

Evaluation of the High School Leadership Initiative

Year 3: Final Evaluation Report

SRI International

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1. Introduction

For more than 25 years, the mission of the California Academic Partnership Program (CAPP) has been to improve California's secondary schools. Jointly administered by the California State University and the University of California, in cooperation with the California Community Colleges and the State Superintendent of Public Instruction, CAPP prides itself as an incubator for innovative approaches to improving the academic quality of public secondary schools. It does so by designing and administering grant programs, learning from each program's successes, and improving on the ideas and approaches in its subsequent grants.

The focus of the CAPP grants has evolved over the years. In the 1980s, CAPP focused its grant efforts on curriculum programs that supported teachers in developing more rigorous and career-focused curricula in collaboration with university faculty and business representatives. With the adoption of state standards in the mid to late 1990s and the curriculum project grants' coming to a close, CAPP leaders turned their attention to supporting efforts to get the standards off the shelf and integrated into teacher practice. Although the CAPP grants shifted to the new California State Standards, the grants remained focused on supporting teachers and building opportunities for teacher leadership within these efforts. Another important state policy shift occurred in 1999 with the adoption of the California High School Exit Exam (CAHSEE). Once again, CAPP leaders responded to California's changing policy context by designing a grant program to help teachers increase the rigor of their instruction to prepare students to pass the CAHSEE. CAPP leaders simultaneously initiated a small grant to support efforts to improve student achievement in the state's lowest-performing high schools, the CAPP Partnership Initiative.

Each of these CAPP grants, from the curriculum projects to the CAHSEE and low-performing high schools projects, provided opportunities for teacher leadership, opportunities that generally were lacking in participating schools. Experiences with these grants highlighted the crucial role teacher leadership played in supporting the successful implementation of efforts to improve student outcomes. As CAPP leaders reflected on their experiences in supporting teacher leadership, it became clear that principals play a crucial role in supporting the success of teacher leadership in their schools. It was this relationship between principal and teacher leadership that influenced CAPP to initiate a new grant in summer 2007, the High School Leadership Initiative (HSLI).

HSLI was designed specifically to develop and support the leadership capacity of high school principals and teacher leaders in the service of improving student outcomes. As described in the HSLI request for proposals,¹ the initiative had three primary goals: (1) to strengthen the leadership of the principal and leadership team focused on student learning, (2) to document how schools create conditions that produce improved student achievement, and (3) to learn how these practices might be institutionalized.

¹ California Academic Partnership Program. (2006). *Request for proposals (revised). Developing courageous and creative high school leadership*. Available at http://www.calstate.edu/CAPP/docs/HS_Leadership_RFP-acc.pdf.

HSLI Theory of Change

CAPP leaders designed HSLI to develop and cultivate effective leadership practices in participating schools. Although there are many characteristics of effective leadership, CAPP leaders defined effective leadership as practices that (1) align organizational policies and procedures with school goals, (2) use data effectively to inform decision making, and (3) support continuous improvement, best instructional practices across all content areas, teacher leadership development, and shared decision making (see Exhibit 1.1).

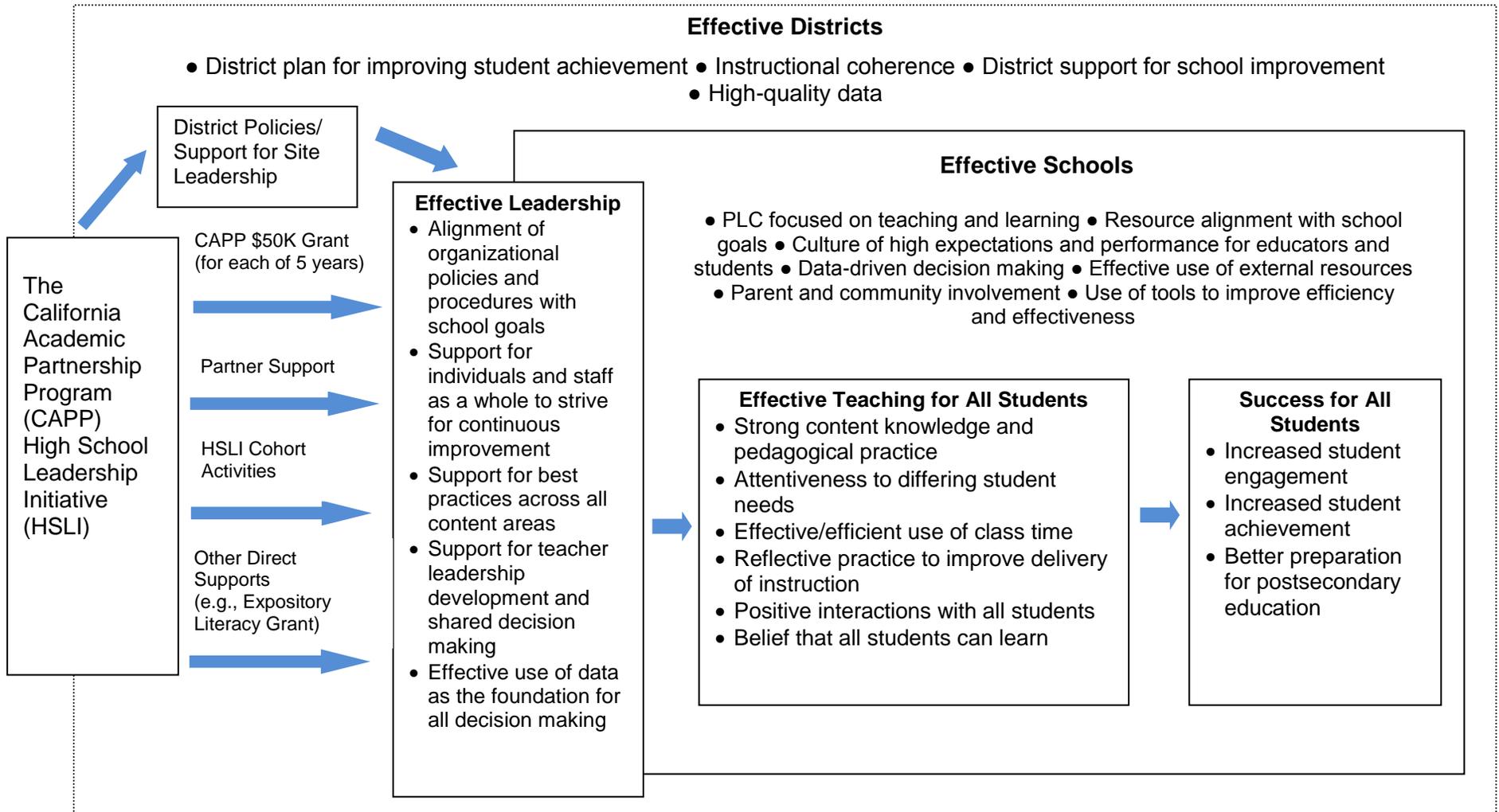
This HSLI theory of change posits that with effective leadership practices in place, schools create and sustain the conditions for effective teaching and learning, including (1) a professional learning community (PLC), (2) alignment of resources with school goals, (3) a culture of high expectations and performance for educators and students, (4) data-driven decision making, (5) the effective use of external resources, (6) parent and community involvement, and (7) the use of tools to improve efficiency and effectiveness.

In such a school environment, teachers will create classrooms characterized by effective teaching for all students. Teachers develop strong content knowledge and pedagogical practice, are attentive to differing student needs, use class time effectively and efficiently, reflect on their practice to improve instruction, have positive interactions with all students, and believe that all students can learn.

Finally, the HSLI theory of change suggests that through the development of effective leadership, schools and teachers will become more effective and ultimately contribute to improved student outcomes. The intent of HSLI was to increase student engagement in school, increase student achievement, and better prepare students for postsecondary education.

While the components of HSLI's supports were designed to build effective leadership in participating schools, CAPP's theory of change recognizes the impact district and school contexts can have on HSLI efforts. District policies and practices can support or hinder reform work in schools. Districts with a plan for improving student achievement, instructional coherence, support for school improvement, and high-quality data are in a position to support improvement at the school level. Community assets and challenges, district financial status, and state and federal policies, including accountability policies, can also support or impede schools' efforts.

Exhibit 1.1 HSLI Logic Model
CAPP's High School Leadership Initiative Strategy for Building and Sustaining Effective School Leadership



Community, State, and Federal Context

- Community assets and needs
- District financial status
- State credentialing requirements
- State and federal accountability
- Legislation

HSLI Evaluation

In 2011, CAPP contracted with SRI International to conduct an independent evaluation of HSLI. The evaluation began in the fourth and penultimate year of the HSLI grant and was designed to understand the implementation of the HSLI grant, as well as the ways in which leadership and student outcomes changed in participating schools. Five research questions guided the evaluation:

1. Have the leadership structures and practices been strengthened in HSLI schools?
2. Have conditions for teaching and learning improved in HSLI schools?
3. Have teachers' instructional practices changed to support the academic achievement of all students?
4. Have student outcomes improved, overall and by subgroup, in HSLI schools?
5. How has CAPP contributed to leadership development in the HSLI schools?

Over the course of the evaluation, the research team used six different data collection and analysis strands: document review; observations of HSLI meetings; telephone interviews with CAPP leaders, HSLI partners², and current and former HSLI principals; school site visits that included on-site interviews with teachers and principals; an HSLI teacher survey; and analysis of publicly available school-level student outcome measures. We describe each of these data collection and analysis strands next.

Document Review

The HSLI director collected a wealth of information from HSLI partners, principals, and staff. The research team gathered and analyzed these documents over the course of the evaluation to advance our understanding of the design, implementation, and effectiveness of HSLI in each school. Documents reviewed were the original HSLI applications; partner documents, including communication logs, reflections, and summary reports; documents for partner meetings, cohort meetings, and summer seminars (such as agendas, meeting materials, and participant feedback); principals' annual summaries; HSLI budgets and plans; and an early HSLI evaluation report.

Observations of HSLI Meetings

The research team attended HSLI-sponsored meetings, including HSLI partner meetings, principal cohort meetings, and the annual summer seminar for HSLI leadership teams.³ At the meetings, researchers attended to the content of discussions, the interactions between HSLI partners and leadership team members, the interactions among leadership team members, the challenges leadership team members confronted, and the support provided by HSLI partners.

² See Chapter 2 for a description of the HSLI partner.

³ See Chapter 2 for descriptions of the HSLI meetings.

Telephone Interviews with Key Stakeholders

During the 2010–11 school year, the research team conducted telephone interviews with CAPP leaders. Specifically, we interviewed the HSLI director, the statewide CAPP director, the CAPP associate director, and the CAPP fiscal and grants manager to understand the history of CAPP and HSLI and the current status of the initiative. Interview topics included CAPP’s goals for the initiative, selection of HSLI schools and partners, the types of supports provided to schools, and implementation challenges and successes to date.

Researchers also interviewed each school’s partner to understand that role and to obtain the partners’ perspectives on how the schools engaged with HSLI and the changes that occurred as a result. Interview topics included the characteristics of HSLI schools and staff; processes, procedures, and strategies used to build working relationships with schools; processes, procedures, and strategies for assessing school leadership needs; processes, procedures, and strategies for building school leadership; perceived effectiveness of supports for partners; and challenges and successes to date.

During the 2011–12 school year, which coincided with the final year of the grant, the research team conducted telephone interviews with all 11 sitting HSLI principals and 5 former HSLI principals. The interview questions for current HSLI principals focused on the ways in which the HSLI supports changed, if at all, in the final year of the grant. Interviewers also asked about principals’ views on the changes in leadership structures and practices, teachers’ instructional practices, and student outcomes that occurred at their schools. Further, interviewers asked principals to describe the challenges they faced in building leadership capacity and sustaining leadership structures and practices into the future. Because 8 of the 11 HSLI schools had more than one principal during the life of the HSLI grant,⁴ the research team interviewed five former HSLI principals to learn how, if at all, their experiences participating in HSLI influenced the way they approached leadership and leadership development in their new roles.

The research team also interviewed the HSLI partners during the 2011–12 school year. We asked partners about the types of supports they provided their schools in the final year of the grant and to assess the progress their schools had made in the areas of leadership structures and practices, teacher instructional practices, and student outcomes. Additionally, we asked partners about the supports that were most effective in helping schools prepare for the transition out of the grant, as well as about key challenges to sustaining the leadership structures and practices that had been implemented at their schools. Finally, we asked partners to reflect on the most useful supports they received as partners to help them meet the needs of their schools.

School Site Visits

Researchers visited each of the 11 HSLI schools twice during the evaluation, in spring 2011 and 2013. At each school, we interviewed the principal and school leadership team members, as well as teachers not involved in school leadership team activities. Interviews addressed the school context (e.g., student demographics, teacher characteristics, organizational structures, and leadership practices); the principal’s and teachers’ participation in and assessment of HSLI-sponsored meetings; the role and influence of the partner; changes in leadership

⁴ Over the 5 years of the grant, HSLI worked with 24 principals in the 11 schools.

practices since HSLI; and supports for and challenges to strengthening leadership, school conditions for teaching and learning, and instructional practices. In a few schools, researchers also interviewed a district representative to understand how HSLI fit with other district initiatives and to obtain his or her perspectives on any effect HSLI had on the school and/or district. In spring 2013, researchers returned to the 11 HSLI schools to interview the principal and teachers about the extent to which shared leadership and other efforts supported by the HSLI grant were sustained in the year after the grant ended in 2012.

HSLI Teacher Survey

The research team developed and administered an online survey to all classroom teachers in every HSLI school in spring 2012. The survey contained questions in three areas: schoolwide culture, collaborative practice, and instructional practice. Because teachers had not been surveyed on these three areas in the first year of the grant, this survey was developed to capture their perceptions on each area for two different time periods: the first year of the HSLI grant, 2007–08 (or the first year the teacher taught at the school if he or she arrived after 2007–08), and 2011–12. Analysis of teachers’ responses to questions about the two time periods yielded change scores that enabled the research team to analyze changes in the HSLI schools over time. The survey also included questions about the role of professional groups in supporting practices associated with effective schoolwide culture, collaboration, and instruction. Fifty-eight percent of HSLI teachers responded to the survey.⁵

School-Level Student Outcome Measures

In each year of the evaluation, the research team collected and analyzed publicly available data on a variety of school-level student outcomes:

- Graduation rates
- Fulfillment of “a-g” subject requirements
- Performance on the math and English language arts portions of the California High School Exit Exam (CAHSEE)
- SAT test participation and performance
- ACT test participation and performance
- Advanced Placement (AP) participation and performance
- Performance on California Standards Tests (CST) in Algebra I and II as well as English language arts
- Performance on Early Assessment Program (EAP) tests.

In the first two years of the evaluation, the research team analyzed the results of the HSLI cohort across each of the above student outcomes compared with statewide averages. In the final year of the evaluation, we compared the results of the HSLI cohort with those of a comparison group of similar high schools across each of the above student outcomes.⁶

⁵ See Appendix A for details on survey development and analysis of responses.

