



# **AB 519 Evaluation Preliminary Progress Report**

#### **Katharine Strunk**

Asst. Professor of Education & Policy

University of Southern California

#### **Theresa Westover**

Director, Center for Education & Evaluation Services

University of California, Davis

with assistance from

Andrew McEachin & Shani Keller

October 23, 2009

# AB 519 Evaluation Preliminary Progress Report - October 2009

# **Executive Summary**

# Overview

This is the first of three annual reports on the status of the AB 519 mandated evaluation (Education Code Section 52055.59) of California's policies and supports regarding local educational agencies (LEAs) in Program Improvement (PI) Year 3, under the Elementary and Secondary Education Act of 2001 (ESEA). The evaluation commenced in late June of 2009 and is intended to be completed by November of 2012. This report describes the current status of the evaluation that examines the implementation, impact, costs, and effectiveness of the corrective actions and technical assistance requirements assigned by the State Board of Education (SBE) to district LEAs advancing to PI Year 3. The evaluation will examine program implementation data, pupil performance data both overall and for various subgroups, and data pertaining to teachers and schools within the PI Year 3 LEAs. Currently, researchers are in the first months of gathering and analyzing data to describe the characteristics of students and LEAs in the study. Preliminary work shows that there are significant differences among the PI Year 3 district LEAs and that these differences are reflected in the technical assistance requirements assigned by the SBE. These differences will impact the design of the program evaluation and analysis of student achievement data. Researchers are also gathering and analyzing qualitative data to further describe the impact of district assistance and intervention teams (DAITs) – these include in-depth analyses of district capacity studies, surveys, and interviews. These data sources are intended to provide information on the initial status and capacity of LEAs when they are first identified for corrective action and their subsequent actions to implement the SBE-assigned corrective action.

#### **District Assistance and Intervention Teams (DAITs)**

Under ESEA, each state must implement a two-level accountability system – school level and LEA level. Schools and districts that fail to make Adequate Yearly Progress (AYP) for two consecutive years become identified for PI. For each year that a school or LEA fails to make AYP, it advances further in PI. Once an LEA advances to PI Year 3, it is identified for corrective action by the SBE. In addition to assigning a federal corrective action, the SBE may assign additional state-level technical assistance requirements. Those LEAs determined to be in greatest need are required to contract with a DAIT to assess district needs across seven areas of district work and make recommendations (which are to be incorporated into the LEA plan) for improvement in one or more of these areas. DAITS are also expected to provide support to districts in implementing the SBE-assigned corrective action and DAIT recommendations and to provide on-going collaboration to build district capacity to support their schools and students, with particular emphasis on English learners and students with disabilities.

#### **Purpose and Scope of AB519 Evaluation**

While the current, legislatively mandated evaluation of AB 519 builds on two earlier pilot studies, there are significant differences between them. The most important difference is in evaluation goals and purpose: the pilot studies were intended to be in-depth, formative reviews of the implementation and process of the DAIT reform, this evaluation takes a summative perspective focused on outcomes, not process. Further, the pilot studies focused on a small group of districts (initially four and later expanded to

fifteen), which were at risk of advancing to PI Year 3. The current evaluation study addresses 175 districts (including the newly identified Cohort 3) that advanced to PI Year 3, based on 2006-07, 2007-08, and 2008-09 AYP. Also, the pilot districts volunteered to participate whereas the districts in the AB519 evaluation are required to do so. Only districts determined to be in greatest need (the eight that were assigned a specific DAIT by the SBE) are required to provide regular progress reports on implementation of their revised LEA Plans. DAITs working with the districts in the moderate category (i.e. the 62 districts required to contract with a DAIT provider of their own choosing) are also not required to report district or DAIT activities beyond the initial capacity study. This presents challenges for researchers' efforts to systematically examine and evaluate improvement planning and implementation across PI3 districts.

# **Definitions of Groups: PI Status Levels and Cohorts**

All PI Year 3 LEAs were assigned Corrective Action 6 and required to revise their LEA Plans to document steps to fully implement Corrective Action 6. In addition, the SBE assigned state-level technical assistance requirements, which were differentiated based on LEA need. Based on objective criteria adopted by the SBE, the California Department of Education (CDE) applied an algorithm to determine the pervasiveness and severity of performance problems for each LEA. The eight LEAs identified as in greatest need (those with the most severe and extensive performance problems) were assigned a specific state-approved DAIT by the SBE – herein "Assigned DAIT." Sixty-two LEAs determined to have moderate performance problems were required to contract with a state-approved DAIT of their choosing – "Contracted DAIT." The 70 LEAs in these first two technical assistance categories were also required to document in their revised LEA Plans steps to fully implement any recommendations made by the DAIT. The remaining 75 PI Year 3 LEAs, determined to have minor or isolated performance problems, were required to access technical assistance to analyze LEA needs, amend LEA Plan or Plan Addendum, and implement key action steps – herein "PI3 Districts – TA."

To examine the evaluation questions, this study compares characteristics and performance among PI Year 3 LEAs in each of the above categories of "treatment" or technical assistance requirements. Additionally, we examine differences between groups that entered corrective action in two different time periods: "Cohort 1" identifies the 95 LEAs identified for corrective action based on 2006-07 AYP data; "Cohort 2" identifies the 50 LEAs identified for corrective action based on 2007-08 AYP data (see Table below).

Number of PI3 Distric	ts in Each	Category by	Cohort
-----------------------	------------	-------------	--------

Sanction Status	Cohort 1 (based on 06- 07 test data)	Cohort 2 (based on 07- 08 test data)	Total to date	
Assigned DAIT	7	1	8	
Contracted DAIT	37	25	62	
PI3- TA only	51	24	75	
Totals	95	50	145	

#### **Evaluation Questions**

This evaluation seeks to answer two overarching sets of questions regarding the efficacy of the DAIT reforms:

- 1. Do LEAs that receive the DAIT intervention see improved student achievement and/or other district outcomes, and improvements at a faster rate than do LEAs that receive funds for non-DAIT technical assistance?
  - a. Is this different for LEAs that are assigned a DAIT provider versus those that are allowed to contract with a DAIT provider of their own choosing?
  - b. Is this different for LEAs in Cohort 1 versus Cohort 2?
- 2. What are LEAs that receive the DAIT intervention doing?
  - a. Is there variation between LEAs that receive DAITs and those that do not?
  - b. Is there variation within LEAs that receive DAITs?
  - c. Is there variation between Cohorts 1 and 2?

Simply put, Question 1 attempts to understand the impact of a policy intervention or treatment (DAITs) on important district outcomes, and Question 2 endeavors to get inside the black box to understand what specific aspects of the intervention or treatment make it more or less successful.

#### **Differences in Performance and Context Among Groups**

Analysis of the contexts of the districts that receive varying levels of treatment (DAITs) as opposed to those that do not demonstrates that there are significant performance differences between districts with different treatment status, as well as between cohorts. These differences imply important considerations for analyses:

First and foremost, PI3 districts have more disadvantaged students than do districts that are not in PI or that are in earlier stages of PI, on average. Also, within PI3 districts, those receiving DAIT treatment appear to have the most disadvantaged students in California. This makes reform hard to achieve, simply given the very difficult student contexts within which districts are attempting to implement substantial change.

Second, we find that districts with assigned DAITs have a significantly different teacher workforce in terms of average and median experience levels and certification rates. This also places the DAIT reform in a challenging context, as DAITs and district leadership must face challenging teacher staffing issues while attempting to implement centralized reform.

Third, we see that districts with DAITs have significantly lower student outcomes, defined by API and proficiency rates as well as by API growth, than do PI3 districts with non-DAIT TA. This is by definition, as PI3 districts are identified because they are low-performing, and the CDE selects districts to receive the DAIT intervention because they are the lowest-performing of the PI3 districts.

Together, the multiple differences between districts by treatment type and PI designation imply that the districts that receive non-DAIT TA are not a suitable control group for a simple evaluation of DAIT effectiveness. As such, we will need to carefully control for all observable differences between the two groups as we attempt to untangle the differential impact of DAITs on student performance. In addition, we will need to be careful to analyze differences in any impacts of the DAITs by cohort, as the 2007-08 and 2008-09 treatment cohorts are significantly different in terms of student performance.

# **Next Steps**

In the coming year we will conduct the initial quantitative analyses incorporating the first year of student data available post-sanction for Cohort 1 PI Year 3 LEAs. We will complete our capacity study analyses and review of additional secondary data and conduct interviews and surveys with DAIT providers and LEA staff in Cohort 1 PI Year 3 LEAs in order to be able to describe how the DAIT is being implemented in these LEAs. Relevant and reliable implementation data will be incorporated into the quantitative analyses. Additional secondary data that may become available over the year will be incorporated into our analyses and reported in the Year 2 interim report.