⁶ See Appendix A for details on the analyses of student outcomes.

Early Evaluation Reports

The first evaluation report, issued in 2011, addressed how HSLI helped school leaders change leadership structures in schools to be more inclusive, navigate the decisions they faced, and access the resources needed to improve teaching and learning in their schools. The first report also discussed the factors that supported the success of HSLI and the challenges that impeded progress. In 2012, the second evaluation report highlighted changes in HSLI schools since the beginning of the grant. This third and final evaluation report draws on findings from all three years of data collection to tell the story of HSLI—what HSLI was, how the initiative supported leadership development, what changes occurred in HSLI schools, and what evidence exists that HSLI has built a lasting legacy of effective leadership in participating schools.

Overview of Final Report

This report describes and analyzes the supports provided to HSLI schools, the changes made in HSLI schools in administrator and teacher leadership, and corresponding changes in student outcomes⁷. Chapter 2 describes in detail the various supports provided to schools as part of HSLI and the school contexts in which these supports were introduced. Chapter 3 describes how the HSLI supports worked to develop leadership in HSLI schools. Chapter 4 presents findings on the lasting changes to structures, culture, and instructional practices evident in HSLI schools. Changes to student outcomes, the ultimate goal of HSLI, are presented in Chapter 5. The report concludes in Chapter 6 with a summary of findings and lessons learned to inform future grant cycles.

⁷ To preserve confidentiality and clear writing, all gendered pronouns in this report that refer to the HSLI partners, principals, or teachers have been changed to the masculine form.

2. HSLI Supports and Schools

As described in the introduction, CAPP leaders designed the HSLI grant to strengthen principal and teacher leadership in California high schools. CAPP leaders drew on their experiences from previous grant cycles in designing the supports HSLI offered to participants. In this chapter, we describe the HSLI supports and outline how those supports were intended to strengthen leadership, instruction, and ultimately student outcomes in participating schools. We then provide a brief description of the schools selected to participate in the HSLI grant.

HSLI Supports

To build leadership capacity, develop shared leadership structures and practices, and increase the college readiness of high school graduates, the HSLI grant offered a set of supports designed to be responsive to the specific needs of individual schools and the leaders in those schools. HSLI did not prescribe a specific program or set of strategies to be implemented. Instead, HSLI grant participants received a monetary grant, support from an HSLI “partner,” and organized “HSLI cohort activities” designed to support and build effective leadership in participating schools.

Monetary Grant

Each HSLI school received \$50,000 per year for 5 years. CAPP leaders created broad parameters around using the funds to support leadership development and strengthen instruction, allowing grantees a fair amount of discretion over how to use the funds to meet their HSLI goals. In general, schools have very little discretion over the use of school and grant funds, an approach that CAPP leaders believe creates unnecessary restrictions that stifle innovation. CAPP leaders wanted to ensure that the rules on using the grant funds did not get in the way of experimenting with new ways of developing and supporting school leadership. HSLI principals reported that the grant’s flexibility was welcomed and allowed them to identify the best uses of the funds to support their goals for building leadership capacity rather than to simply follow grant guidelines. HSLI grantees used their funds in a variety of ways, including (1) release time for data analysis, curriculum development, and instructional planning during the school day; (2) staff development on specific instructional strategies; (3) consultants with specific areas of expertise; and (4) time for schoolwide planning during the summer.

Partner Support

CAPP leaders recognized that school leaders have varying strengths and weaknesses and that these leaders work in specific contexts with unique conditions and circumstances. CAPP leaders also saw the power of matching schools with experts to provide intensive, individualized, and targeted assistance. Thus, each HSLI school received on-site support from an HSLI partner who had expertise in curriculum, knowledge of K–12 educational programs, and/or leadership experience. Unlike a typical school “coach,” the partner worked collaboratively with school personnel, serving as a peer and colleague. And unlike the coaching these schools had received in the past, partners were not charged with supporting the implementation of a particular school intervention or program. Rather, partners were charged with working with school leaders to help

them develop a vision of effective leadership and implement strategies and structures aligned with that vision.

Funded to spend 2 days per month⁸ in each school, partners were a regular presence in the schools. Partners' support spanned a range of activities, including shadowing the principal and providing feedback, conducting joint classroom walk-throughs and discussing observations, and discussing leadership issues with the principal to provide advice. Partners also worked with other school staff members by attending leadership and department team meetings, facilitating meetings, leading teacher trainings, and working one on one to discuss and build effective leadership skills. Partners also worked on behalf of the schools with outside organizations—for example, by advocating for the school with district administrators, securing technical assistance for the school by making connections with outside providers, and inviting their colleagues with specialized expertise to provide targeted support.

Providing support across so many domains of leadership can be challenging even for the most experienced experts. HSLI acknowledged this fact and supported the ongoing development of partner expertise mainly through two mechanisms: quarterly partner meetings and regular feedback from the HSLI director. The 5-hour quarterly partner meetings included discussions of assigned readings (e.g., on leadership, organizational management, or school reform) and the ways the readings informed partners' work. The meetings also included time for each partner to provide an update on his work with each school and to discuss ongoing challenges in developing leadership capacity at HSLI schools. Drawing on their own experiences and expertise, partners supported each other in these meetings by offering suggestions and strategies for addressing specific challenges.⁹ Additionally, the HSLI director supported the ongoing development of partner expertise through collaborative reflection and feedback. HSLI partners kept a log of their communications with their assigned schools and wrote regular reflections based on their school visits. The HSLI director reviewed these documents and initiated more in-depth conversations about the challenges to leadership development and supporting school improvement efforts and how partners might address those challenges. The topics of conversation were both broad and applicable to all HSLI partners, and narrow, targeted to individual partners to help them address unique challenges at individual HSLI schools when they arose.

HSLI Cohort Activities

HSLI leaders recognized that principals rarely have opportunities to have open and honest discussions around the challenges of leadership with their peers. HSLI created such an opportunity for principals through regularly scheduled principal cohort meetings, twice per year. A rotation among high schools was established for hosting the meetings, giving almost all HSLI schools an opportunity to have the other cohort members visit their schools. During each 2-day meeting, principals heard presentations from the host school's faculty and students about their educational approach and special programs, toured the school, and discussed issues related to leadership. The cohort meetings were a time for the HSLI principals to share best practices;

⁸ Partners were funded to visit schools for 10 months of the academic school year calendar.

⁹ HSLI partners also played active roles in other HSLI activities, including administering and analyzing the annual staff assessment survey, collecting and analyzing student outcomes, and planning the summer seminars. The quarterly meetings provided time for planning these other activities and discussing results of data collection efforts.

discuss challenges they faced and identify potential solutions; discuss beliefs about teaching, learning, and leadership; and discuss research on effective schools and effective school leadership. The principal cohort enabled principals to expand their view of schools and leadership beyond their own school and to receive support and advice from peers who were facing similar challenges.

HSLI also hosted an annual summer seminar for the leadership teams from each HSLI school. Over the life of the 5-year HSLI grant, the summer seminar was modified to meet the needs of the grantees. In the first few years of the grant, the majority of the summer seminar focused on professional development around specific educational issues as well as building leadership skills. Workshop topics included building academic literacy for English learners, facilitating effective meetings, developing ninth-grade interventions, connecting professional development with classroom practice, the Common Core, and creating a college-going culture. Planning time became more important to school leadership teams in the later years of the grant, and the summer seminars were modified to provide teams more time to plan and fewer workshops.

Other Direct Supports

The HSLI director drew on her professional networks to garner additional resources for HSLI schools over the life of the grant. For example, in addition to HSLI, CAPP was administering another grant program to improve expository reading and writing skills, the Expository Literacy Grant (ELG). Initial assessments of ELG indicated that the participating schools were having success in improving student outcomes. Knowing that many of the HSLI schools were struggling in expository reading and writing, the HSLI director made additional funding available to support the participation of a subset of HSLI schools in the ELG program. The HSLI director also made Transcript Evaluation Service (TES) available, including training on the program, to all HSLI schools to support efforts to improve college and career advising.¹⁰ The HSLI director also connected HSLI schools with content experts that had been successful in supporting improved student outcomes.

These HSLI supports, designed to be flexible and tailored, were provided to a diverse group of schools across the state of California. Below we provide information on the various contexts in which HSLI was implemented.

The HSLI Schools

CAPP released the HSLI request for proposals in fall 2006 and encouraged all high schools in the state with an Academic Performance Index (API) statewide rank of 1 through 5 to apply. Forty-four principals across the state responded to the request. In their proposals, principals enumerated the leadership challenges they faced and the ways in which the HSLI leadership grant would help them and their schools improve student outcomes. Eleven principals and their schools were selected to participate in HSLI for 5 years, 2007–08 through 2011–12.

¹⁰ TES provides student- and school-level reports based on school transcript data that track the courses needed to meet college entrance requirements or requirements for postsecondary goals. For more on TES, see <https://www.transcriptevaluationservice.com/>.

These 11 HSLI high schools represented California's diversity. The schools varied greatly in size, from slightly under 600 students to more than 4,200 in 2007–08 (see Exhibit 2.1). They also varied in the types of students they served, from small percentages of English language learners (15%) to almost 40% of the entire student population speaking languages other than English. The student populations at 8 of the 11 HSLI schools were primarily Latino, and all HSLI schools served student populations in which 40% or more of the students were eligible for free or reduced-price lunch. In 9 of the 11 HSLI schools, 65% or more of the students were eligible for free or reduced-price lunch.

Exhibit 2.1
Characteristics of Participating HSLI Schools, 2007–08

HSLI School	County	School District	Student Enrollment	Percentage Latino	Percentage English Learners	Percentage Free or Reduced-Price Lunch	API ¹¹ State Rank	Program Improvement (PI) Status
Baldwin Park	Los Angeles	Baldwin Park Unified	2,463	90	22	62	2	Not in PI
Caruthers	Fresno	Caruthers Unified	586	69	38	79	5	Not in PI
Dinuba	Tulare	Dinuba Unified	1,697	87	22	67	3	Y1
Florin	Sacramento	Elk Grove Unified	1,832	23	24	71	5	Not Title I*
John H. Francis Polytechnic	Los Angeles	Los Angeles Unified	4,251	90	29	73	2	Y5
Samuel F. B. Morse	San Diego	San Diego Unified	2,699	34	16	65	3	Y5
William C. Overfelt	Santa Clara	Eastside Union High School District	1,668	78	28	65	3	Not in PI
Oxnard	Ventura	Oxnard Union High School District	3,231	70	15	41	4	Not in PI
Soledad	Monterey	Soledad Unified	1,097	91	28	87	2	Y4
Southwest	San Diego	Sweetwater Union High School District	2,123	86	37	71	4	Y5
Valley	Sacramento	Elk Grove Unified	1,770	31	26	77	5	Not Title I*

*Program Improvement status is not applicable to this school because it does not receive Title I funding.
Sources: California Department of Education, 2011 (DataQuest and STAR websites).

¹¹ Academic Performance Index.

As mentioned in the discussion of HSLI's theory of change, district and school contexts can have a significant impact on the ways in which schools implement grants like HSLI. Exhibit 2.1 provides a glimpse into two key pressures that greatly influenced the school contexts in many HSLI schools: API ranking and Program Improvement status. Throughout the grant, HSLI schools had to balance their HSLI grant efforts with other pressures that placed demands on their time and resources. The key pressures that drew attention in most of the school communities during their participation in HSLI included the state and federal accountability systems, school restructuring, unstable leadership and staffing, and Western Association of Schools and Colleges (WASC) accreditation. We briefly describe each of these pressures next.

Accountability

The federal accountability system, No Child Left Behind, affected HSLI schools differently. For all but two schools that did not receive Title I funds and therefore did not participate in the federal accountability system, Program Improvement status was a concern and played prominently into school and district decisions and priorities. For example, two HSLI schools were implementing Explicit Direct Instruction (EDI), an instructional strategy geared toward teacher-directed or teacher-guided instruction, during the grant period. This whole-school implementation of a specific instructional strategy across all content areas was a new experience for high school teachers and caused anxiety and concerns around the effectiveness of this particular instructional strategy at the secondary level. These schools were implementing EDI as part of their district's Program Improvement Plan and had to align their HSLI efforts with their improvement strategies and programs.

School Restructuring

Several HSLI schools underwent major restructuring during the life of the grant. Two schools established wall-to-wall, small learning communities where all students are assigned to a small learning community or "house." A third HSLI school made a major change to their academic calendar by shifting from a multi-track, year round schedule to a traditional academic calendar. A fourth HSLI school shifted its daily schedule to a block schedule where students attend a subset of their classes on alternating days. Creating new systems such as professional learning communities that met the needs of these new structures and schedules was challenging and required strong leadership to bring the entire school community along.

Unstable Leadership and Staffing

Most HSLI schools experienced turnover of principals during the life of the grant, with some schools experiencing a principal change as many as three times in the 5 years of the grant. There were a total of 24 principals in the 11 HSLI schools over the course of the grant. Each new principal had to be brought up to speed on the HSLI grant, and not all new principals were as invested in the grant as their predecessors. In addition, new principals often lacked an understanding of the organizational history of their schools and were therefore unaware of the evolution of the schools' organizational structures, processes, and procedures. District leadership also was in flux for many HSLI schools as superintendents came and went. In fact, there were 17 superintendent changes across the HSLI cohort during the 5 years of the grant. Superintendent changes brought a level of uncertainty regarding the future of existing district and school priorities and efforts. For example, in one HSLI school, after switching to a block schedule, the new superintendent directed the school to switch back to a traditional school calendar.

Furthermore, a few HSLI schools had to contend with decreases in staffing due to shrinking student enrollment. The unstable staffing created challenges as HSLI schools worked to develop and strengthen shared leadership structures even as the size of school faculty contracted.

WASC Accreditation

Over the course of the grant, all HSLI schools participated in WASC accreditation. The importance of WASC accreditation created a sense of urgency for staff to focus on the accreditation tasks during WASC visitation years. Many HSLI principals reported that some HSLI activities took a back seat to WASC accreditation activities. In addition, one HSLI school had difficulty obtaining full WASC accreditation. With the possibility of a revoked accreditation, this school directed many of its resources and efforts, including the HSLI resources, to support WASC accreditation activities.

These key pressures highlight the varied issues that leaders in HSLI schools had to balance with their HSLI efforts. However, HSLI supports were designed to be flexible, tailored, and intensive to handle the realities of schools in practice. In the next chapter, we discuss how these supports helped develop effective leadership practices in schools, even under challenging situations.

3. Developing Leadership in HSLI Schools

HSLI took a multipronged approach to developing effective leadership in participating school by offering a suite of supports, including a monetary grant, an HSLI partner, and cohort activities. In this chapter, we discuss the ways in which each of these supports developed leadership in HSLI schools.