# **Contents**

Introduction	/
Background	7
DAIT Pilot Studies	9
Overlap Between the SRI Pilot Sample and the AB 519 Evaluation Districts	10
AB 519 Evaluation Design	11
Methodological Overview	11
Quantitative Analyses	12
Student Achievement Evaluation Questions	14
Teacher "Quality" Evaluation Questions	15
Qualitative Analyses	17
Overview of Context of Districts in Program Improvement Year 3 and in Varying T Levels	
Student Performance	22
Teacher Characteristics	29
Summary and Implications	30
Next Steps	31

# AB 519 Evaluation Preliminary Progress Report – October 2009

#### Introduction

This is the first of three annual reports on the status of the AB 519 mandated evaluation (Education Code Section 52055.59) of California's policies and supports regarding school districts in Year 3 of Program Improvement Status (PI3) under the Elementary and Secondary Education Act of 2001 (ESEA). For purposes of this report, it is assumed that readers are familiar with ESEA requirements and language related to those requirements – e.g. Program Improvement status, sanctions, and the criteria under which districts and schools are identified for Program Improvement. Briefly, a school or district that fails to meet its Adequate Yearly Progress (AYP) goal (goals are based on student achievement on statewide tests) over multiple years is assigned to Program Improvement status. An LEA or school that continues to miss its AYP goals for three consecutive years after initial identification is in Program Improvement Year 3 status (PI3). This evaluation study of Year 3 Program Improvement districts commenced in late June of 2009 and is intended to be completed by November of 2012. This report describes the current status of the evaluation which examines the implementation, impact, costs, and effectiveness of the corrective actions and reform strategies undertaken by district LEAs identified for corrective action. The evaluation examines program implementation data, pupil performance data both overall and for various subgroups, and data pertaining to teachers and schools within the PI Year 3 district LEAs. Currently, researchers are in the first months of gathering and analyzing data sets to describe the characteristics of districts in the study and defining strategies for systematically gathering and analyzing qualitative data to address districts' initial status and capacity and subsequent actions to implement program improvements to support improved student achievement. The specific research questions guiding the evaluation, the methodological approaches used to answer these questions, and results to date are detailed below.

# Background

In March 2008 the California State Board of Education (SBE) assigned Sanction F ("Instituting and fully implementing a new curriculum that is based on state academic content and achievement standards, including providing appropriate professional development based on scientifically-based research for all relevant staff, that offers substantial promise of improving educational achievement for high priority pupils" as per California *Education Code* Section 52055.57(c)(1)(F) ) to 97 (later dropped to 95) districts in PI Year 3 (<a href="http://www.cde.ca.gov/be/ag/ag/yr08/agenda0308.asp">http://www.cde.ca.gov/be/ag/ag/yr08/agenda0308.asp</a>). Each of these districts was required to amend its LEA plan or Plan Addendum, identifying objectives and action steps to fully implement this sanction. For purposes of this evaluation, this group of districts is referred to as "Cohort 1." They were identified for corrective action based on their 2006-07 test results.

Within these Cohort 1 districts, seven were identified as most in need of technical assistance and were assigned a District Assistance and Intervention Team (DAIT), identified and trained by the California Department of Education (CDE), to assist the district in data analysis and to provide recommendations for actions to improve student achievement. These districts are referred to in the evaluation as "Assigned DAIT" districts. An additional 37 PI3 districts (determined to be the next most in need of external support) were required to contract with a CDE approved DAIT for the same purpose (these are referred to as "Contracted DAIT" districts in the evaluation report). The remaining PI3 districts were required to implement Sanction F and file revised LEA plans – in this evaluation these districts are referred to as "PI3 Districts - TA." Please see the SBE agenda documents for details on the actions taken, the background for actions taken, the algorithms used by CDE to identify those districts most in need and therefore required to either contract with or be assigned a DAIT to assist them in revising their LEA plan and identifying necessary improvement actions, and lists of the specific districts in each subgroup

(http://www.cde.ca.gov/be/ag/ag/yr08/agenda0308.asp). Subsequent data corrections and district consolidations resulted in some changes to the list of specific districts within each group.

In September 2008 an additional 50 districts entered Program Improvement Year 3 (PI3) status, <u>based on their 2007-08 test data</u>. These districts are referred to as **Cohort 2** in the evaluation report. In November 2008, the SBE assigned Corrective Action 6 ("Institute and fully implement the State Board of Education adopted standards aligned curriculum, including appropriate professional development, as documented in the districts' local educational plan"), which is essentially the same as Sanction F described above, to these 50 districts. Again, CDE provided and implemented an algorithm for identifying which, among the newly identified PI3 districts, were most in need of assistance, resulting in one of the newly identified districts being assigned a DAIT (entering the "Assigned DAIT" category) and 25 required to contract with a state approved DAIT ("Contracted DAIT"), while the remaining newly identified districts were instructed to "access technical assistance to analyze LEA needs, amend LEA plan or Plan Addendum and implement key action steps," entering the "PI3 Districts - TA" category in this report (<a href="http://www.cde.ca.gov/be/ag/ag/agenda1108.asp">http://www.cde.ca.gov/be/ag/ag/agenda1108.asp</a>). At this time SBE clarified that any district working with a DAIT was required to include in their LEA plan and implement the recommendations of the DAIT.

Districts were awarded varying levels of financial support to support their improvement efforts. Amounts were based on the number of schools within the district in program improvement and the severity of their performance problems. Districts with "severe performance problems" were awarded \$150K per PI school (these are the "Assigned DAIT" districts), those with "moderate performance issues" received \$100K per PI school (the "Contracted DAIT" districts), and those with "minor or isolated problems" received \$50K per PI school ("PI3 Districts - TA" districts). Eight districts in the "PI3 Districts - TA" category received no funding (four each in Cohort 1 and Cohort 2) because, despite the district being in PI, they contain no PI schools (<a href="http://www.cde.ca.gov/be/ag/ag/agenda1108.asp">http://www.cde.ca.gov/be/ag/ag/agenda1108.asp</a>). As of October 2009, (see Table 1), there are 75 PI3 districts in Cohorts 1 and 2 classified as PI3 Districts-TA; 62 districts that contracted with DAITs (Contracted DAIT) and 8 districts that were assigned DAITS (Assigned DAIT). In September 2009, thirty additional PI3 districts were identified, which constitute Cohort 3. As of this writing, sanctions have not been assigned to these districts.

Table 1: Number of PI3 Districts by Cohort and Level of Sanction

Sanction Status	Cohort 1 (based on 06-07 test data)	Cohort 2 (based on 07-08 test data)	Total to date
Assigned DAIT	7	1	8
Contracted DAIT	37	25	62
PI3- TA only	51	24	75
Totals 95		50	145

School Assistance Intervention Teams (SAITs)

The California Department of Education's (CDE) School Assistance and Intervention Team (SAIT) intervention for low performing schools has been proven effective in raising student achievement in those schools where it is implemented (http://www.htaconsulting.com/\_pdf/EV\_SAIT.pdf). The SAIT is a team of experts, trained and authorized by CDE, assembled to assist a school in addressing their most critical needs in order to raise student achievement. The SAIT works closely with site level administrative and teaching staff over a period of time, providing or brokering key support resources (for example, instructional coaching) and periodically assessing the school's progress on key dimensions of variation, referred to as the nine Essential Program Components (EPCs). These components encompass instructional materials, professional development for both teachers and administrators, teacher collaboration time, student achievement monitoring systems, instructional support for teachers, instructional time and scheduling (including pacing schedules and time allotted for core and intervention instruction), and budget alignment with student needs.

One of the recurring themes reported from SAITs is the critical role that district support plays in assisting low-performing schools in their improvement efforts. Further, in the 2004-05 school year, for the first time, districts became subject to ESEA Program Improvement identification and sanctions. Consequently, the CDE applied their experience with the SAIT intervention to develop a process for district level improvement efforts by developing District Assistance and Intervention Teams (DAITs). The structure and goals of the DAIT are similar to those of the SAIT – a team of experts with relevant experience is assembled to address district-level needs. The DAIT is expected to assist districts in evaluating their processes and practices, identifying particularly high leverage or critical needs, providing advice and assistance in addressing those needs, and providing on-going collaboration to build district capacity to support their schools and students. The aspects of district improvement that the DAIT is expected to address are slightly different and broader than the EPCs addressed by the SAITs. DAITs are expected to address, in addition to the areas covered by the EPCs, overall governance, parent and community involvement, and human resources systems in the districts they assist (the specific areas that the SBE has asked DAITs to address have changed slightly over time to be more inclusive).

#### DAIT Pilot Studies

In order to test and evaluate the efficacy of the DAIT approach to district assistance, two pilot studies were conducted. The first was conducted by American Institutes for Research (AIR) during 2004-06 and the second was conducted by SRI International (SRI) beginning in 2007, with an anticipated final report in late 2009. The initial study, conducted by AIR, examined the process in four volunteer districts. The second pilot study, conducted by SRI, expanded the scope by adding another eleven volunteer districts to the original four, for a total of 15 participating districts. The work of these districts, providers, and evaluators provided information to the CDE, SBE and the Legislature, leading to refinement of the intervention parameters and requirements. Both evaluation studies were formative in nature – examining the processes and tools of the DAIT intervention.