The HSLI Partner

The HSLI partner proved to be the linchpin for ensuring that the different HSLI supports were woven together to meet individual school needs. Partners helped school leaders and leadership teams create their own visions of shared leadership, they helped shape the direction of leadership growth, and they provided the scaffolding schools needed to move forward productively. Although HSLI partners targeted their support to meet the individual needs of schools, the evaluation found that partners focused their efforts on the development of a similar set of leadership practices and structures. In this section, we discuss those common areas of leadership development.

Laying the Foundation for Effective Leadership

As HSLI partners began their work with schools, it became clear that much of their initial support needed to focus on laying a foundation for effective leadership. Early in the grant, partners spent considerable time getting to know the principals and school staff (e.g., their strengths, challenges, and personalities), as well as the school contexts (e.g., the structures, policies, curricula, and student characteristics). Partners' early observations at the schools and conversations with principals and other school staff highlighted the need for partners to focus their early support on the basics of effective leadership, helping principals recognize the value of shared leadership, and setting the foundation for a pipeline of effective school leaders.

Making the Case for Shared Decision Making. One way that partners helped lay the foundation for effective leadership was to help principals understand the strengths of a shared leadership model and to encourage principals to adopt more inclusive decision-making processes. Early in the grant, partners noted that many HSLI principals operated in ways that did not foster shared decision making. These principals assumed a “go it alone” style, taking on many leadership responsibilities that could have been shared among school staff. Even if they theoretically understood the benefits of shared leadership, principals had a hard time practicing it. They needed to learn to let go and to adopt leadership styles they had not used before.

To help principals relinquish some of their control, partners facilitated conversations with them about the need to distribute leadership authority and responsibility among staff. The sheer number of tasks and responsibilities in a high school is too much for one individual to take on successfully. The partners worked to help principals understand that sharing decision making was the only way to accomplish the lofty goals the principals had set for improving their schools.

In addition to highlighting the practical consideration of facilitating the more timely completion of tasks, partners also conveyed to principals that shared decision making often

fosters staff buy-in for even the most challenging efforts to improve schools. Conversations between partners and principals centered on the need to build trust among school staff so that everyone entrusted with decision-making authority made decisions based on what was best for students and aligned with the school vision and mission. Principals and partners reported that helping principals “let go” of an authoritarian leadership style and understand the ways in which shared leadership supports more effective leadership were key HSLI support activities early in the grant.

Building a Pipeline of Effective Leaders. Another emphasis of the partners’ early work was building a pipeline of school leaders. Partners noted that when they began working with schools, there was no formal system for identifying potential teacher leaders and little in the way of formal or informal supports for nurturing the development of effective leadership skills in teachers, assistant principals, or others with leadership potential. As part of their efforts to build shared decision-making practices and structures, HSLI partners were concerned with the absence of a leadership pipeline that would ensure the schools had a sufficient supply of effective leaders that could take on shared decision-making roles.

In response, in their initial work with schools, HSLI partners identified teachers and administrators such as assistant principals or counselors with strong leadership skills, as well as those with potential for leadership, and actively worked with these individuals to build their leadership skills. Interviews with teachers highlighted how crucial this partner support was in encouraging teachers to see themselves as leaders and to take on leadership roles. At the same time that partners were preparing principals to share decision-making authority, they were building the skills of others to be effective school leaders and decision makers.

Establishing Meeting Basics. Finally, HSLI partners focused their early work on helping principals, department chairs, and others implement tools and protocols that support productive collaborative work. At the most basic level, partners recognized the need to change practices around meetings so that meetings were productive and led to action.

Partners reported that when they first began working with the schools, meetings routinely lacked agendas or failed to follow established agendas, they tended to end without clearly establishing next steps or who was responsible for those next steps, they regularly were postponed or cancelled, and promises made in meetings were not kept. However, meetings are the crux for joint work, for it is in meetings that problems and successes are identified and ideas are generated, discussed, and improved, and from which action is launched. Partners recognized that without improving the structures and functioning of meetings, new leadership practices, especially those designed to promote distributed leadership, would be difficult, if not impossible, to establish.

In response to the ineffective meetings, partners worked directly with individuals leading meetings to revamp the purposes and structures of their meetings. It was important to give meetings meaning and run them in a way that promoted collaboration and action. Thus, partners helped to create agendas centered around the core work of the schools rather than around administrative details, and they attended meetings to ensure that next steps were delineated. Further, by following up after meetings, the partners ensured that action steps were followed and

commitments were honored. Having basic meeting practices in place set the stage for distributed leadership and school change.

The early work of the partners—encouraging principals to abandon authoritarian leadership styles, identifying and building the skills of potential leaders besides the principals, and helping schools improve communication and action through effective meetings—was focused on laying the groundwork for schools to establish effective distributed leadership systems. Throughout the grant, however, the mainstay of partners’ support was assisting schools with the development and implementation of effective leadership practices. We discuss those efforts next.

Supporting Effective Leadership Practices

HSLI partners worked with participating schools in a number of areas to support the development and implementation of effective leadership practices. Partners focused their efforts on strengthening existing leadership structures, building or strengthening consensus for school-level decisions, and maintaining focus.

Strengthening Leadership Structures and Processes. Most HSLI schools had structures in place prior to the HSLI grant that required teacher participation and were teacher led, such as instructional teams, governance teams, and task forces. However, many of these leadership structures were not managed effectively and generally did not function as models of shared leadership. Often, these governance groups were merely advisory; they served to make recommendations to the principal or school administration, but they did not have true decision-making authority.

To bring legitimacy to these groups, raise their stature, and make them more effective, partners helped improve the capacity of their members, contributed to the development of tools and organizational routines to improve their functioning, and provided general feedback and guidance. This combined role of advisor, mentor, and professional developer was assumed by nearly all of the HSLI partners. They spent a considerable amount of their time in schools with instructional teams and asked questions, provided guidance, and generally served as thought partners.

In their work with HSLI schools, partners noted that teacher teams needed support to implement collaborative practices. Although teacher teams had time built into their schedules to plan together, many teams did not have the training or skills necessary to collaborate effectively. HSLI partners worked with teacher teams to increase their efficacy. For example, many partners assisted teams in using student data to plan instruction by increasing discussions about challenges with teaching specific concepts or skills and supporting teams to investigate collaborative practices that could support teaching those concepts and skills.

Another way that partners helped strengthen the leadership teams was to assist school administrators and teachers in developing tools and protocols to make shared leadership practices more efficient, productive, and sustainable. These tools and protocols facilitated “systems of institutional memory,” in the words of one partner, and were intended to help HSLI schools use consistent practices over time. Partners worked with school staff to develop protocols, policies, and rules that would enable the leadership structures to run smoothly and effectively. For

example, at several HSLI schools, the partners worked with teachers and administrators to design protocols that would clearly articulate the steps, procedures, and intended outcomes of a broad range of school functions, including communicating with parents, establishing discipline systems, setting up lab procedures, aligning instruction with state tests, and analyzing data from formative assessments. These protocols were designed to allow the school to use consistent practices over time and to help facilitate collaboration across the staff, for example, by initiating common practices for looking at student data.

Building or Strengthening Strategies for Consensus. As HSLI schools began to put shared decision-making structures and practices into place, it became clear that school leaders and leadership teams would need to nurture those structures and practices to build consensus and broad-based support for shared decision making. Partners worked with HSLI schools to enhance communication as a means to build consensus. Such efforts often involved facilitating candid conversations among team members in which critiques were raised and addressed so that each member could feel that his or her voice was heard and concerns acknowledged. Although this process was time-consuming and sometimes frustrating, principals and partners typically reported that it led to accomplishments that were robust in the face of challenge and sustainable in the long term. One partner reflected on how he and the principal were able to nurture the existing deliberative culture at the school and leverage it in support of important schoolwide decisions:

This is a staff [that] no matter what you do with them, they have to make it their own. That is why we spent a whole year [on] what a schoolwide academy would look like. The conversations with them gave teachers opportunities to question, so that they could come together as a staff. [The principal and I] spent the year orchestrating this so that when the school voted on going wall-to-wall academies, we had 70% or more of staff support. ... This is a pretty basic model. They don't take something and adopt it just because research has shown that it works. A district mandate would never work unless they were able to take the model and adjust to their own terms. That is a real strength but can be a real weakness if you want to be a leader that wants to dictate. They have to mull over something. They go through stages—challenging, modifying, implementing. I think of it as their strength. They are always questioning things.

Several partners noted the need to broaden the support for shared decision making by expanding leadership opportunities and encouraging active participation from more teachers in their schools. Partner interviews in the final year of the grant revealed far more emphasis on efforts to expand opportunities for leadership beyond the core group of teacher leaders who actively participated for much of the grant's 5 years. Partner efforts included a range of strategies that were responsive to the contextual realities at each school. For example, a few schools struggled with small pockets of teachers who were resistant to the changes proposed by the leadership team. In such cases, partners sometimes counseled principals to actively include such teachers on leadership teams. As one principal relayed, the partner showed him that he "needed to bring in some naysayers to the leadership team." Moreover, the principal emphasized that this advice was particularly valuable because it represented candid insight into leadership that was not typical in his formal leadership development and "not something that I hear from anywhere else."

Similarly, another partner leveraged other HSLI supports by advising the principal to invite some of the resistant teachers to the HSLI summer seminar as a way of enlisting them in the work of the leadership team:

I have been trying to get them to expand the leadership team a bit. They need to get some fence-sitters to be on the team. This would be a good way to get everyone on board with the PLCs [professional learning communities] and the new distributed leadership structure. ... It would go a long way to changing school culture further. Next week I will go down and help them select the semi-cynical teachers to invite to participate on the leadership team and have them go to [the summer seminar in] Long Beach.

Maintaining Focus. Another way that partners supported schools' implementation of new leadership structures was to help schools maintain focus in an ever-changing environment. Throughout the grant, partners reported that there were many distractions at HSLI schools, such as new grants or programs with goals not necessarily aligned with existing school improvement plans. To help schools prioritize the myriad opportunities and disruptions, partners made regular efforts to remind leadership groups to "keep their eyes on the prize." Partners often accomplished this singular focus by steering conversations so that leadership groups' efforts remained centered on student learning.

Partners also helped principals and leadership teams remain focused by working with them to think strategically about how to achieve schoolwide goals in incremental steps, balancing the long view with the need to concentrate on immediate next steps. An established principal described how his partner was "always asking focusing questions [of the leadership team] like what is the overall goal? He refocuses to have clearly defined activities that are related to our goals. [He] helps us figure out steps to get there."

Importantly, partners conveyed the importance of focusing efforts when the schools faced disruptive transitions. A reality of today's public education is that schools undergo a range of transitions that challenge the stability and progress of improvement efforts (Hargreaves, 2005).¹² Principal turnover is high, and the complex accountability pressures have been accompanied by a steady influx of new initiatives at the district, state, and federal levels. Moreover, to be responsive to the unique needs of the local context, school leaders have little option but to layer additional changes on top of these external mandates.

Partners were invaluable in demonstrating the importance of moving forward strategically even when the principalship was in flux. For example, in a school besieged with frequent principal turnover, the partner was able to help it through yet another change in leadership. The partner accomplished this by collaborating with existing teacher leaders as well as the district superintendent to keep the leadership team together at the end of the exiting principal's tenure while also helping bring the new principal into his position as the head of the leadership team during the 2010 HSLI summer seminar. The following passage from the partner's reflection reveals how he helped the teacher leadership team and the school through this transition:

¹² Hargreaves, A. (2005, June). Leadership succession. *Educational Forum*, 69(2), 163–173.

The current principal was indicating that he wanted to wait until the new [principal] came before dealing with the Long Beach workshop [HSLI summer seminar]. I decided that waiting was not an option and that we needed to continue to move forward with a group of teacher leaders and determine how to prepare for the meeting in Long Beach in June. I met with the superintendent to ascertain where they were in the process of hiring a new principal and if they had any concerns with me leading a process that would keep the focus on moving forward and laying the foundation for the new principal. I asked the principal for permission to continue with this process, and he also concurred.

In addition to taking active steps to facilitate a smooth transition in leadership, partners also represented a key resource for institutional memory to schools confronting principal turnover. Through their deep knowledge of the school and its functioning, partners were critical in helping incoming principals get up to speed about the schools' established ways of working, as well as inform them of key challenges, staff concerns, and sources of conflict. By leveraging this valuable partner resource, leaders could move beyond the trial-and-error approach that is all too common among principals new to a school.

Partners also supported schools through changes in school structure or resources. For example, a partner worked closely with the principal of a school encountering a significant reduction in student population and the concomitant loss of a large number of staff. Here, the partner's work with the principal focused on how to make the tough decisions about which teachers to encourage to stay and which teachers to encourage to leave. Throughout this 2-year experience, the partner helped the principal identify the teachers who were the best fit for the school, offered a steady reminder to the principal that the process the school uses to make such difficult decisions matters a great deal, and provided critical support to the principal on communicating his decisions. Interviews suggested that these purposeful actions resulted in a process that was widely viewed as transparent and fair, which, given the situation, was no small feat:

One of the things I worked with [the principal] on over those years was how to keep communications flowing, especially when the opportunities were there for people to volunteer to go to the new school, and when enough people didn't volunteer, how the downsizing was going to occur, and how to go to people and talk to them directly, as painful as it was, when they were given March 15th notices or notices that he knew about that they were going to get cold in the mail—because, as you might guess, in a large district they don't do a lot of things personally.

Over the 5 years of the grant, HSLI partners provided a variety of supports targeted at laying a strong foundation for effective leadership and building and strengthening effective leadership practices. Building those leadership practices and structures required a delicate balance of facilitating reflection and exploration of leadership practices and structures while guiding school leaders and leadership teams toward effective leadership. Partners achieved that balance through their strong coaching techniques, discussed next.

Partner Coaching Techniques

HSLI offered a rare and valuable opportunity for principals and teacher leaders: a dedicated thought partner who was both knowledgeable about the domain of school leadership and independent from it. Each principal we interviewed extolled the benefits of having someone who was expert in educational leadership as a sounding board as he or she thought through ideas, wrestled with challenges, and engaged in the decision-making process. In most HSLI schools, teacher leaders also had opportunities to work directly with HSLI partners and reported that those interactions were crucial to building their leadership capacity as individuals and as collaborative decision-making groups.

Findings from our interviews suggested three interrelated ways that partners worked to build leadership capacity and professional growth. First, partners leveraged their rich knowledge and experience through generative questioning about real problems of practice. This questioning helped leaders reflect on their current practices and explore more collaborative leadership practices for the future. Second, through professional support that began with careful listening, partners worked from a trusted position that was outside the system yet still responsive to the needs of the school. Third, partners modeled effective leadership practices in their interactions with HSLI schools, providing school leaders opportunities to see effective practices in action.

Rather than tell principals and teacher leaders what to do, partners often used questioning strategies designed to elicit reflection on the challenges of leadership. The benefits of partners' counsel and professional support were discussed by principals who were new to the school, new to the role of principal, and veteran principals alike. One principal, for example, reflected on the critical role that the partner played in his first year at the job. This support enabled him to hit the ground running:

[In the first year] I made it well known that I didn't know what I was doing and I was willing to admit it.... I needed [the partner] to help get credibility and capacity to gain the respect of the high-flying departments and bring in other departments. What [the partner] helps me a lot with is to ask the guiding questions to refine plans. When I present my plans to [him], [the partner] asks questions that get me thinking. [He] asks the kinds of questions that cause me to reflect after [he] leaves.

For this principal, the partner acted as a catalyst, enabling the principal to more rapidly assume the leadership role, while also supporting the principal's ongoing professional growth.

In other cases, the expertise partners brought to the table enabled new principals to better navigate the complex political environment of public schooling. For example, one principal reported how working with the partner helped him understand state policies so that he could make better decisions for his school:

[The partner] helped me understand the larger picture [of state politics]—how it all works—which helps me make better decisions specifically on the ground.... What I found is that a lot of people that are in education are not in tune with state politics—budgets and things like that—so a lot of times what I found is that they react very, very late and only when it is really affecting their situation.

As this example illustrates, a unique quality of the principal-partner relationship is that it embeds professional growth in the problems of practice: reflection is focused on the actual decisions that the principal encounters every day.

Appreciation of the partner's counsel was not limited to new principals. Many veteran principals noted that the day-to-day demands of leading a school are often so overwhelming that even they rarely find time for the kind of reflection necessary for sustained professional growth. In such cases, the partner helped the principal to take the time to proceed through decisions in a thoughtful manner. As one principal reported,

This world is so fast paced that principals don't have an opportunity to reflect and take a breath; we just have to go, go, go 1,000 miles an hour, and when you have [a partner] some really good things come out of that. So one of the good things is an opportunity to reflect, to stop. [The partner] ...was a period in a sentence that said, "Wait before we move forward. Let's talk about this." Because in our world we don't have periods or commas or semicolons, we just go.

When working with a principal, the partner's approach was neither directive nor didactic. Rather, the partner helped the principal consider the range of issues involved and think through solutions that, in the principal's view, were most appropriate for the school. The partner served as a mirror, helping the principal reflect on the problem's particulars and asking timely questions that prompted the principal to think carefully through difficult decisions. Ultimately, however, the decisions were the principal's to make. As one principal reported, "I haven't done everything exactly the way, I suspect, [the partner] would have. And he's always respected that, but his insight and his perspective have really helped."

In fact, partners often stressed that their role was to listen first and be responsive to the needs of the principal and the school rather than to push any particular agenda. From this "listen first" stance, partners were able to leverage their knowledge and experience to pose questions that challenged the ways principals framed problems and approached solutions. This stance, in conjunction with the partners' position outside the district system, also helped assuage the evaluation anxiety that can shut down generative dialogue. Interviews suggested that partners were effective in helping principals to reflect on their own practice and scrutinize their own decision-making process. As in the above example, principals commonly reported that these efforts led them to think more carefully about problems of leadership.

The partners' work with principals and teacher leaders in participating schools was intensive and impactful. Interviews with faculty and administrators at each of the HSLI schools consistently pointed to the individualized support of the partner as invaluable. Teachers who never saw themselves as leaders received the one-on-one support they needed to take on leadership roles. Teachers and assistant principals who aspired to become principals learned critical lessons about effective leadership and about the skills they personally needed to develop to become effective leaders. And principals highlighted the opportunity to reflect with an expert who had intimate knowledge of their schools as priceless. While the partner was critical to HSLI schools, schools were also supported by the other components of the HSLI, including the monetary grant and the cohort activities. We discuss these grant components next.

The HSLI Monetary Grant

As mentioned in Chapter 2, each grantee received \$50,000 per year for 5 years. The grant guidelines placed few restrictions on the use of the grant, stating that the funds were to be used to support each school's efforts to build leadership and support school improvement efforts. The HSLI director approved annual HSLI budgets to ensure that the funds were used appropriately, but encouraged schools to think creatively about how the funds could best support leadership development and school improvement efforts.

Most schools used large portions of their grants to buy time for leadership activities, releasing teachers during the school day to plan for and participate in decision-making bodies such as a schoolwide leadership team or a task force focused on improving student engagement in all classrooms. The time to plan for and participate in leadership groups was often cited by principals and teacher leaders as a critical component of the grant's effectiveness in building leadership. This time gave principals and teacher leaders opportunities to practice effective leadership skills while receiving real-time feedback from the partner.

Many schools also used grant funds to support summer planning time for teachers and administrators. This summer planning time made it possible for school leadership teams to reflect on the previous year as a group and refine the schoolwide efforts to improve student outcomes and strengthen the leadership structures to better support those efforts.

HSLI Cohort Activities

HSLI cohort activities included the principal cohort meetings and the annual summer seminar. These activities were designed to establish an HSLI professional learning community to support and further develop leadership skills.

Principal Cohort Meetings

HSLI cohort meetings provided opportunities for the HSLI principals to learn from each other by offering them regular opportunities to observe firsthand how other HSLI schools were tackling a range of issues and to engage in productive dialogue with other principals on specific school improvement strategies. At these meetings, principals engaged in conversations about organizational structures for leadership and specific instructional strategies, focusing on the strengths and limitations of specific structures and strategies within their particular school contexts. For example, at the fall 2010 cohort meeting, the host principal described the organizational structures in place at his school designed to facilitate department-level instructional planning and the use of student data in that planning. HSLI principals were then invited to observe planning meetings in small groups, ask questions of the host principal, and discuss the possibilities of replicating these structures in their own schools. During the spring 2011 cohort meeting, principals engaged in an in-depth discussion on the use of the Explicit Direct Instruction instructional delivery model and whether or not EDI was an appropriate intervention at the high school level. Not all principals came away from these meetings with concrete, implementable strategies that they could use in their own schools, but some principals saw value in exposure to what other principals were doing. For example, reflecting on his experience at cohort meetings in general, one principal from a small HSLI school noted the following:

I'm just fascinated by the different dynamics the larger schools are dealing with and I'm trying to process, well, what do I think about that? How would I do that as a leader of a school like that? Is there anything that they are doing or had to do that I could bring back here? And I always get something out of [cohort meetings] that way.

Despite the demographic and geographic diversity of the 11 HSLI schools, many of the principals were able to find commonality and learn from others who were in similar circumstances. For example, one HSLI principal reported that his school's four-by-four schedule was unique in his district and he was grateful to have another HSLI principal running a school on the same schedule to consult about the challenges. Another principal assessed the general value of cohort meetings in one of his HSLI reflections: "Although our schools are diverse, I always pick up best practices and learn from the experiences of my colleagues."

In some cases, principals learned about specific programs or strategies from cohort meetings and subsequently implemented them at their own schools. One HSLI principal reported that members of his school leadership team lacked the commitment to make the structural and instructional changes called for in his school's HSLI plan. On a cohort visit, this principal learned that another HSLI school had faced a similar challenge and, in response, had developed an application and interview process for prospective leadership team members. The process was designed to explicitly lay out the expectations of serving on the school leadership team and to create a transparent process for selecting leadership team members. After learning about this application process during the cohort meeting, the principal replicated it at his own school with great success. The principal and school leadership team members reported that the new application process resulted in selecting teachers who were committed to implementing the HSLI plan. Furthermore, use of this transparent process improved the overall standing of the leadership team members. Whereas previously they had been seen as "puppets of the administration," they were now viewed as leaders of the school improvement process.

The principals at two other schools described learning about specific approaches from similar schools in HSLI:

The HSLI cohort network of schools also serves as a resource for [my school]. I have the opportunity to learn about how schools outside of [my district] approach dealing with similar challenges. For example, [my school] has embraced the use of Data Director, which is currently utilized in several HSLI cohort schools. Additionally, Naviance Succeed, which was shared at [an HSLI school] during the school year, will also be phased in at [my school]. Naviance Succeed will help provide students with a clear, well-defined route that leads to outstanding achievements, both in school and beyond.

Participating in the HSLI has provided me with many opportunities to visit other principals of the cohort schools and learn various strategies to improve the instructional as well as operational programs at my school. As a result of these visits and discussions, I have been able to share with my leadership team the best practices which led to implementing some structural changes at [my school]. Those changes include implementing a schoolwide testing campaign as well as

providing me with a successful structural professional learning community model for continuing to pursue our WASC recommendations.

The cohort meetings provided a valued opportunity for many principals to learn from their colleagues, but some principals reported that the meetings did not always meet their needs. Principals offered two main criticisms of the cohort meetings. First, some principals perceived the meetings to be more of an opportunity for the host school to “show and tell” highlights from their site than an opportunity for leaders to exchange ideas or discuss challenges. Second, a few principals reported that they did not always find the issues and strategies discussed at cohort meetings to be particularly relevant for their school.

Summer Seminar

Whereas the principal cohort meetings targeted the principals, the annual HSLI summer seminar provided opportunities for entire school leadership teams to share and learn from other participating schools, further developing their leadership skills. One science department chair reflected on the general value of learning from other teachers at the summer seminar:

I have a viewpoint that I don't care what industry you're in, I don't care how long you've been in it, you're never going to be the best, there's always something you can learn. Sitting around that room talking with 80-some teachers, I learned a lot.

An instructional coach at another school noted that he was introduced to new tools at the summer seminar that changed the way he communicates with teachers:

I have gotten things that have just changed the way I work. They were very good at giving us very timely resources that were extremely useful. In fact, two summers ago they connected us with the edresults.com site. It has completely changed the way I'm able to communicate needs to schools by looking at data that is so informative. It's cutting through all the data baloney.

Another teacher in this school talked about the benefits of learning and connecting with teachers from other schools in similar situations and facing similar challenges:

There are people to advise you. Not only the [partner], but also the other network schools. And you feel that once you're in [the summer seminar] as well as beyond that...[there are] people who are going through similar things and there are diverse ways to get at goals.

The summer seminar, just like the cohort meetings, allowed school leaders to go outside the boundaries of their own schools and districts to explore ways in which the experiences of other participating HSLI schools could help inform their own efforts to build leadership in their schools.

Together, the various HSLI supports were designed to comprehensively support leadership development in schools. Rather than focusing on a single factor, collectively they addressed everything from the fundamentals of meetings to more elusive complex endeavors such as expanding capacity and introducing new strategies and opening up perspectives. In the next chapter, we discuss how this package of supports was able to create change in the HSLI schools.

4. Lasting Changes in HSLI Schools

Over the course of the initiative’s 5 years, HSLI schools worked to build, nurture, and maintain an understanding of shared leadership that distributed responsibility and decision-making authority across each campus. According to the HSLI theory of change, there is no single “best” way to implement the distributed leadership structures. Through mechanisms described in the preceding chapter, each school worked to devise methods of introducing aspects of distributed leadership that fit into the school’s context. The question remains: were they successful? In this chapter, we explore the changes evident in HSLI schools that have remained past the grant period. We discuss changes in three areas: leadership structures and processes, school culture, and professional practices. Throughout, the chapter also looks across schools’ efforts to consider some of the ongoing struggles schools encounter as they build effective shared leadership structures and change practices.

Changes in Schoolwide Leadership Structures and Processes

With HSLI’s support, schools were able to develop a variety of structures for sharing leadership across the teaching and administrative staff. Although these structures often were in place before the HSLI grant began or were initiated without the involvement of HSLI, almost all partners worked to make leadership structures at their schools more effective. At the majority of HSLI schools, these structures have become integral to schoolwide decision making and are the vehicles through which schoolwide goals, and the strategies to achieve those goals, are established and managed. Over time, these groups have become the foundation of the schools’ leadership structures: roles are recognized by the staff, meeting times are known and attendance is understood to be part of a teacher’s role at the school, and the groups’ decision-making authority has been demonstrated in leadership on major schoolwide efforts.

New Leadership Structures

The most common shared leadership structures at HSLI schools were instructional teams, governance teams, and task forces. All HSLI schools had one or more instructional teams in which teachers played leadership roles. Across the schools, instructional teams varied in scope, operating at the school, department, grade, or course level. Larger schools tended to have multiple types of instructional teams, whereas smaller schools were more likely to have just one. Instructional teams served a variety of functions but were frequently intended to facilitate data-driven decision making, help develop formative assessments, aid in implementing specific instructional strategies, provide a community of practice in which teachers could discuss teaching strategies, or some combination of these activities. In addition to instructional teams, by the end of the grant most HSLI schools had at least one governance team that was engaged with school-level decision making and incorporated leadership roles for teachers. Although they served a variety of functions, governance teams were commonly used to promote a wide range of teacher voices in conversations about school reform, foster leadership capacity across the school for issues integral to the school at large, and develop—and/or develop support for—school reform ideas. Whereas governance groups might make broad decisions about instructional change, in general they left the details of deconstructing teacher practice to instructional teams. Finally, some HSLI schools instituted temporary or permanent teacher groups to fulfill a specific function, such as implementing common literacy strategies across the curriculum, making

vertical articulation agreements with feeder middle schools, or developing formative assessments. Most often, these groups were teacher led.

Illustrating the ongoing evolution of leadership structures across the HSLI cohort, there was a shift over time in how key leadership positions were typically staffed. At the beginning of the grant, many HSLI principals realized the need to create a more formalized teacher leadership structure and largely hand selected teachers with whom they had existing relationships to serve on the team. Over time, most principals began to appreciate that in order to distribute leadership more authentically and garner wider buy-in, the teachers themselves needed to be able to contribute to the creation of the leadership teams. Accordingly, many schools began to experiment with application processes and elections as a method of filling teacher leadership positions. In a visible way, the authority to staff the leadership groups became an aspect of the decision-making power that was shared.

Similarly, there was a shift over time in how decision-making authority was distributed across leadership groups and individuals. For example, in some HSLI schools, teacher leaders set the agendas and direction of the leadership teams. In other HSLI schools, the direction of leadership teams was driven by school administration and the teams served primarily as advisory groups to the administration. By the end of the grant, however, teacher leadership groups at most schools made decisions largely on their own or in collaboration with the administration.

Developing leadership structures is a necessary precursor to creating effective leadership in schools and enabling schools to improve teaching and learning. In addition to developing structures, there is evidence that HSLI changed important schoolwide processes to move the schools forward in their efforts for improvement.

A Common Vision for School Improvement

Vision is often spoken in the same breath as leadership. However, school-level models of how vision is developed, shared, and enacted vary along a spectrum from top down to bottom up. It may be administrator generated and teacher enacted, it may be broadly defined by administration and then fully articulated by staff, or it may be collaboratively constructed by teachers through consensus-seeking dialogue. Although we saw a range along this spectrum from top down to bottom up, HSLI efforts emphasizing shared leadership contributed to a less top-down approach—a significant and lasting change for many of the schools.

Typically, vision in HSLI schools was painted in broad strokes by the principal, with wider buy-in achieved through collaborative articulation of details by staff, who then led key aspects of its enactment. For example, one school administrator described how vision was enacted at his school:

I think the idea is to give teachers ownership of specific programs...because what you want to do is create that sustained growth.... If teachers have ownership in that, then it doesn't matter who the principal is or who the vice-principal is. I think the principal provides an overall mission and a vision, and then it's up to the key players and teacher leaders to move forward and have ownership and facilitate those programs as they see fit [and] that will fit inside of the scope, the boundaries, of our mission and vision.