While the current, legislatively mandated, evaluation of AB 519 builds on the earlier pilot studies performed by the AIR and SRI, there are five important differences between these earlier pilot studies and the current evaluation. **First**, the most important difference stems from the distinctly different goals of the studies. Whereas the pilot studies were intended to be in-depth, formative reviews of the implementation and process of the DAIT reform, this evaluation takes a summative perspective, primarily attempting to assess differences in student achievement and other district outcomes between districts that did and did not receive assistance from DAITs. The focus is on outcomes, not process. **Second**, the scope of this evaluation is quite different from that of the two pilot studies. Where these pilot studies focused on 4-15 districts which received intensive assistance from DAITs, the current evaluation study will assess all PI3 districts that have been identified based on achievement data from the 2006-07, 2007-08 and 2008-09 school years (175 districts, including the newly identified Cohort 3), with more intensive data collection

from the 70 currently receiving DAIT assistance. Third, the PI3 districts who receive the DAIT intervention in the current evaluation are mandated to do so, they are not volunteers as were the pilot districts. This will necessarily impact how the DAIT is implemented in the sanctioned districts, compared to the volunteer districts. Fourth, neither the legislation nor current SBE policies require all PI3 districts to provide periodic progress reports on their implementation practices. Legislation and policy require the sanctioned districts with DAITs to incorporate DAIT recommendations in their LEA plans but there is no clear requirement that districts implement their plans in any particular order or timeline, or report in any systematic fashion on their implementation actions and progress. Neither are the DAITs required to file reports regarding their districts' implementation activities (this diverges from the SAITs where school progress in implementing recommendations is rated and reported on a regular schedule). With no reporting requirement, it will be difficult to clearly define the parameters of implementation variation. Finally, and **fifth,** there is no legislative or SBE mandate that requires DAITs to remain engaged in the their districts beyond providing the recommendations to be included in the plan (although clearly the CDE training of DAIT providers sets the expectation that they will remain engaged in assisting districts to implement their plans). It seems likely that this introduces still another source of variation impacting evaluation of the impact of the DAIT intervention.

Overlap Between the SRI Pilot Sample and the AB519 Evaluation Districts

Of the 15 districts involved in the SRI pilot study, nine are currently identified as PI3 districts in the 2008-09 school year and are included in the AB519 Evaluation of Cohorts 1 and 2 (see Table 2 for the list of overlapping districts). Four of these districts received non-DAIT technical assistance, and five contracted with DAITs. Another two of the sample districts entered in PI Year 3 status in 2009-10, and have not yet been assigned an intervention. Given that the nine (or more) districts from the original pilot sample that are also in the current evaluation sample have had a lengthier and likely substantively different intervention than districts receiving interventions from either non-DAIT or DAIT technical assistance providers for the first time, we will have to consider these districts separately. Because we already begin this evaluation with a small number of treated districts, removing the pilot districts from our overall sample will weaken the power of the analyses. However, the benefit of having these districts in our evaluation sample is that we will be able to examine the differences in outcomes of these nine districts that may be attributable to a longer intervention period and/or to a more intensive intervention.

Table 2: Overlap Between Pilot Sample and AB 519 Evaluation Sample

	In PI 2008-	Year in	Cohort	Intervention
	9	PI		
Alisal Union	X	3	1	Contracted DAIT
Escondido Union	X	3	1	TA
Elementary				
Reef-Sunset Unified	X	3	1	Contracted DAIT
Salinas City Elementary	X	3	1	Contracted DAIT
Bishop Union Elementary	X	3	2	Contracted DAIT
Lamont Elementary	X	3	2	Contracted DAIT
Napa Valley Unified	X	3	2	TA
Oceanside Unified	X	3	2	TA
Red Bluff Union Elementary	X	3	2	TA
Turlock Unified	X	3		
Washington Unified	X	3		
Azusa Elementary	X	1		
Beaumont Unified				
Cloverdale Unified				
Washington Union High				

#### **AB 519 Evaluation Design**

The State Board of Education has charged the independent evaluators with answering two overarching sets of questions regarding the efficacy of the District Assistance and Intervention Team reforms. They are as follows:

- 3. Do districts that receive the DAIT intervention see improved student achievement and/or other district outcomes, and improvements at a faster rate than districts that receive funds for non-DAIT technical assistance?
  - a. Is this different for districts that are assigned a DAIT provider versus those that are allowed to contract with a DAIT provider of their choice?
  - b. Is this different for districts in Cohort 1 versus Cohort 2?
- 4. What are districts that receive the DAIT intervention doing?
  - a. Is there variation between districts that receive DAITs and those that do not?
  - b. Is there variation within districts that receive DAITs?
  - c. Is there variation between cohorts 1 and 2?

Simply put, Question 1 attempts to understand the impact of a policy intervention or treatment (DAITs) on important district outcomes, and Question 2 endeavors to get inside the black box to understand what specific aspects of the intervention or treatment make it more or less successful.

We tackle these questions from two perspectives. The first is a quantitative set of analyses that examines Question 1 (above) along multiple dimensions of district outcomes. The second is from a qualitative lens that attempts to get inside the black box to better understand what DAITs and the districts that are receiving assistance from DAITs are doing. Some of the qualitative findings will also feed the quantitative analyses insofar as data from the qualitative analyses are helpful for models that attempt to explain any impacts of the DAIT intervention.

#### Methodological Overview

Evaluation of the CDE/SBE interventions for PI Year 3 Districts will include the following components: (1) quantitative analysis of student-, school-, and district-level achievement data to examine what, if any, changes are occurring in student achievement (both overall and by significant student subgroups) post intervention/sanction and, to the extent possible, what kinds of district actions appear to be associated with observed changes in student achievement, (2) qualitative analysis of LEA capacity studies, existing reports, and any progress reports required of PI3 districts by SBE, to evaluate the specific actions LEAs are implementing to improve student achievement, (3) primary data collection via interviews and surveys with district staff in PI3 districts which have engaged a DAIT and with DAIT providers to examine the specific actions and activities associated with the DAIT intervention, and (4) quantitative analysis of CST outcomes in districts with DAITs to determine any relationships between specific types of assistance from the DAITs to changes in student achievement and other important organizational outcomes. It is our intention to use the findings from activities 2 and 3 (LEA secondary data analysis and primary data collection) to inform the second set of quantitative analyses, and to provide more descriptive contextual information about the actions and activities within these districts.

We are limiting our primary data collection to districts with DAITs due to (1) the greater likelihood of obtaining valid and reliable data due to the opportunity to triangulate information received from the district staff with that provided by the DAIT members, (2) the fact that PI3 districts with DAIT interventions are, by definition, those facing the greatest challenges and thus those that will provide the most pertinent information about high impact actions, and (3) financial limitations which preclude representative and reliable primary data collection and site visits and to all PI3 districts. We may open

the district staff survey to those districts without DAITs if there is no more reliable source of information available regarding these districts' implementation of their LEA plans (such as required quarterly or annual reports). We anticipate that our subsequent annual reports will include both quantitative results that primarily focus on student achievement and contextual, descriptive analyses which will aid in interpreting the quantitative results.

#### A. Quantitative Analyses

Answering questions about the impact of any policy intervention requires evaluators to compare a randomly-selected treated set of districts to a matched sample of un-treated districts. In the case of the AB 519 Evaluation, the treatment is the DAIT intervention. An ideal evaluation, then, would compare districts that were randomly assigned DAITs to a control group of districts without DAITs that are substantively the same in terms of previous performance, district characteristics and student demographics. In other words, we would need a matched sample of districts that appear identical to the treated sample (those with DAITs), except for the treatment. Then we could compare the outcomes of treated districts (districts with DAITs) to non-treated districts (districts without DAITs). However, given that the DAIT intervention was assigned to the lowest-performing PI3 districts by design, we do not have a matched sample of equally low-performing districts to use as a control group.

In the absence of random assignment of treatment to a set of districts alongside a matched control group, the next best evaluation design will use the most similar non-treated group of districts as a comparison set. The most similar non-treated group of districts is the set of remaining PI3 districts required to access Technical Assistance without being required to contract with a DAIT provider. As such, our analyses will compare PI3 districts that receive DAIT assistance to those that receive non-DAIT TA, and we will compare PI3 districts that are given the option to contract with a DAIT of their choice to those that are assigned specific DAIT providers. In addition, we will compare all PI3 districts - all of which received some intervention or sanction - to PI2 districts.

We will be best able to isolate the impact of DAITs on student performance and other outcomes if these comparison groups of districts have relatively similar student demographics, performance levels and other district characteristics such as similar levels of teacher tenure and credentials. If the groups are dissimilar, then we will proceed with analyses that attempt to control for the greatest proportion of the variation in the models that cannot be attributed to the DAIT treatment.