In this sense, a shared vision became an integral and mutually reinforcing component of the shared leadership structures in place at many HSLI schools. To better understand how this operates, it is important to appreciate that a shared vision has two parts: the sharing and the vision. Distributed leadership facilitates both. It fosters the communication and buy-in necessary for ideas to be held in common (building the *we* in “we believe that”), and it suggests the structures and processes that enable articulation of the content of the vision (helping to define and operationalize the *that* in “we believe that”). As one school administrator explained:

[Shared leadership efforts] have provided teachers with some buy-in into the governance of the school and to the mission and vision of the school. I think it's enabled and empowered some of those hardworking staff members to feel like they can come to me or the principal and share and meet with us in an open and friendly environment. So I think it's enabled and empowered teachers to affect what goes on, not just within their classroom but outside the classroom as well.

Although an authentically shared vision was apparent at many schools across the HSLI cohort, it was sometimes unclear how universally shared or clearly communicated the vision was. Further, in at least a handful of schools, teachers perceived the school's vision to be more a top-down mandate than a collaboratively constructed commitment. As one teacher leader explained:

We had a new principal a few years ago, and for whatever reason, he decided that [our leadership model] was a poor model. He...essentially dismantled that and tried to impose a culture that didn't need change. There was a lot of friction. And we sort of meandered and [the new model] ...was more like shared decision making in name only. [The principal] would evoke that phrase whenever a top-down decision was made.

Institutionalized Time to Meet

As discussed earlier, grant money often went to fund release time for school leaders—both teachers and administrators—to meet on a regular basis. Allocating resources in this way meant that the work of leadership bodies was part of the regular school day, that collaboration was an institutionally supported activity. This use of grant money enabled multiple years of sanctioned time for teachers to discuss a range of issues, share experiences, and come together as a staff. Interviews strongly suggest that because this meeting time was part of the regular school day, rather than the ad hoc, fractured conversations teachers without this time cobble together, it enabled greater access to leadership structures, provided more sustained opportunities to identify and plan for needed changes, and established wider buy-in for decisions that affected the school. As one principal reported, “One of the things that [CAPP] has really enabled us to do is fund teachers to work together. We've been able to buy people's prep time so that they can work together, do peer observations, things like that, all things that we really didn't have a chance to do before.”

HSLI school administrators' commitment to leadership structures developed under HSLI has influenced them to look for ways to fund these structures without the grant money. Some administrators shifted existing funding from federal programs such as Title I or state funding, including the reinstatement of professional development days, to support leadership structures.

Some administrators sought additional grants to support shared leadership structures. Regardless of the source for funds, HSLI schools were committed to maintaining institutionalized time for teachers to meet.

Goal-Oriented Discussions and Embedded Accountability

The preceding chapter discussed how partners often worked to help school leadership groups maintain a focus on student learning. Over time, this support prompted leadership teams to shift attention away from administrative details toward instructional improvement. Meetings became less about the dissemination of administrator directives and more about developing and planning for improvements to the school. Often, this shift was accompanied by the adoption of practices and protocols that emphasized goal-oriented processes and accountability structures to manage progress toward those goals. For example, a few schools used a decision-making framework to structure work in leadership teams around identifying actionable goals and specifying the steps needed to get there. Meetings, in turn, discussed progress toward stated goals and any adjustments to strategy that might be needed. Similarly, one principal emphasized that a key to the success of the leadership teams at his school was that “we never leave a meeting without knowing what are our next steps.” Using protocols, identifying goals, and focusing on action to meet those goals became the new way of operating in many of the HSLI schools.

Changes in Schoolwide Culture

While shared leadership structures and processes often are the vehicles through which school improvement operates across the HSLI cohort, the sustainability and ongoing evolution of these structures depends on changes in schoolwide culture. In short, staff must come to a new understanding of their role in the school and find new ways of working to support shared goals. In the HSLI schools, the development of leadership structures and the increased opportunities for teachers has resulted in a shift in how teachers define teacher leadership and the roles that they play in their schools. In this section, we examine such changes and discuss how HSLI schools have redefined the role of teacher to include leadership.

Taking a Broad View

Since HSLI, teacher leaders in HSLI schools pay attention to the needs of the entire school community as well as the needs of their particular department or grade level. Teacher leaders in HSLI schools have expanded their perspectives to include concerns outside of the subject or grade level they teach. While some focus on their specific content areas—e.g., developing instructional materials, pacing guides, common assessments—others take a more expansive view of the school and the needs of the school as a whole. Together, these narrow and broad perspectives enable the content departments and the school as a whole to move forward.

Taking a broader perspective has helped teachers to appreciate and support the work and professional concerns of teachers outside of their own domain. As one teacher asserted, “The reality is that I understand what it is other teachers are doing in other departments, so I am not just focusing on my own small little world.” Further, it has facilitated constructive conversations around pedagogical issues that span across individual departments, enabling multiple perspectives to engage in a common problem. For example, one teacher recounted how focus groups at his school helped bring a range of teachers together to improve student opportunities for higher-order thinking:

We're sort of working on critical thinking and asking what kind of critical-thinking work are you doing in your own classrooms, because our focus groups are composed of various members of various different departments. So we're looking at critical thinking as a whole in the school and...to share that amongst each department.

Accepting Responsibility

A second apparent change in school culture is that HSLI teacher leaders embrace their own responsibility for moving schools forward. They do not rely on the administration to take action; rather, they see action as part of their charge as leaders. In the words of one teacher, "Whenever I think about leadership...it's about doing."

According to many of the teacher leaders we spoke to, this sense of responsibility and engagement in school-level concerns has reinvigorated their sense of purpose. Instead of relying on administrators to recognize and solve their problems, teachers are taking it upon themselves to develop solutions. As one teacher said about taking responsibility:

It's been an amazing transformation. It seems like we really just waited for things to happen and talked about wouldn't it be great if the administration did this or that. And now that we have these small groups of leadership pods...we come up with our ideas, we decide that would be great, let's figure out how we'd do it, come up with a plan and present it to the administration.

Teacher leaders' acceptance of responsibility also may be helping to temper pockets of negativity among the staff. As one teacher observed, "We're about not complaining...but about fixing." This sentiment was shared by administrators, who asserted that apathy had less hold when staff were empowered to improve their own situation:

You have teachers in departments that aren't that excited about what's happening in their house or something that's going on on campus, and...a lot of times they realize, I can't just sit here and complain, I need to say something or make a change.

Embracing Decision Making

The third cultural change evident in HSLI schools is that HSLI teacher leaders view themselves as having an important role in making decisions for the school. Teacher leaders view themselves not merely as developing or supporting others' ideas, but as having a real role in deciding which of those ideas are worth pursuing. In the words of one teacher leader, "The teachers understand that they have...influence on decision making and the direction of the school." A powerful example of this can be seen at one school that recently adopted a new governance model with a nearly unanimous vote. The key, according to the principal, was that the effort was teacher led:

We had a course lead that otherwise without CAPP wouldn't have been a course lead. Add that leadership experience and [he] felt comfortable being in front of the stage and leading the effort. ... Teachers are leading the efforts and crafting

the message and developing an elect-to-work agreement that allows for due process. ... Our course leads are the people that are driving it.

In this example and in others across the cohort, we saw that the professional culture in HSLI schools recognizes that everyone has something to contribute. Rather than all the ideas and authority existing in the suite of administrative offices, the schools appreciate that the diversity of expertise across the staff is an asset to ongoing school improvements. As one teacher reported:

I'm not like department chair or anything, but, you know, I think it gives people that might have other skill sets a way to just sort of contribute back to the campus and beyond your classroom. So I feel like it's been helpful, and there's not a sense that the power is sort of housed in one particular person or one particular place.

Focusing on Teaching and Learning

Finally, changes in school culture are apparent in concentrated focus on efforts that support improved teaching and better student outcomes. Rather than getting mired in discussions of student dress code policies and room assignments, the emerging professional culture was one focused on meeting the needs of teachers and students. For example, teachers at one school found the district's system for conducting instructional rounds to be unhelpful, so the teachers devised a new strategy that would contribute to instructional improvement. As one teacher leader said:

The way that we used to do our site support...we would basically report on what we were doing and then we would ask for help and not get it. So instructional rounds was a way for us to sort of take back site support and tailor it to what we specifically needed.... We've taken that site support and turned instructional rounds into our site support.

Other teacher leaders noted that this renewed focus on student outcomes had helped the staff come together to improve classroom practices, and ultimately student learning:

I would say five years ago we were disjointed. We didn't have much trust in one another. There was a lot of bickering going on. We were more so focused on...small problems like discipline issues. We weren't really focused on how to move the school forward, how to get the kids to be better, move our test scores. I feel like now we're more focused on...teachers basically teaching better, the students actually learning, improving test scores. It's not just simply focusing on issues like discipline and things of that nature.

Changes in Professional Practices

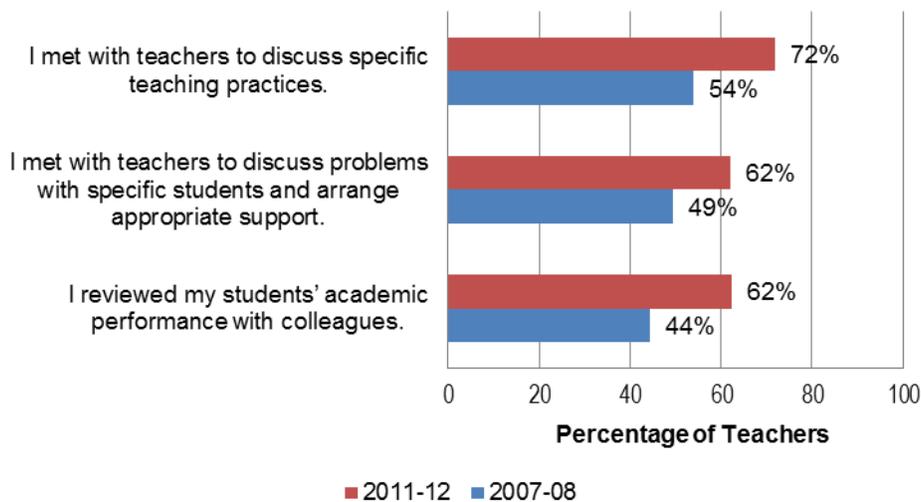
Along with changes in the expected role of a teacher in HSLI schools came changes in teachers' everyday practices. After 5 years of participating in HSLI, partners and school leaders and staff reported improved collaboration, more systematic use of data, and a renewed emphasis on college and career readiness.

Improved Collaboration

As discussed in the preceding chapter, HSLI partners worked with principals and teacher leaders to establish new structures to foster increased collaboration among staff. The 2012 teacher survey revealed that some collaborative practices had become embedded in teacher professional practice, whereas others remained largely untapped.

We asked teachers to reflect on their participation in three types of conversations with their colleagues: discussions on specific teaching practices, discussions on arranging supports to meet specific student needs, and discussions on the academic performance of students. For the 2007–08 school year, frequent participation (at least once per month) in these activities ranged from 44% of teachers who reviewed students’ academic performance with colleagues to 54% of teachers who met with other teachers to discuss specific teaching practices. Eighteen percent more teachers reported frequent participation in these two activities in 2011–12 (see Exhibit 4.1). In all but one of the schools, more than 50% of teachers reported frequent participation in collaborative conversations in 2011–12 (not shown).

Exhibit 4.1
HSLI Teachers Reporting Frequent Participation in Collaborative Conversations, 2007–08 and 2011–12



Source: HSLI Teacher Survey, 2011–12

While improved opportunities for teachers to work together are important, the focus of that work is equally important. Are teachers bemoaning school policies and procedures, or are they engaging in discussions about improving instruction? HSLI partners spent 5 years listening to teachers’ discussions and encouraging a greater focus on instruction. Over that time, partners and principals in most schools noted that the collaborative conversations became more centered on instruction. As one principal reported, in the 2011–12 school year teacher discussions at his school were more student centered and concerned with how the teachers could change their instruction to meet the needs of individual students. Improving rigor was the topic of conversation at another HSLI school in 2011–12, as faculty sought to improve their instructional practices. The partner at this school noted how collaborative conversations had changed at his school:

[Efforts at the school] started off as looking at rigor as it relates to classroom assignments. So now I think the conversation has moved up a little bit to how are teachers providing rigorous classroom instruction? What does critical thinking look like? How do you ask critical questions? And how do you engage students in critical dialogue and conversations and not just asking basic questions that don't require a lot of critical thinking? That level of conversation is becoming more schoolwide and that level of conversation is becoming a little bit deeper. That is challenging instructors to think more deeply about both their content and also about how that content gets delivered. I think that is an example of the ways that conversation is changing.

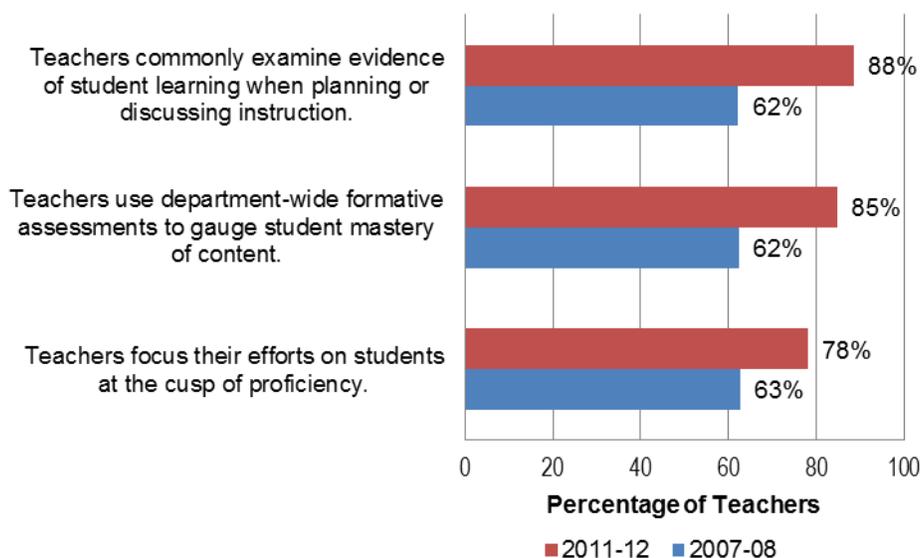
Use of Data

In recent years, the use of data to inform instruction has become key for improving student outcomes in California public schools and around the nation and is promoted as a practice of effective schools.¹³ However, as HSLI partners initially encountered in their schools, teachers and administrators had very little training or experience in analyzing student outcome data or translating the results into appropriate instructional strategies. Efficient and effective use of data became a major focus of HSLI support as one method of expanding educational equity to all students.

After 5 years of hard work, teachers in HSLI schools reported substantial growth in the use of data at their schools. When asked about their practice in 2007–08, 62% of teachers agreed or strongly agreed that teachers commonly examined evidence of student learning together (e.g., test data, work samples). In 2011–12, this increased to 88% of teachers. Similarly, the percentage of teachers reporting that they used department-wide formative assessments to gauge student mastery of content increased from 62% to 85% between 2007–08 and 2011–12 (see Exhibit 4.2). In 6 of the 11 HSLI schools, these practices regarding data use were so common in 2011–12 that nearly all teachers (at least 90%) reported using them (not shown).

¹³ See Hamilton L., Halverson, R., Jackson, S., Mandinach, E., Supovitz, J., & Wayman, J. (2009). *Using student achievement data to support instructional decision making* (NCEE 2009-4067). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education.

Exhibit 4.2 HSLI Teachers Reporting Data Use among Their Colleagues, 2007–08 and 2011–12



Source: HSLI Teacher Survey, 2011–12

An Emphasis on College and Career Readiness

A third aspect of professional practice that developed over the course of HSLI was an increased emphasis on students’ college and career readiness. Principals noted that distributed leadership has motivated teachers to be forward thinking, and the teacher leadership groups have provided the resources and capacity to tackle such challenges as transitioning to the college- and career-ready standards of the Common Core State Standards. One principal, for example, identified a cultural shift toward college expectations for all students as the “number one” change he saw in his school in the past few years:

Teacher leadership now comes from a place of vision and purpose—teachers who believe their students can do better and [believe that] students at this school need to achieve and graduate and go to college. It’s a shift in mind-set of teachers. Students come with hardships but we won’t use them as an excuse to not educate them. We’re not making excuses for why we can’t and instead are looking at what we can. I think those attitude shifts in teacher leaders and beliefs are in their minds, so they are leading from a place that lets them embrace those changes.

Moreover, these efforts seem less motivated by compliance and have more to do with the schools’ continual work toward establishing a college-going culture. Interviews suggested that school-level efforts to prepare for the Common Core have coalesced with ongoing work to look beyond test scores as the sole measure of student achievement. In the school referenced above, the partner discussed how this cultural shift was the result of sustained work over several years:

They worked very hard on developing a college culture—more students taking their classes and learning more seriously. They have done a lot on changing

students' image of themselves. Mandated that everyone has to have a backpack and supplies. And they do backpack checks. And they track students' completion of work. Are kids getting their work done? There has been an increase in completion of work—not just grades, but are they completing the work? I think the students think of themselves as scholars. They now have academic assemblies in addition to sports assemblies. Students are engaged at the assemblies. Students talk about how they are going to work harder to be recognized for their academic achievement.

Movement toward a college-going culture was clear in many of the schools, but some principals acknowledged that this was still a work in progress. Further, at least one principal expressed frustration about the competing demands placed on schools over the past few years. Still, HSLI efforts have established structures and practices that can help schools weather those competing demands and establish a culture that values the intent of the Common Core standards.

As this chapter has demonstrated, HSLI has had a lasting impact on at least some of the schools. It has helped to change school structures, school culture, and instructional practices, and these changes were evident even after the grant had ended. While HSLI was developed to foster such changes, its intention was always to do so in the service of improving student outcomes, the focus of the next chapter.

5. Student Outcomes

HSLI’s theory of change posits that effective leadership will lead to effective schools and ultimately to improved student outcomes. Over the course of the HSLI evaluation, the research team collected and analyzed publicly available data for a variety of student outcomes selected to measure changes in academic rigor of instruction, college-going culture, and student engagement in HSLI schools. The selected student outcomes were the following:

Measures of academic rigor

- Performance on the math and English language arts portions of the California High School Exit Exam (CAHSEE)
- Advanced Placement (AP) performance
- Performance on California Standards Tests (CST)
- Performance on Early Assessment Program (EAP) tests

Measures of college-going culture

- Fulfillment of “a-g” subject requirements
- SAT test participation and performance
- ACT test participation and performance
- AP participation

Measure of student engagement

- Graduation rates

In the first two evaluation reports, we presented the average performance of HSLI schools and of the state’s high schools as a whole across these student outcomes. Where available, we presented average student performance for three years prior to the grant (2004–05 through 2006–07), as well as student performance during the grant years (2007–08 through 2011–12). This review of student outcome trends was conducted to provide baseline data on HSLI schools before their involvement in HSLI and trend data on HSLI schools’ performance as they progressed through the initiative, relative to state averages and percentages.

In the final year of the evaluation, the research team conducted an additional analysis, comparing HSLI schools with a set of comparison schools. The comparison schools included all high schools in the state that were eligible for the HSLI grant—schools with an API of 1 through 5 in 2006–07. A multivariate regression analysis was performed to detect differences in student outcomes between HSLI and comparison schools after controlling for the following baseline characteristics:

- Percentage of students eligible for free or reduced-price lunch
- Program Improvement (PI) status
- Title I status
- School size
- English language learner enrollment

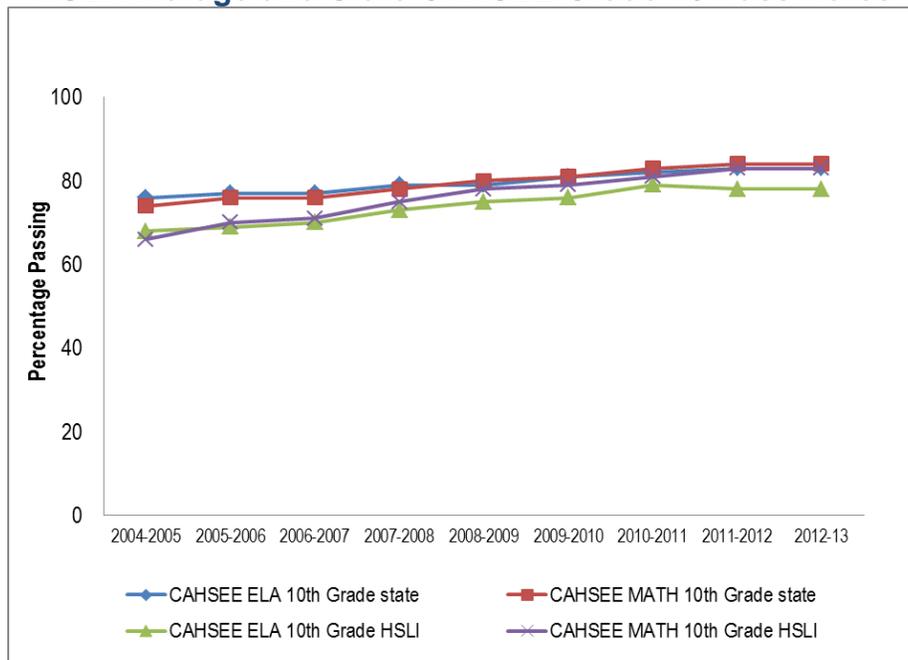
- Percentage of minority students in the school.¹⁴

In general, the student outcome analyses found that students in the HSLI schools performed at about the same level as the average California high school student on most measures of academic rigor, college-going culture, and student engagement over the course of the grant. The analyses comparing the HSLI cohort with a similar set of schools showed similar results — students in HSLI schools performed at the same level as their peers in similar high schools in the state. There is, however, one measure of academic rigor on which HSLI schools outperformed similar schools. In this section, we present the results of a subset of the student outcomes across the three measures of rigor, college-going culture, and student engagement. The complete results for all analyses performed can be found in Appendix B.

Academic Rigor—California High School Exit Exam

An important measure of a high school’s ability to ensure a foundational level of knowledge in its graduates is the California High School Exit Exam. CAHSEE first became a graduation requirement in California with the class of 2006. The purpose of the exam is to ensure that students who graduate from a California public high school can demonstrate grade-level competency in reading, writing, and mathematics. CAHSEE consists of two sections, mathematics and English language arts (ELA). Since its introduction, CAHSEE pass rates have increased slowly. The analysis of the average CAHSEE pass rate for HSLI schools shows that HSLI pass rates were slightly lower than the state CAHSEE pass rates for both the mathematics and ELA portions of the exam. The gap in pass rates between the state and HSLI has narrowed in math since 2004–05 (Exhibit 5.1).

Exhibit 5.1
HSLI Average and State CAHSEE Grade 10 Pass Rates

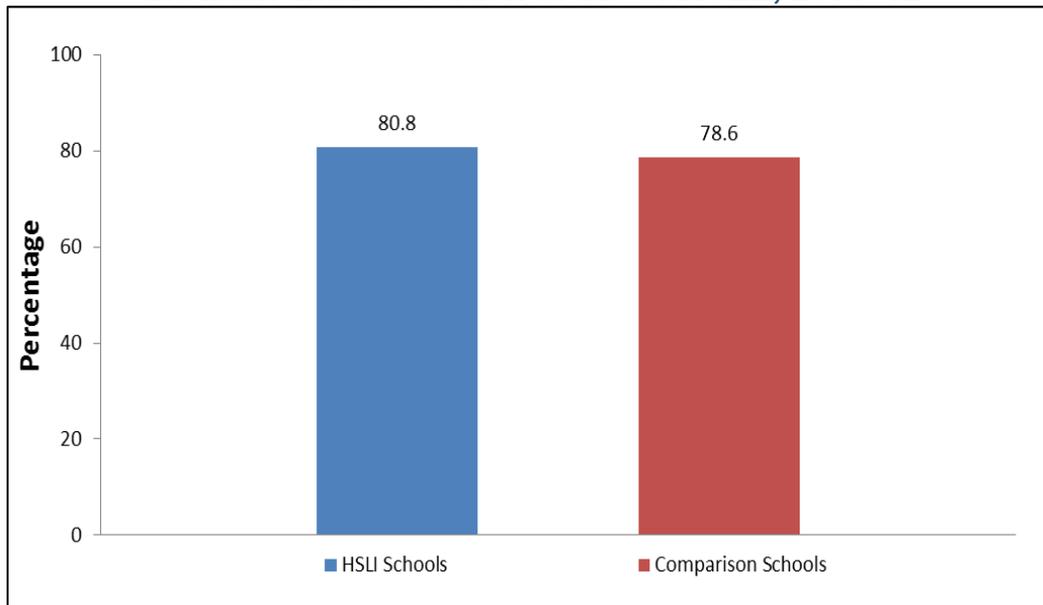


Source: DataQuest, 2013

¹⁴ See Appendix A for additional statistical information on the multivariate regression analysis conducted for this report.

To investigate how HSLI schools compare to a similar set of high schools, the research team constructed a comparison group of schools that were eligible to apply for the HSLI grant but either did not apply or did not receive the grant. Exhibit 5.2 shows the difference in the percentage of students who passed the mathematics portion of the CAHSEE in HSLI schools and the comparison schools in 2011–12, after controlling for baseline characteristics and achievement on the mathematics portion of the CAHSEE in 2006–07. After including these statistical controls, we found that being in an HSLI school is associated with a positive increase of 0.04, which is to say that 4% more students in HSLI schools passed the mathematics portion of the CAHSEE than in comparison schools. This difference is statistically significant at the 5% level of significance. The pass rate for the ELA portion of the CAHSEE for all students (not shown) in 2011–12 is statistically indistinguishable in HSLI schools and comparison schools.

Exhibit 5.2
Percentage of All 10th-Grade Students Passing
the Mathematics Portion of the CAHSEE, 2011–12

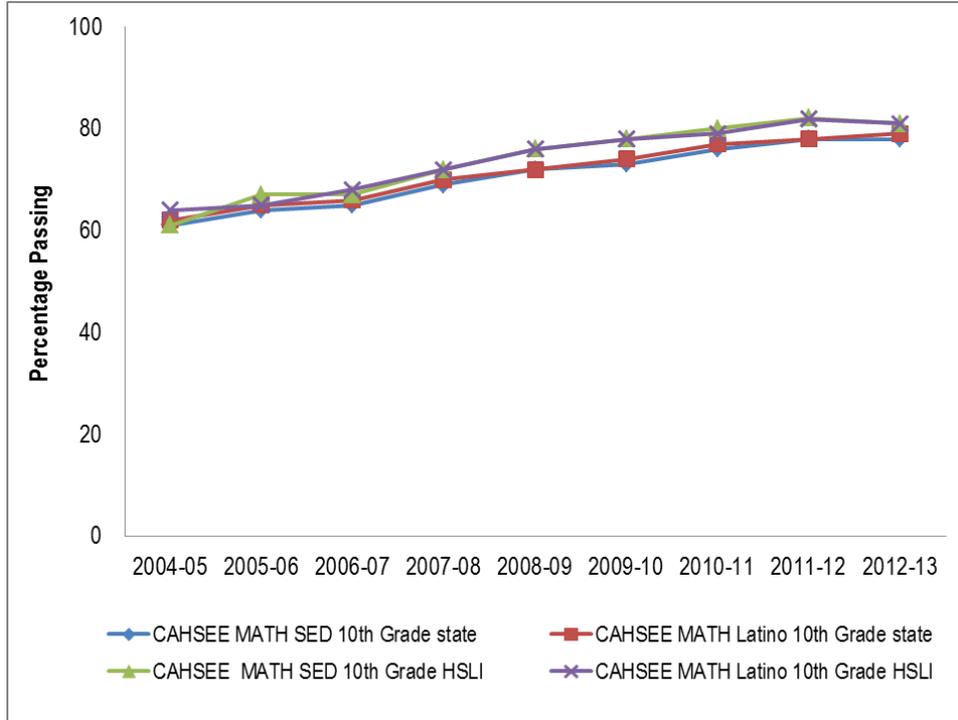


Source: California Department of Education, 2013

The research team also tracked the performance of Latino and socioeconomically disadvantaged (SED) students on the CAHSEE. Annual CAHSEE results show similar percentages of Latino and socioeconomically disadvantaged students passing the mathematics and English language arts portions of the CAHSEE as compared with statewide averages (Exhibit 5.3).