We also explore differences in the background characteristics of the two cohorts of PI3 districts that received DAIT or non-DAIT technical assistance. Whether or not we find significant differences between these two cohorts will inform our ability to evaluate the interventions assigned to both cohorts as a single treatment, or if the cohorts appear so different from the outset that we must consider the DAIT/TA treatments separately. In this instance, we are most concerned with differences in cohort characteristics at the time the districts were identified for treatment. As such, we compare the data upon which Cohort 1 treatment designations were decided (2006-07 data) to the data used in the Cohort 2 designations (2007-08 data).

The comparison groups are as follows:

- 1. PI3 districts that receive the DAIT intervention (both assigned and contracted) vs. PI3 districts that receive non-DAIT technical assistance.
  - a. PI3 districts that are required to contract with DAITs vs. PI3 districts that are required to contract with non-DAIT technical assistance.
- 2. PI3 districts that are required to contract with a DAIT vs. PI3 districts that are assigned a DAIT.
- 3. PI3 districts vs. PI2 districts

- 4. Cohort 1 vs. Cohort 2 districts in each of the following district groups:
  - a. PI2 overall
  - b. PI3 overall
  - c. PI3 districts that are required to contract with non-DAIT TA
  - d. PI3 districts that are required to contract with a DAIT
  - e. PI3 districts that are assigned a DAIT

Due to the methodological concerns mentioned above, a large portion of this first interim report examines differences between groups of districts. A better understanding of the different contexts of each group of districts will help us fine-tune the methods we will use going forward in the evaluation so that we may best establish the impact of DAITs on district outcomes.

There is also a second reason why better understanding the district contexts of the different treatment groups is useful at this stage of the evaluation study. District context matters a great deal in the implementation of reforms. Learning more about the underlying contextual factors that mediate reform will enable us to better situate our analyses of DAITs' impacts on district outcomes. By definition, districts receiving the DAIT intervention are the lowest performing districts in the state. However, the larger district context, including demographic and other background characteristics of the districts, will also be important to consider as we move forward with our evaluation. Specifically, we are interested in understanding the performance discrepancies between district types (PI status and Technical Assistance status) as well as the differences in student background (race and ethnicity and socioeconomic status) and the differences between districts in the prevalence of special needs students and English Language Learners. In addition, understanding the disparities between districts in teacher characteristics, including the proportion of teachers with emergency versus full credentials and teacher experience levels, will help us to better grasp the different contexts into which the DAITs and other TA providers are placed.

The following questions address the quantitative component of *Education Code*, Section C. 52055.59(d): "The evaluation shall include a rigorous qualitative and quantitative assessment of how program implementation affected pupil achievement and teacher quality using the information required pursuant to subdivision (c)." The quantitative analyses also meet AB 519 Evaluation Requirements 52055.59 (c) "The Superintendent shall ensure that the evaluation includes, at a minimum, all of the following factors: (2) Pupil performance data, including, but not limited to, results of assessments used to determine whether local educational agencies have made significant progress towards meeting their state and federal academic growth targets and data for each of the following subgroups:

- (A) English learners.
- (B) Pupils with exceptional needs.
- (C) Pupils who are eligible for funds under Title I of the federal No Child Left Behind Act of 2001 (20 U.S.C. Sec. 6301 et seq.)",

And (3), "Data on the percentage of fully credentialed teachers, the percentage of teachers who hold emergency credentials, the percentage of teachers assigned outside their subject area of competence, the accreditation status of the school if appropriate, average class size per grade level, and the number of pupils in multi-track, year-round schools."

Note that within the questions indicated below we will also consider differences between cohorts of districts that receive DAIT assistance.

#### Student Achievement Evaluation Questions

Quantitative analyses will take two primary forms. Due to the methodological challenges described above, both sets of analyses will be descriptive in nature. The first set will summarize macro trends in California school districts, comparing the progress of districts with DAITs to those without, and districts which have been identified for Program Improvement to those that have not as described below. These analyses will rely primarily on public district-level data available from the CDE.

The second set of analyses will provide a more nuanced evaluation of the growth in student achievement in districts with DAITs versus PI3 districts without DAITS, and Program Improvement Year 3 districts as compared to other districts when controlling for important student-, school- and district-level factors that may impact student performance. Given that student achievement and growth in student achievement over time are impacted both by individual student-level characteristics and by the larger school and district contexts, as well as any school- or district-level interventions (e.g., the DAITs), it is important to account for the hierarchical structure of the data by using multi-level modeling techniques. In this case, we will utilize hierarchical linear models (HLM) and hierarchical growth models to examine the impact of the DAIT intervention and other important student, school and district factors on student achievement and growth in student achievement. We will also utilize any standard econometric models deemed necessary to further explore the questions outlined below. The HLM analyses will be supplemented by descriptive analyses of district level data that will illustrate the trajectories of student achievement (including significant student subgroups) within the PI3 districts both before and after their PI designations. Please note that the accuracy of all longitudinal analyses of California test score data (and summary measures based on those test scores) is limited due to changes in the measurement components of outcome/achievement data over time. Researchers are working with CDE staff to provide the most accurate longitudinal analyses of test score data possible.

- 1. Questions regarding the progress of PI3 districts:
  - a. Have students within PI3 districts shown improved student outcomes since PI3 district identification?
  - b. Have specific subgroups of students (EL, pupils with exceptional needs, pupils eligible for Title 1 funds) within PI3 districts shown improved student outcomes since PI3 district identification? Have they shown improved student outcomes relative to students outside of these subgroups?
  - c. Have students within PI schools in PI3 districts shown improved student outcomes since PI3 district identification? Have they seen improved outcomes relative to students in non-PI schools in PI3 districts?
  - d. Have specific subgroups of students (EL, pupils with exceptional needs, pupils eligible for Title 1 funds) within PI schools in PI3 districts shown improved student outcomes since PI3 district identification? Have they shown improved student outcomes relative to students outside of these subgroups?
  - e. Have students within PI3 districts shown improved student outcomes since their districts were identified for PI?
  - f. Have specific subgroups of students (EL, pupils with exceptional needs, pupils eligible for Title 1 funds) within PI3 districts shown improved student outcomes since district PI identification? Have they shown improved student outcomes relative to students outside of these subgroups?
  - g. Have students within PI schools in PI3 districts shown improved student outcomes since district PI identification? Have they seen improved outcomes relative to students in non-PI schools in PI3 districts?
  - h. Have specific subgroups of students (EL, pupils with exceptional needs, pupils eligible for Title 1 funds) within PI schools in PI3 districts shown improved student outcomes

- since district PI identification? Have they shown improved student outcomes relative to students outside of these subgroups?
- i. Do district governance structures, as measured by available data, mediate any relationship between PI3 interventions and/or student performance?
- 2. Questions regarding the progress of districts with DAIT interventions<sup>1</sup>:
  - a. Have students within districts with DAITs shown improved student outcomes since DAIT implementation?
  - b. Have specific subgroups of students (EL, pupils with exceptional needs, pupils eligible for Title 1 funds) within districts with DAITs shown improved student outcomes since DAIT implementation? Have they shown improved student outcomes relative to students outside of these subgroups?
  - c. Have students within PI schools in DAIT districts shown improved student outcomes since DAIT implementation? Have they seen improved outcomes relative to students in non-PI schools in DAIT districts?
  - d. Have specific subgroups of students (EL, pupils with exceptional needs, pupils eligible for Title 1 funds) within PI schools in districts with DAIT interventions shown improved student outcomes since DAIT implementation? Have they shown improved student outcomes relative to students outside of these subgroups?
  - e. Do district governance structures, as measured by available data, mediate any relationships between DAIT implementation on status of student performance?
- 3. Questions comparing the progress of districts with DAIT interventions to PI3 districts that were required to access non-DAIT technical assistance:
  - a. Have students within districts with DAITs shown improved student outcomes since DAIT implementation relative to students in PI3 districts that were required to access non-DAIT technical assistance?
  - b. Have specific subgroups of students (EL, pupils with exceptional needs, pupils eligible for Title 1 funds) within districts with DAITs shown improved student outcomes since DAIT implementation relative to the same subgroups of students in PI3 districts that were required to access non-DAIT technical assistance?
  - c. Have students within PI schools in districts with DAITs shown improved student outcomes since DAIT implementation relative to students within PI schools in PI3 districts that were required to access non-DAIT technical assistance?
  - d. Have specific subgroups of students (EL, pupils with exceptional needs, pupils eligible for Title 1 funds) within PI schools in districts with DAITs shown improved student outcomes since DAIT implementation relative to students within PI schools in PI3 districts that were required to access non-DAIT technical assistance?
  - e. Do district governance structures, as measured by available data, mediate any relationships that may differ between districts with DAITs and PI3 districts that were required to access non-DAIT technical assistance on student performance?