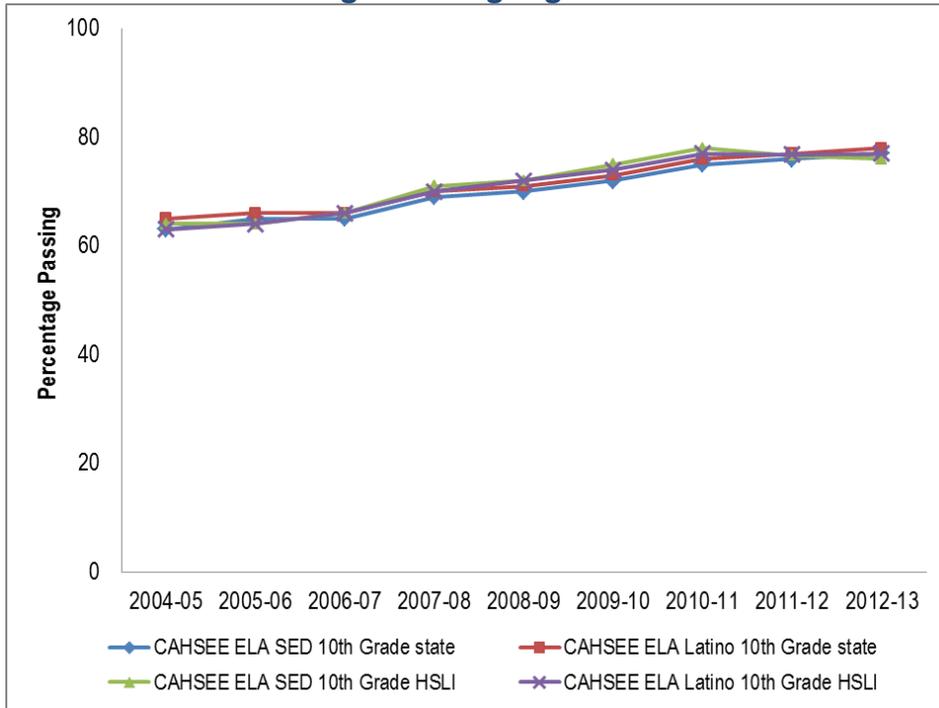
**Exhibit 5.3
HSLI Average and State CAHSEE Pass Rates, by Subpopulation**

Mathematics



Source: DataQuest, 2013

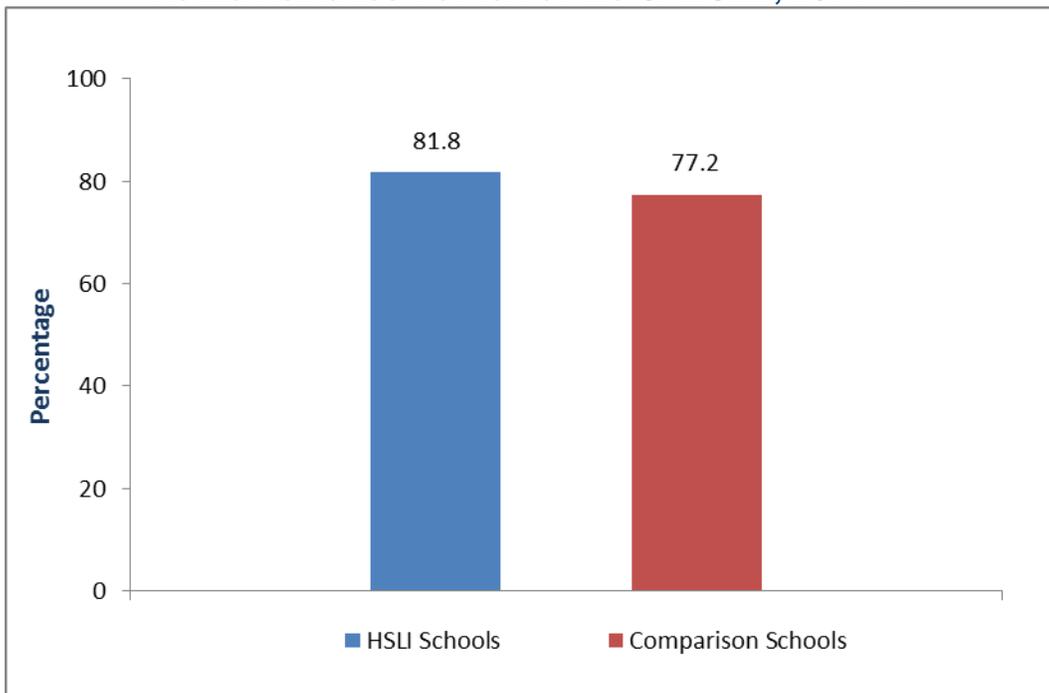
English Language Arts



Source: DataQuest, 2013

Similar to the performance of all HSLI students on the CAHSEE, Latino and socioeconomically disadvantaged students in HSLI schools outperformed their peers in the comparison schools. In HSLI schools, almost 82% of Latino students passed the mathematics portion of the CAHSEE, compared with approximately 77% of Latino students in comparison schools. This difference is significant at the 5% level of significance (Exhibit 5.4). Similarly, a higher percentage of socioeconomically disadvantaged students passed the mathematics portion of the CAHSEE in the HSLI schools than in the comparison schools, a difference that is statistically significant at the 10% level of significance (not shown).

Exhibit 5.4
Percentage of Latino 10th-Grade Students Passing
the Mathematics Portion of the CAHSEE, 2011–12

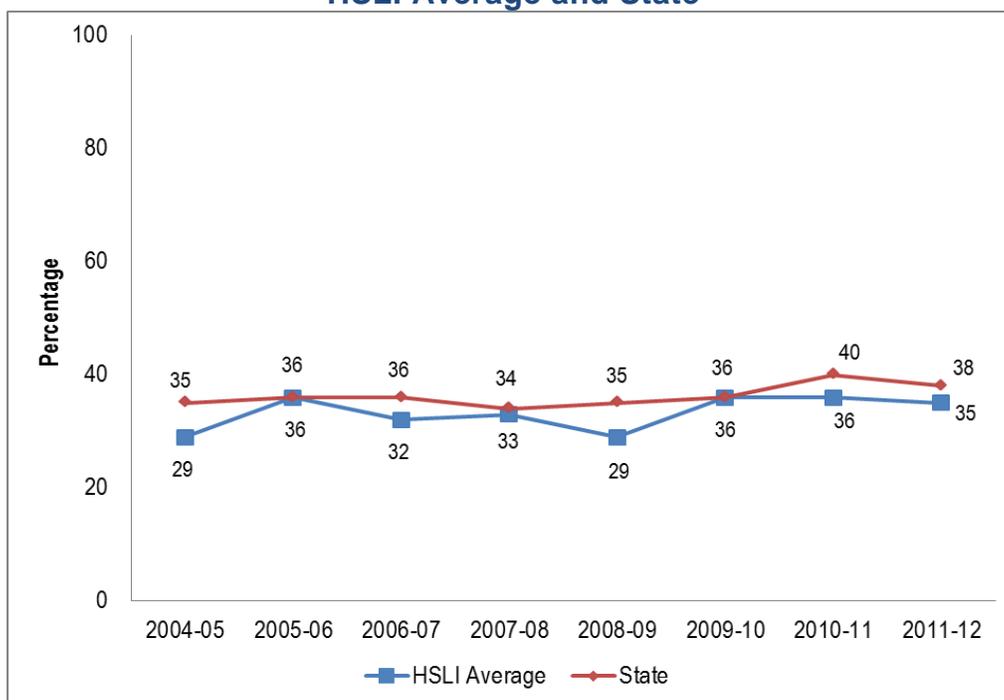


Source: California Department of Education, 2013

College-Going Culture—Completion of “a-g” Subject Requirements

The University of California and the California State University systems have identified a sequence of high school courses to fulfill the minimum eligibility requirements for admission. This course sequence is known as the “a-g” subject requirements. The percentage of students who complete the requirements is a measure of a school’s college-going culture. Data on “a-g” completion show that neither the state as a whole nor HSLI schools as a group were steadily increasing the percentage of graduates completing the “a-g” requirements. At the state level, the percentage of graduates completing “a-g” requirements was relatively flat between 2004–05 and 2011–12. HSLI schools’ average percentage of graduates completing “a-g” coursework shows no consistent trend but ranges from 29% to 36% (Exhibit 5.5). In 2008–09, two HSLI schools reported that none of their graduates completed the “a-g” requirements, and in 2006–07 one HSLI school reported having no graduates who completed the “a-g” requirements. These schools reported percentages of students completing “a-g” requirements in other years, so it is unclear whether an error in reporting occurred or whether these schools truly did not have any graduates in those years completing “a-g” requirements. The averages for these two years may be inaccurate.

Exhibit 5.5
High School Graduates Completing the “a-g” Requirements,
HSLI Average and State

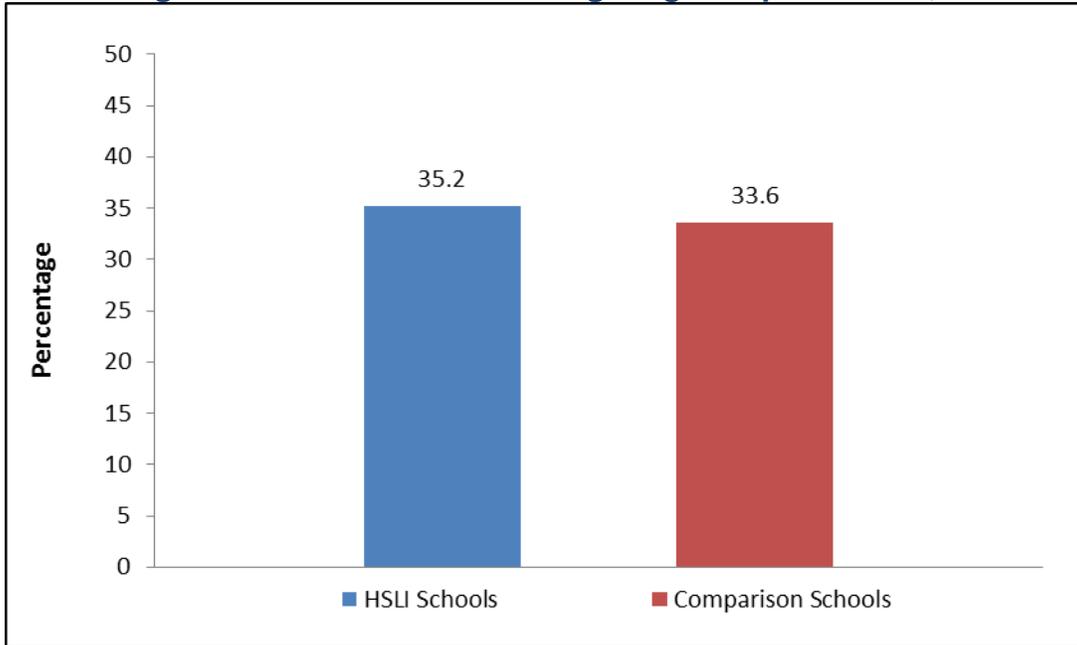


Source: DataQuest, 2013

Note: 2011–12 is the most recent year for which data are available.

Exhibit 5.6 suggests that the percentage of graduates who fulfilled the “a-g” requirements was slightly higher at HSLI schools than at comparison schools. However, after adjusting for baseline characteristics and fulfillment of “a-g” requirements in 2006–07, this difference is not statistically significant. HSLI schools and comparison group schools had similar rates of “a-g” completion among graduating seniors.

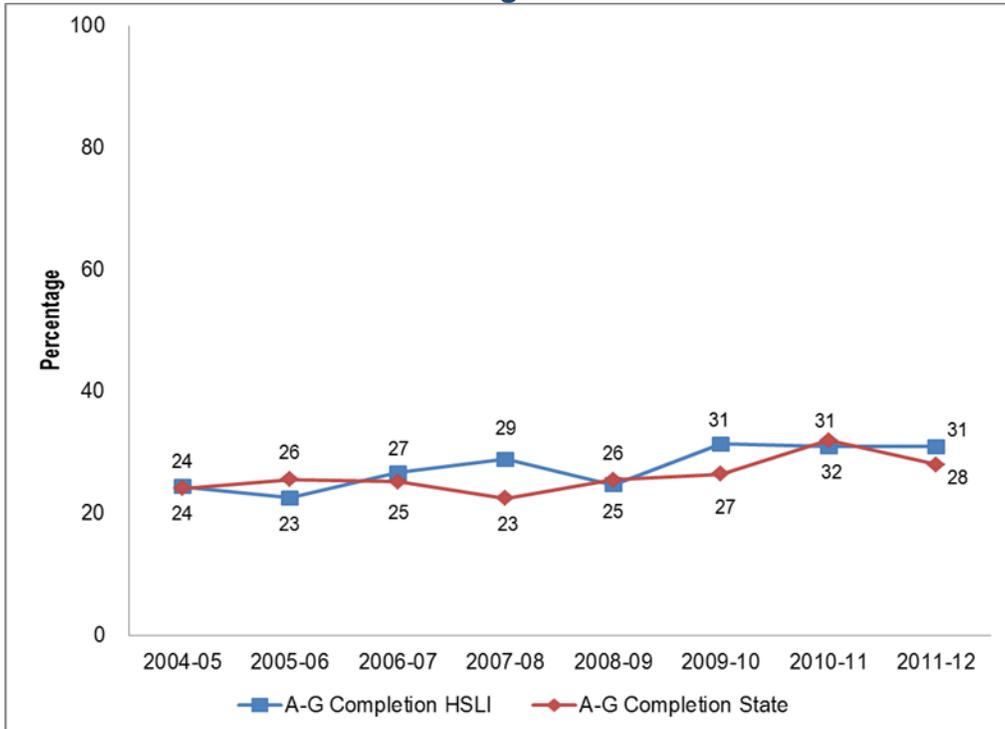
Exhibit 5.6
Percentage of All Graduates Fulfilling “a-g” Requirements, 2011–12



Source: California Department of Education, 2013

Analysis of the Latino student subgroup shows that similar percentages of Latino students in HSLI schools completed the “a-g” requirements as compared with the entire Latino high school population in the state (Exhibit 5.7). Between 2004–05 and 2011–12, less than one-third of Latino students in both HSLI schools and the state completed the “a-g” requirements. (“a-g” completion data for the socioeconomically disadvantaged student subgroup are not publicly available.)

Exhibit 5.7
Latino High School Graduates Completing the “a-g” Requirements,
HSLI Average and State

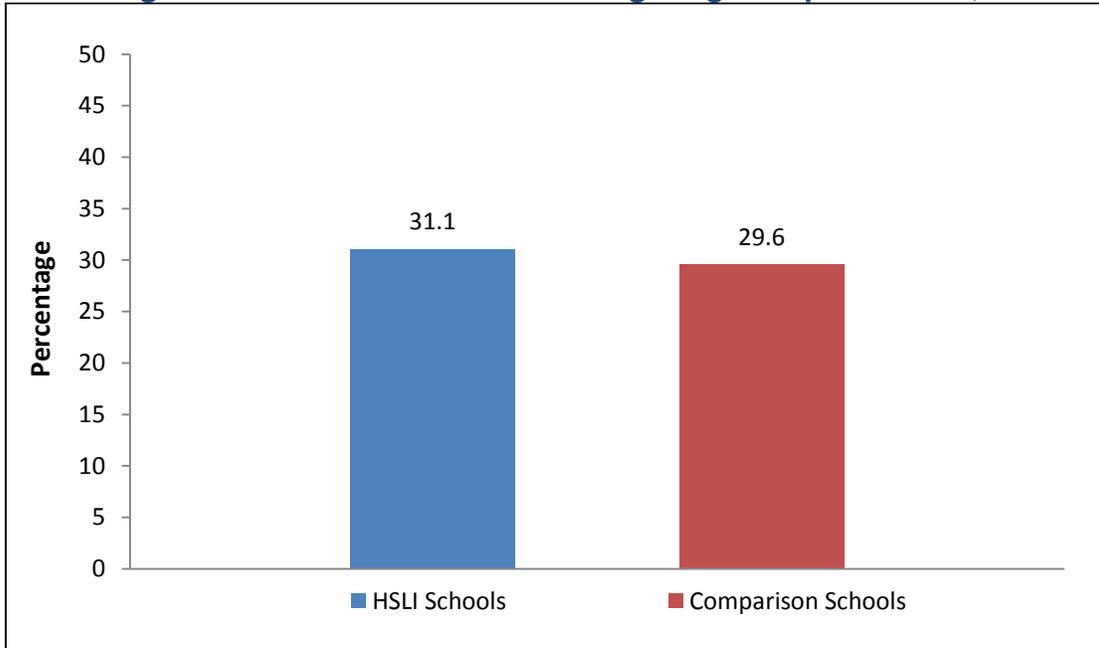


Source: DataQuest, 2013

Note: 2011–12 is the most recent year for which data are available.