# Teacher "Quality" Evaluation Questions

- 1. Questions regarding the progress of PI3 districts:
  - a. Do teachers in PI3 districts have different teacher characteristics, on average, than teachers in other CA districts (comparing, for example, the PI3 districts to non-PI

<sup>&</sup>lt;sup>1</sup> Note that all analyses of "Districts with DAIT Interventions" will include separate analyses of districts that contracted DAITs and districts that were assigned DAITs.

districts, and to those in PI1 and PI2)? Have these ratios changed since PI3 district identification? Have these ratios changed since PI identification? Indicators include:

- i. more or fewer teachers with full credentials
- ii. more or fewer teachers with emergency credentials
- iii. average and median levels of experience
- iv. additional indicators as available
- b. Do teachers in PI schools in PI3 districts have different teacher characteristics, on average, than teachers in non-PI schools in PI3 districts? Have these ratios changed since PI3 district identification? Have these ratios changed since PI identification? Indicators include:
  - i. more or fewer teachers with full credentials
  - ii. more or fewer teachers with emergency credentials
  - iii. average and median levels of experience
  - iv. additional indicators as available
- 2. Questions regarding districts with DAIT interventions:
  - a. Have the observable characteristics of teachers in districts with DAIT interventions changed since the implementation of the DAIT intervention? Indicators include:
    - i. more or fewer teachers with full credentials
    - ii. more or fewer teachers with emergency credentials
    - iii. average and median levels of experience
    - iv. additional indicators as available
  - b. Do teachers in PI schools in districts with DAITs have different teacher characteristics, on average, than teachers in non-PI schools in districts with DAITs? Have these ratios changed since DAIT implementation (September 2009)? Indicators include:
    - i. more or fewer teachers with full credentials
    - ii. more or fewer teachers with emergency credentials
    - iii. average and median levels of experience
    - iv. additional indicators as available
- 3. Questions comparing the progress of districts with DAIT interventions to PI3 districts that were required to access non-DAIT technical assistance:
  - a. Do teachers in districts with DAITs have different teacher characteristics, on average, than teachers in PI3 districts that were required to access non-DAIT technical assistance? Have these ratios changed since DAIT implementation (September 2009)? Indicators include:
    - i. more or fewer teachers with full credentials
    - ii. more or fewer teachers with emergency credentials
    - iii. average and median levels of experience
    - iv. additional indicators as available
  - b. Do teachers in PI schools in districts with DAITs have different teacher characteristics, on average, than teachers in PI3 schools in PI3 districts that were required to access non-DAIT technical assistance? Have these ratios changed since DAIT implementation (September 2009)? Indicators include:
    - i. more or fewer teachers with full credentials
    - ii. more or fewer teachers with emergency credentials
    - iii. average and median levels of experience
    - iv. additional indicators as available

#### **B.** Qualitative Analyses

Qualitative analyses focus on defining important differences among districts in terms of context, components of the DAIT process, and implementation activities. Qualitative analyses will be the primary source of information about program implementation and will be used both for descriptive analyses and as components of the quantitative models, where appropriate. Data sources for information about PI3 districts' implementation activities include (a) analysis of capacity studies provided by DAITs as their initial entry into the district – all DAITS report on the district conditions they encounter upon entry; specific content elements of the report are established by CDE, (b) existing and upcoming reports to the SBE from the set of districts (currently only the "assigned DAIT" districts) required to provide testimony and/or quarterly progress reports, and (c) primary data collection via interviews and surveys of DAIT providers and district staff. Should additional secondary data become available over the course of the evaluation, it will be incorporated. These data collection activities can speak to the AB 519 Evaluation Requirements, Section A. 52055.59(b) for examination of impact and effectiveness of state interventions.

Primary data collection activities (surveys and interviews) will be restricted, for the most part, to districts in Cohorts 1 and 2 which are working with a DAIT. Cohort 3 districts will be too early in their improvement efforts to provide useful information before the final evaluation report is due. By focusing on districts with DAITs for the deeper qualitative data collection, we can better triangulate information from various sources (key informants in the districts, DAIT providers, and student achievement data) to enhance our understanding of how these most challenged PI3 districts are approaching improvement efforts, what factors are facilitating or blocking these efforts, and the extent to which these efforts appear to be associated with student achievement. Further, it is critical to evaluate the nature and extent of DAIT engagement in the sanctioned district and the impact of DAIT activities in their respective PI3 districts. Information gathered via primary data collection will also, to the extent possible, be coded for inclusion in quantitative models as well as discussed descriptively in order to provide contextual information.

It is our understanding that SBE may consider requiring some form of periodic progress reports from all PI3 districts regarding their implementation of their LEA plans. Should that occur, these reports will be incorporated into the qualitative portion of the evaluation. If these reports are not forthcoming, the district staff survey developed for those districts with DAITs will be opened to non-DAIT PI3 districts in order to obtain information about their progress in implementing actions to improve student achievement in their districts. It is unlikely that such a survey will have response rates that will permit incorporation of the data into the quantitative models, but they should provide at least some indication, although not necessarily a representative one, of how the PI3 districts without DAITs are progressing in implementing their planned improvements.

The legislation requires a variety of implementation data to be examined. To the extent possible, each of the specific program areas addressed in the legislation will be addressed. Below is a list of those areas and the data source for each.

- 1. Review of start-up activities: We will address this via examination of the capacity studies and interviews/surveys with DAIT providers and districts.
- 2. Quality of the academic program: CDE has indicated that the operational definition for this is "alignment of curriculum, instruction, and assessments to state standards." We will examine the information included in the LEA documentation and primary data collection in terms of:
  - a. SBE approved/aligned materials that have been purchased and, to the extent possible, the manner and extent of their implementation in the districts, including interventions at both the strategic and intensive levels

- b. Percent of principals and teachers trained in the use of the above materials (SB 472/AB 430)
- c. Other variables related to the established nine Essential Program Components (EPCs)
- 3. Local governance and leadership: We intend to include variables such as turnover among district senior staff and school principals to address this component. Additional governance issues are addressed in the capacity studies filed by DAITs and can also be addressed during interviews and in surveys. We also have data available on collective bargaining agreements for districts on a statewide basis. These data provide a dimension of local governance that will be incorporated into the quantitative models.
- 4. Allocation of fiscal resources: Fiscal health is addressed in the capacity studies and in County Office of Education fiscal reviews. Additional sources of information may be identified over the course of the project, in addition to fiscal issues that may be addressed in primary data collection.
- 5. Allocation of personnel: We are defining this in terms of analyzing the distribution of experienced teachers and teachers with advanced degrees (Masters and PhDs) across the schools in the districts over time.
- 6. Management practices: This will be addressed in surveys/interviews and in analysis of the capacity studies. At this time, pending further collaboration with CDE, we are operationally defining this as district wide changes in policies, procedures, and accountability requirements.
- 7. Parental participation/community support and use of pupil data to inform instruction: These areas are addressed in some, but not all, capacity studies and related secondary data. This will also be addressed in primary data collection with the PI3 districts with DAITs.
- 9. Staff development: In addition to the analyses of percent of teachers in the PI3 districts who have participated in curriculum based professional development (SB 472), we will examine any additional professional development (PD) activities described in the LEA documentation and capacity studies. Primary data collection efforts will also address this issue.

Currently, evaluation staff are coding and analyzing the capacity studies provided by the DAITs in their initial engagement with their districts. These documents are prepared by the DAIT provider as part of their diagnostic phase of work with their districts; they include the DAIT recommendations to be incorporated into the LEA plan as well as documentation of district conditions around several broad categories. The specific categories of information requested by CDE have changed somewhat between cohorts 1 and 2 but generally include (1) governance, (2) alignment of curriculum, instruction and assessments to state standards, (3) fiscal operations, (4) human resources, (5) parent and community involvement, (6) data systems and achievement monitoring, and (7) professional development. While this seems fairly straight-forward, we are finding wide variation in how DAIT providers interpret and report on these general categories of information. We hope to be able to establish "baseline" conditions in the districts in order to more fully assess their progress over the next few years. Capacity study analysis also informs our development of surveys and interview protocols for both DAIT providers and district staff.

In coding the DAIT capacity studies, we attempt to answer the following evaluation questions:

- 1. What strengths and weaknesses were most frequently observed in DAIT districts?
- 2. What recommendations were most frequently prescribed by DAIT teams?

3. What areas were emphasized in DAIT recommendations and how many recommendations were made? Do the number and nature of the recommendations appear to be "reasonable?"

The coding tool developed for analyzing the capacity studies is based on the Academic Program Survey (APS), a CDE-developed instrument designed to measure the presence of the nine EPCs for high quality instructional programs that promote student achievement, listed below in Table 3.

# **Table 3. Essential Program Components**

- 1. Use of State Board of Education (SBE)-adopted (kindergarten through grade eight) or standards-aligned (grade nine through twelve) English/reading/language arts and mathematics instructional materials, including intervention materials
- **2.** Instructional time (adherence to instructional minutes for English/reading/language arts and mathematics (K-8) and high school access to standards-aligned core courses)
- **3.** School Administrator Training Program- Assembly Bill (AB) 430 (Chapter 364, Statutes 2005) on SBE-adopted instructional materials
- **4.** 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
  - **a.** Fully credentialed, highly qualified teachers
  - **b.** District providers teachers of English/reading/language arts and mathematics with the appropriate AB 466 (SB 472, pending) Professional Development Program through a SBE-authorized provider.
- **5.** Student achievement monitoring system (use of data to monitor student progress on curriculum-embedded assessments and modify instruction)
- **6.** Ongoing instructional assistance and support for teachers (use of content experts and instructional coaches)
- **7.** Monthly teacher collaboration by grade level (K-8) and department (9-12) facilitated by the principal
- **8.** Lesson and course pacing schedule (K-8) and master schedule flexibility for sufficient numbers of intervention courses (9-12)
- **9.** Fiscal support: The general and categorical funds of the school or district are used appropriately to support the English/reading/language arts and mathematics program goals in the school plan.

As a consistent component of the DAIT information-gathering process, the APS and its constituent EPCs provide a filter for DAIT studies that is both highly familiar to and appropriate for California schools and DAIT providers alike. In addition to the EPC related information in Table 3, five additional areas of interest are addressed and coded from the capacity studies: (1) Facilities, (2) Community Relations/Parental Involvement, (3) Human Resources/Personnel Management – e.g. HR policies and practices, stability and distribution of teaching staff and site administrators, staff evaluation policies, staffing of district leadership positions, (4) Governance – e.g. school board and district leadership stability and development, goals and vision communication, coordination and collaboration, policies and procedures, etc., and (5) Overall District Capacity as addressed in a summative manner by DAIT providers. Each capacity study is coded by two coders to insure consistency.

Each statement in the DAIT capacity studies is first categorized by topic – e.g. one of the EPC related areas or the additional five content areas. Observations are coded according to their relevant EPC(s) or other topic (each general topic mentioned above is coded into subareas) and then evaluated as indicating a strength or weakness of the district, or as neutral statement. If an observation is neutral or the DAIT provider indicated both positive and negative aspects, the observation is coded as Neutral/Mixed.

Recommendations are categorized as Recommended or Strongly Recommended; typically, providers made succinct recommendation statements, however, occasionally providers would underscore the need for correction of a policy or practice with language that communicated the need for urgency – including phrases such as, "It is highly recommended that," or "We strongly recommend..." or "[specified action] must be addressed immediately."

In alignment with the APS, codes for the EPCs and other topic areas are subdivided to give more specific information regarding the issue noted by DAIT providers. This method of coding increases flexibility of analysis: subdivided EPCs and other topic areas allow for the examination of a single aspect of a single EPC or topic area, related aspects of multiple EPCs/topic, or the collapsing of all aspects of a single EPC/topic area. The following sample (Table 4) of the coding key illustrates how general categories are broken into subcategories.

**Table 4. Example of Capacity Study Coding Form** 

EPC 2: Instructional time (adherence to instructional minutes for English/reading/language arts and mathematics (K-8) and high school access to standards aligned core courses)

Area: In	structional Ti	me	Data Type (check one)				
Coding SubArea ID	SubArea	Additional Description	Status District Weakness	Status Neutral/Mixed Comment		Recom- mendation Recommended	Recom- mendation Strongly Recommended
	RLA	•					
	instructional time is compliant, monitored	District complies with and monitors implementation of instructional time for adopted RLA programs and protects time from					
2.11	given priority	interruptions					
2.12	RLA Intervention instructional time is compliant, monitored	District complies with and monitors implementation of additional instructional time for RLA intensive intervention program					
2.21	Math instructional time is compliant, monitored, given priority	District complies with and monitors implementation of instructional time for adopted math program; time is protected from interruptions					
		District complies with and monitors implementation of additional instruction time for math intervention program teneral/Unspecified area of time (please provide quote)					

DAIT providers vary greatly in their style of communication, with some repeating observations and recommendations in multiple sections and others making a single statement followed by an extensive justification. To account for this variation in reporting, quantitative analysis is not performed on the simple count of observations and recommendations, but on the percent of observations or

recommendations within a given EPC and within the entire document. This standardizes the data and directly feeds into the foundational evaluation questions of the qualitative analysis:

- 1. What strengths and weaknesses were most frequently observed in DAIT districts?
  - EPCs/topics with highest % of strengths (% of all observed strengths in entire document)
  - EPC /topic subareas with highest % of strengths (% of all observed strengths in entire document)
  - Within each EPC/topic, highest % of strengths (% of all observed strengths for a given EPC/topic)
  - EPCs/topics with highest % of weaknesses (% of all observed weaknesses in entire document)
  - o EPC/topic subareas with highest % of observed weaknesses (% of all observed weaknesses in entire document)
  - Within each EPC/topic, subarea with highest % of observed weaknesses (% of all observed weaknesses for a given EPC/topic)
- 2. What recommendations were most frequently prescribed by DAIT teams?

#### Data Points:

- EPCs /topics with highest average % of recommendations (% of all recommendations in entire document)
- EPC/topic subareas with highest average % of recommendations (% of all recommendations in entire document)
- EPC/topic subareas with highest average % of "strongly recommended" recommendations (% of all "strongly recommended" coded statements in entire document)
- Within each EPC/topic, subarea with highest % of recommendations (% of all recommendations for a given EPC)

In addition to answering evaluation questions regarding the status and needs of the DAIT districts, the qualitative analysis also describes the way that findings and recommendations were presented to the districts, thus answering the final qualitative evaluation question:

3. What areas were emphasized in DAIT recommendations and how many recommendations were made? Do the number and nature of the recommendations appear to be "reasonable?"

#### Data Points:

- o Range and average number of recommendations overall and by EPC/topic
- o Number of "strongly recommended" recommendations overall and by EPC/topic

Analysis of the relationship between the number of recommendations and other variables in the study (e.g. student achievement, implementation progress) may provide evidence regarding whether there is a critical (optimal) number of recommendations for districts. For example, as the total number of recommendations increases does this appear to diffuse the district's improvement efforts?

# III. Overview of Context of Districts in Program Improvement Year 3 and in Varying Technical Assistance Levels

As mentioned in the outline of quantitative methods that will be used in the evaluation, it is important to understand the contexts of the districts that receive treatment (DAITs) as opposed to those that do not. Here we provide an overview of these districts' contexts. We conclude that there are significant performance differences between districts with different treatment status, as well as between cohorts. We

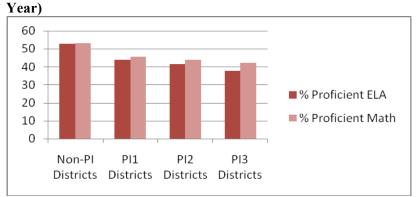
also find that the most disadvantaged students attend schools in these low-performing districts; districts in PI3 status, and districts receiving DAIT interventions, have the highest proportions of minority, EL, special needs, and low-income students. This finding is consistent across treatment cohorts. Last, we find that teachers in districts that receive the most severe treatment (those that are assigned DAITs) have the least teaching experience and are less likely to be fully credentialed. This finding is consistent across treatment cohorts.

#### **Student Performance**

PI3 Districts are the lowest performing districts, although not by much.

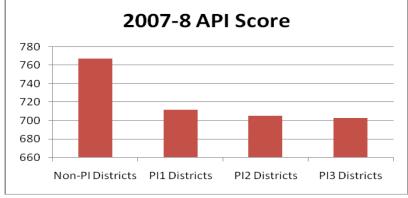
LEAs are identified as Program Improvement Year 3 when they fail to make Adequate Yearly Progress for four consecutive years. They can only exit PI3 status if they make AYP for two consecutive years. It is no surprise, then, that these districts are the lowest-performing in California when measured by federal accountability guidelines (proportion of students scoring proficient in ELA and Math) and by state accountability measures (district-level API scores). Figures 1a and 1b show that California districts in more advanced stages of PI status are lower-performing, although perhaps not by as great a distance as we would expect. Only two percent and four percent fewer students reach proficiency in math and ELA respectively in PI3 versus PI2 districts, and PI3 districts only score 2 points lower on the overall district API than PI2 districts.

Figure 1a: Overall % Proficiency in ELA and Math by PI Status (Data from the 2007-8 School



Only the difference between Non-PI and PII districts is statistically significant for both Math and ELA (p<.05)

Figure 1b: Overall API Score by PI Status (Data from the 2008-9 School Year)



Only the difference between Non-PI and PII districts is statistically significant for both Math and ELA (p<.05)

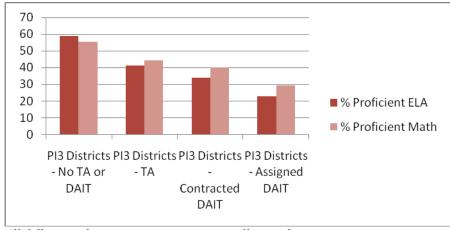
Within the PI3 classification, the lowest performing districts are those that receive the greatest levels of technical assistance

As described above, there are three designations of technical assistance for districts within PI3; "severe" technical assistance, which includes districts that require intense assistance from DAITs and are assigned a DAIT provider; "moderate" technical assistance, which includes districts that require DAIT intervention but are allowed to contract with their choice of DAIT providers from among those that have been recognized by the CDE; and "light" technical assistance, or those who are required to access technical assistance but not to contract with a DAIT. All three groups of districts receive funding based on the number of PI3 schools within their districts. This funding mechanism then created a fourth group - PI3 districts that had no PI3 schools in them, and as such receive no funds with which to contract with a technical assistance provider. We label these districts "Non-Technical Assistance" PI3 districts.

The algorithm used by the CDE to distribute PI3 districts to their respective technical assistance groups is based largely on districts' performance levels (see SBE Notes from March and November 2008 - <a href="http://www.cde.ca.gov/be/ag/ag/agenda1108.asp">http://www.cde.ca.gov/be/ag/ag/agenda1108.asp</a> and

http://www.cde.ca.gov/be/ag/ag/agenda1108.asp - for the outlines of the exact algorithms). It is again unsurprising, then, that the lowest performing districts within the PI3 classification are those that receive the greatest levels of technical assistance. The magnitudes of achievement differences between treatment groups (Assigned DAIT, Contracted DAIT, Contracted with non-DAIT TA) are much larger than the achievement disparities between PI1, PI2 and PI3 districts. For instance, districts that are required to contract with DAITs have four and seven percent fewer students who achieve proficiency in Math and ELA, respectively, than do districts who are required to access non-DAIT TA, and districts with contracted DAITs score 27 points lower on the API. Figures 2a and 2b show these relationships.

Figure 2a: Overall % Proficiency in ELA and Math by PI3 Technical Assistance Status (Data from the 2007-8 School Year)



All differences between groups are statistically significant.

.

<sup>&</sup>lt;sup>2</sup> Because only four districts fall into this category, we exclude them from much of our analyses.

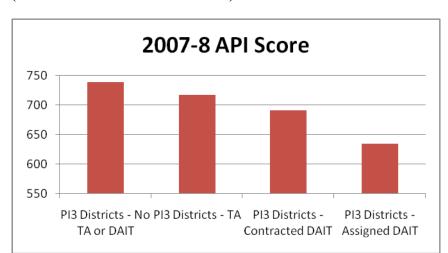


Figure 2b: Overall API Score by PI3 Technical Assistance Status (Data from the 2007-8 School Year)

All differences between groups are statistically significant other than that between no assistance districts and non-DAIT TA districts.

Student subgroups are lower performing in districts with contracted DAITs as opposed to districts required to access non-DAIT TA

Figures 3a and 3b show that within each tested subgroup, there is a clear relationship between district TA status and district subgroup API. White, Asian, "Other" (consisting of the Pacific Islander, American Indian and Filipino subgroups), African American, and Hispanic subgroups are shown in Figure 3a, and Special Needs, Socioeconomically Disadvantaged and English Language Learners are shown in Figure 3b. We see that for all subgroups PI3 districts with assigned DAITs are the lowest performing.

The difference in subgroup performance between districts that receive non-DAIT TA and those that were required to contract with DAITs appears substantively small across most race and ethnicity subgroups. The African American and Hispanic subgroups show the largest differences between districts that receive non-DAIT TA and contracted DAIT interventions. African American and Hispanic students in districts with non-DAIT TA scored approximately 15 points higher than did their peers in districts that contracted with a DAIT. However, the Asian and "Other" subgroups actually performed better in districts with contracted DAITs than did their peers in districts with non-DAIT TA. Only the API differences between the Hispanic and White subgroups are significantly different between districts with non-DAIT TA and districts with contracted DAITs. This implies that there are fewer differences in subgroup performance between districts in the two TA designations.

There are, however, significant and substantial differences between subgroup performance if districts with non-DAIT TA and with contracted DAIT assistance. Special Needs students in districts receiving non-DAIT TA scored approximately 38 points higher on the Academic Performance Index than did Special Needs students in districts that were required to contract with a DAIT, and EL students in districts with non-DAIT TA scored 20 points higher than did EL students in districts with contracted DAITs.

900
800
700
600
500
400
300
200
100
0
PI3 Districts - TA

PI3 Districts - Contracted DAIT

PI3 Districts - Assigned DAIT

Figure 3a: Race & Ethnicity Subgroup API Score by PI3 Technical Assistance Status (Data from the 2008-9 School Year)

The differences between TA and contracted DAIT groups are statistically significant for the Hispanic and White subgroups.

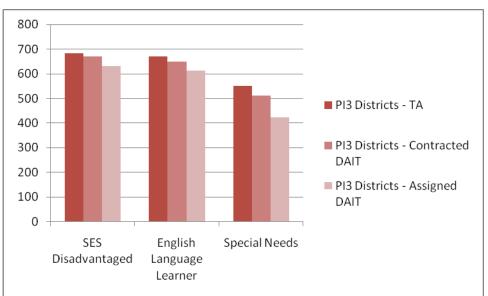


Figure 3b: Additional Subgroup API Score by PI3 Technical Assistance Status (Data from the 2007-8 School Year)

All differences between ELL and special needs assistance groups are statistically significant. The difference in SES disadvantaged subgroup scores is significant between districts that contracted with DAITs and those that contracted with non-DAIT TA.

Districts receiving DAIT and non-DAIT TA interventions have the greatest proportion of schools in program improvement.

Table 5 outlines the proportion of schools in each PI status designation and in PI overall in each district group. It is clear that districts in PI3 and districts receiving DAIT interventions are also the lowest performing districts in terms of the proportion of schools in PI status, and in advanced levels of program improvement. Fifty-four percent of schools in districts that were required to contract with a DAIT are in PI status, as were 88 percent of schools in districts that were assigned a DAIT provider.

Table 5: % of Schools in PI Status by District PI and Treatment Type

	Non-PI	PI1	PI2	All PI3	PI3 TA	PI3 Contracted DAIT	PI3 Assigned DAIT
% in PI 1	2.4%	4.6%	10.1%	6.3%	5.6%	7.6%	6.4%
% in PI 2	2.3%	3.5%	5.2%	10.5%	8.7%	12.0%	18.5%
% in PI 3	1.3%	3.4%	4.9%	5.2%	4.7%	6.4%	1.7%
% in PI 4	1.3%	2.6%	5.6%	10.1%	6.8%	12.2%	27.1%
% in PI 5	1.0%	5.7%	5.3%	13.6%	9.8%	15.8%	33.8%
Total	8.2%	19.8%	31.1%	45.6%	35.5%	54.0%	87.5%

Significant differences between treatment groups for the total % of schools in PI, and for differences between % of schools in PI4 and PI5.

Cohort 1 districts are significantly lower performing than are districts in Cohort 2

Figure 4 compares the overall and subgroup API scores of students in each PI3 district treatment group across cohorts 1 and 2.3 For the most part, Cohort 2 districts had higher API scores, on average, in the year that they were identified for treatment than did Cohort 1 districts. The differences were significant between cohort 1 and 2 districts receiving non-DAIT TA for the Asian, EL and special needs subgroups (the latter two are not shown). The EL, socioeconomically disadvantaged, overall and Hispanic subgroups performed significantly worse in cohort 1 districts that were required to contract with DAITs than they did in cohort 2.Results were similar when comparing cohorts across percent proficient rates of achievement as well as when comparing cohorts by the proportion of schools in each district type in PI. In addition, cohort 2 districts across designations have lower proportions of schools in PI overall, as well as in PI3 through PI5 status.

<sup>&</sup>lt;sup>3</sup> Note that there is only one district (Parlier Unified) in the cohort 2 assigned DAIT subgroup, so we cannot make any general comparisons of API scores between cohorts 1 and 2 districts that were assigned DAITs.

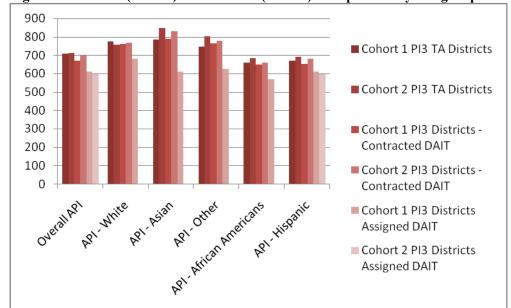


Figure 4: Cohort 1(2006-7) vs. Cohort 2 (2007-8) Comparison by Subgroup API Scores

TA districts: significant differences between Cohort 1 and 2 Asian subgroup

Contracted DAIT districts: significant differences between Cohort 1 and Cohort 2 Overall and Hispanic subgroups

## **Student Demographics**

P13 districts and districts receiving DAIT treatment have the highest proportions of traditionally disadvantaged students.

There are significant and substantial differences between districts with different PI designations as well as between PI3 districts with receiving different treatments. These differences span the range of traditional predictors of student disadvantage: minority, socioeconomically disadvantaged, migrant, EL and special needs students and students with parents who have never attended college or even completed high school. We find that, on average, districts with DAIT interventions have significantly higher proportions of disadvantaged students than do districts receiving non-DAIT technical assistance.

Figures 5a and 5b show the average proportion of white and Hispanic students in the different types of districts. The patterns for black students and for those subgroups described above are quite similar to those shown in Figures 5a and 5b. The differences between PI3 districts with DAITs and those without and between PI3 districts and PI1 or PI2 districts are for the most part statistically significant.

There are two important policy conclusions that can be garnered from these analyses. First, these figures indicate that minority and other traditionally disadvantaged students in California school districts are disproportionately found in California's lowest performing schools. Moreover, we see that districts that receive non-DAIT TA as opposed to assistance from DAITs have significantly lower proportions of disadvantaged students and higher proportions of white students. Second, districts attempting to implement reforms due to accountability sanctions, including non-DAIT TA and DAIT interventions, are attempting to do so with some of the most challenging student populations. Not only are the contexts they face in terms of student populations difficult, but the problems are layered on top of one another such that these low-performing districts not only have the highest proportions of students in poverty *or* EL students, but they must cope with high proportions of both students in poverty *and* who are English learners, in addition to higher proportions of students with special needs, students who are migrant workers, and students whose parents are not highly-educated.

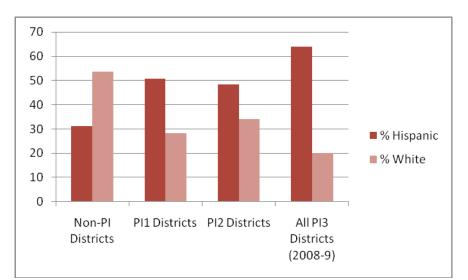


Figure 5a: Proportion of Hispanic and White Students by PI Designation (2007-8 Data)

All differences are significant except for the difference in % Hispanic and White between PI1 and PI2 districts

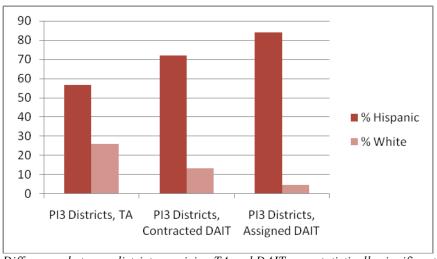


Figure 5b: Proportion of Hispanic and White Students by Treatment Status (2007-8 Data)

Differences between districts receiving TA and DAITs are statistically significant.

There are no significant differences between cohorts in the proportions of minority and white students or by students with special needs, English language learner status or poverty by district group.

Notably, there are no significant differences between Cohorts 1 and 2 by district PI and treatment groups in the proportion of black, Hispanic, or white students. Neither are there significant between-cohort differences in the proportions of students who qualify for free- or reduced-price lunches, who are designated as English Language Learners, or who have special needs. This indicates that districts in both cohorts identified as in Program Improvement status, and those given DAIT versus non-DAIT Technical Assistance, look relatively similar in terms of student background.

# **Teacher Characteristics**

Teachers in districts receiving DAIT treatments have significantly less experience than non-PI3 districts and districts receiving non-DAIT TA.

Not only are student and performance characteristics different by district PI3 status and treatment group, but districts also differ by observable teacher characteristics. Although mean and median teacher experience levels do not differ significantly or substantially by district PI status, Figure 6 does show that both mean and median teacher experience levels are significantly lower in the eight districts that are assigned DAITs. Teachers in PI3 districts that were required to access non-DAIT TA have, on average, 13.1 years of experience, and a median of 10.9 years of experience. These figures are higher, although not significantly so, than the mean and median teacher experience levels in PI3 districts that were required to contract with DAITs (12.4 and 10.2 years respectively). However, teachers in the eight districts that were assigned DAITs have significantly lower levels of teacher experience. Teachers in these districts average only 9.1 years of experience, with a median experience level of only 6.6 years.

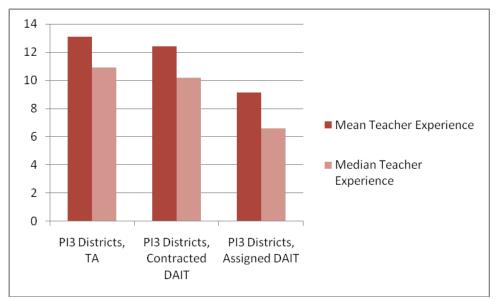


Figure 6: Differences in Teacher Experience by District Treatment (2007-8 Data)

Differences between districts assigned DAITs and those who contracted with DAITs are significant.

These findings imply that students in the worst performing districts are faced with the least experienced teachers. Moreover, as districts attempt to implement substantive reforms they do so in a district context with the least experienced teachers.

Higher proportions of teachers in districts that were assigned DAITs hold emergency credentials, and lower proportions are fully certified.

Figure 7 shows that, although there are no differences between districts in various stages of program improvement in the proportions of teachers with emergency and full credentials, there are vast and significant differences between districts who were assigned DAITs and districts which were required to contract with a DAIT or non-DAIT TA provider.

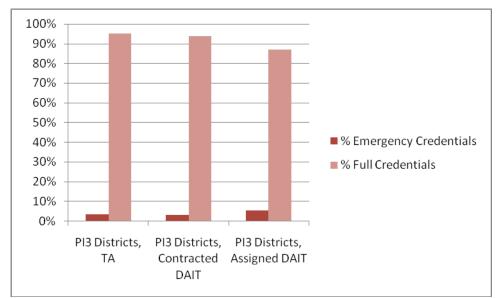


Figure 7: Differences in Teacher Credential Status by District Treatment (2007-8 Data)

Differences in % fully credentialed teachers between districts assigned DAITs and those who contracted with DAITs are significant.

Only 87 percent of teachers in districts that were assigned DAITs have full credentials, compared to 94 percent of districts that were required to contract with DAITs of their choosing and 94 percent of districts that were required to contract with non-DAIT providers. In addition, five percent of teachers in districts that were assigned DAITs are emergency credentialed, as opposed to only three percent of teachers in the remaining PI3 districts.

These results indicate that not only are teachers districts with DAITs, and specifically in districts that were assigned DAITs, less experienced, but fewer of them are fully credentialed according to state law in California.

There are few significant differences in teacher characteristics by district PI or treatment designation between Cohorts 1 and 2

Again, Cohorts 1 and 2 appear quite similar in terms of the experience levels and credential types of their teachers. This suggests that the cohorts have similar teacher characteristics, at least by observable standards. In other words, teachers in districts identified for the most severe technical assistance are less experienced and fewer are fully credentialed, regardless of cohort of identification.

## Summary & Implications

The findings regarding the differences between districts with different PI and treatment designations and DAIT cohorts imply important considerations for analyses:

First and foremost, PI3 districts have more disadvantaged students than do districts that are not in PI or that are in earlier stages of PI, on average. And within PI3 districts, those receiving DAIT treatment appear to have the most disadvantaged students in California. This makes reform hard to achieve, simply given the very difficult student contexts within which districts are attempting to implement substantial change.

Second, we show that districts with assigned DAITs have a significantly different teacher workforce in terms of average and median experience levels and certification rates. This also places the DAIT reform in a challenging context, as DAITs and district leadership must face challenging teacher staffing issues while attempting to implement centralized reform.

Third, we see that districts with DAITs have significantly lower student outcomes, defined by API and proficiency rates as well as by API growth (not shown), than do PI3 districts with non-DAIT TA. Not only are students in PI3 and in districts with DAITs the most traditionally disadvantaged, and working with the least experienced teachers, but they are also the worst performing. This is by definition, as PI3 districts are identified because they are low-performing, and the CDE selects districts to receive the DAIT interventions because they are the lowest-performing of the PI3 districts. Nonetheless, this finding further reinforces the idea that the neediest students are learning from the least experienced teachers and are performing at the lowest levels.

Together, the multiple differences between districts by treatment type and PI designation imply that the districts that receive non-DAIT TA are not a suitable control group for a simple evaluation of DAIT effectiveness. As such, we will need to carefully control for all observable differences between the two groups as we attempt to untangle the differential impact of DAITs on student performance. In addition, we will need to be careful to analyze differences in any impacts of the DAITs by cohort, as the 2007-08 and 2008-09 treatment cohorts are significantly different in terms of student performance.

# IV. Next Steps

In the coming year we will conduct the initial quantitative analyses incorporating the first year of student data available post-sanction for Cohort 1 districts (this is the first year in which any district actions in response to technical assistance and revised LEA plans could reasonably be expected to be in place and possibly influence student achievement). We will complete our capacity study analyses and review of additional secondary data and conduct interviews and surveys with DAIT providers and district staff in Cohort 1 districts in order to be able to describe how the DAIT is being implemented in these districts. Relevant and reliable implementation data will be incorporated into the quantitative analyses. Additional secondary data that may become available over the year will be incorporated into our analyses and reported in the Year 2 interim report.