Although the comparison of percentages of Latino students completing the “a-g” requirements between HSLI schools and the comparison schools appears to show a difference between the two groups, the difference is not statistically significant (Exhibit 5.8).

Exhibit 5.8
Percentage of Latino Graduates Fulfilling “a-g” Requirements, 2011–12

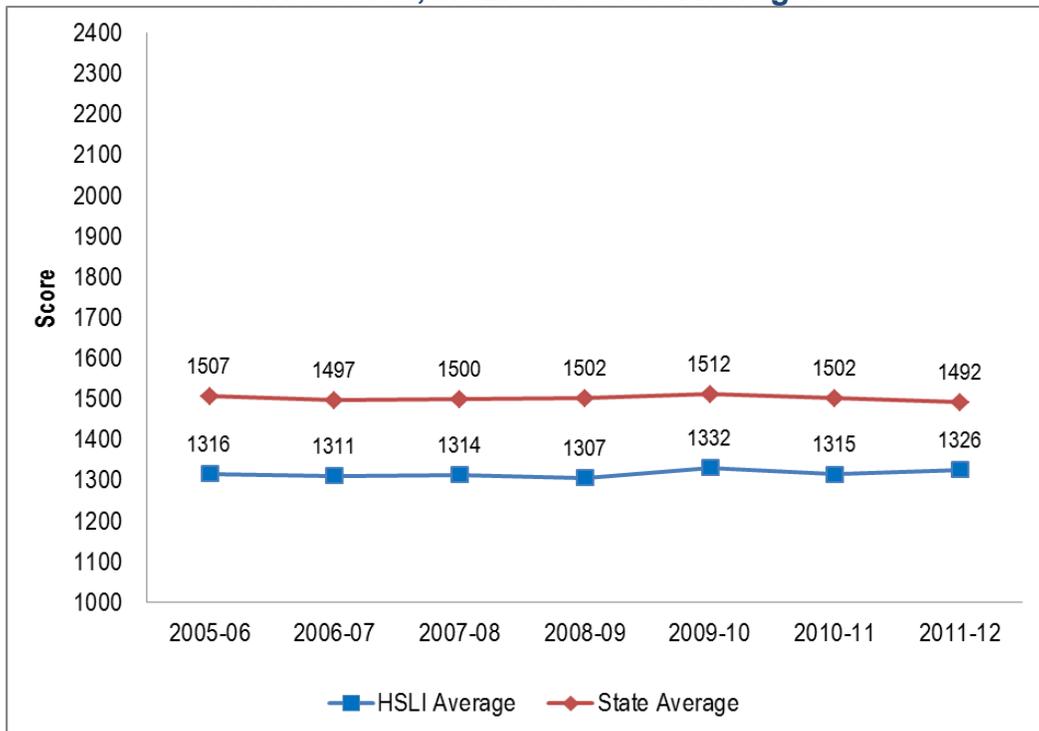


Source: California Department of Education, 2013

College-Going Culture—SAT Reasoning Test¹⁵

The SAT is a college entrance exam that covers reading, mathematics, and writing and serves as a measure of high school college-going culture. The analysis of SAT scores since 2005–06 shows that these scores have remained relatively flat for both the HSLI cohort and the state as a whole. HSLI students, on average, scored below state averages from 2005–06 through 2011–12 (Exhibit 5.9). SAT scores are not available for student subgroups.

Exhibit 5.9
SAT Scores, HSLI and State Averages



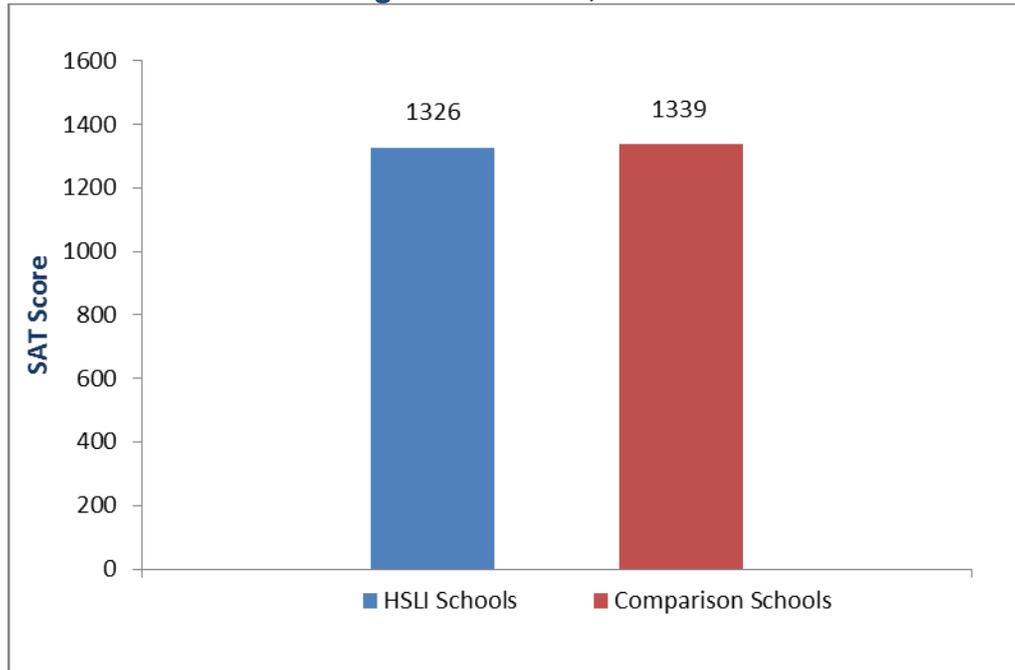
Source: DataQuest, 2013

Note: 2011–12 is the most recent year for which data are available.

¹⁵ The SAT Reasoning Test was formerly the Scholastic Aptitude Test or the Scholastic Assessment Test.

Although performing below statewide averages, students in HSLI schools were performing on par with their peers in comparison schools on the SAT exam (Exhibit 5.10). Similarly, the percentages of 12th-graders taking the exam were nearly identical in HSLI and comparison schools, with no detectable statistical difference between them (not shown).

Exhibit 5.10
Average SAT Score, 2011–12

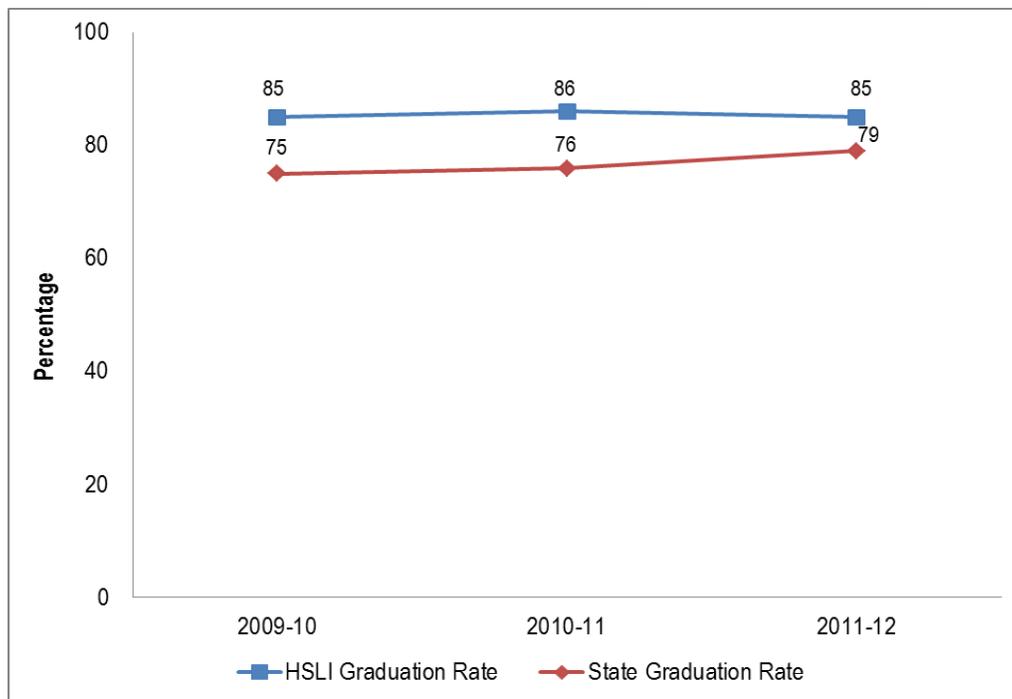


Source: California Department of Education, 2013

Student Engagement—Graduation Rates

In addition to CAHSEE, the research team chose to track high school graduation rates over the course of the evaluation because graduation rates demonstrate the ability of a high school to educate its students successfully. In 2006–07, the state of California began calculating a 4-year cohort analysis to provide a more accurate accounting of graduation and dropouts. The state released the graduation rate based on the cohort calculation for the first time in 2009–10.¹⁶ Analysis of the newly defined graduation rate data shows that, in the final 3 years of the HSLI grant, the average graduation rate in HSLI schools was around 85%. The HSLI cohort had a higher graduation rate, on average, than the statewide average in each of the three years (Exhibit 5.11).

Exhibit 5.11
Graduation Rates, HSLI and State (Cohort Definition)



Source: DataQuest, 2013

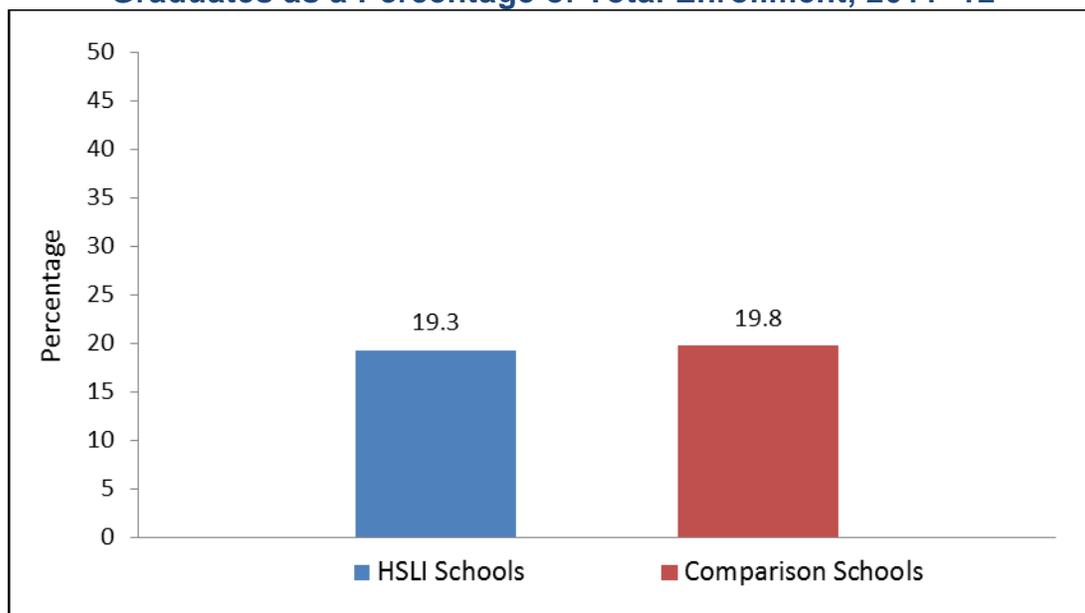
Note: 2011–12 is the most recent year for which data are available.

Using multivariate regression analysis to compare HSLI schools with a similar set of schools required us to calculate a graduation measure distinct from the 4-year cohort analysis above because the baseline time period of 2006–07 occurred prior to the availability of the 4-year cohort analysis data. In our regression model, we calculated graduation as a percentage of total enrollment, with number of graduates in the numerator and total enrollment in all grades served at the school in the denominator. For this reason, Exhibit 5.12 is not comparable to Exhibit 5.11, but it does allow us to accurately compare HSLI and comparison schools on a high school graduation measure.

¹⁶ The graduation rate based on a cohort analysis is the percentage of ninth-grade students who graduate 4 years later.

Although Exhibit 5.12 suggests that the number of graduates as a percentage of total enrollment was slightly higher at comparison schools than at HSLI schools, after controlling for baseline school characteristics this difference is not statistically significant at any conventional level of significance.

Exhibit 5.12
Graduates as a Percentage of Total Enrollment, 2011–12



Source: California Department of Education, 2013

The analyses of academic rigor, college-going culture, and student engagement show that students in HSLI schools performed at about the same level as the average California high school student over the course of the grant on almost all the student outcomes investigated. One notable exception is the graduation rate where the HSLI cohort posted a higher average graduation rate than the average California high school. The results of the analyses comparing HSLI schools with a similar set of high schools in the state also showed that students in HSLI schools performed at the same level as their peers in similar schools at the end of the grant period, after controlling for baseline characteristics, with one notable exception. Students in HSLI schools did, however, outperform their peers in similar schools on the mathematics portion of the CAHSEE. A higher percentage of students in HSLI schools than of their peers in similar schools passed the mathematics portion of the CAHSEE. This result held true for the student subgroups of Latino and socioeconomically disadvantaged as well.

Although HSLI may not have had the full impact on student outcomes imagined at its inception, these findings are neither surprising nor an indication that HSLI was ineffective. HSLI effectively contributed to changes in school structures, cultures, and instructional practices at many HSLI schools. However, these changes took several years to be realized, and they did not occur in all schools. What, then, has been learned about HSLI and changing leadership structures in high schools? We turn to conclusions next.

6. Conclusion

The California Academic Partnership Program (CAPP) ushered in a new chapter in its history of supporting improved academic quality in California high schools with the High School Leadership Initiative (HSLI). Prior to HSLI, CAPP grant cycles focused primarily on working with teachers to develop their leadership skills. While continuing its commitment to teacher leadership, CAPP acknowledged that principals play a crucial role in creating and supporting the structures and practices that make effective teacher leadership possible. CAPP created the HSLI grant to provide supports to both principals and teachers in the service of developing effective leaders and consequently effective schools and improved student outcomes.

SRI International was contracted in 2011 to conduct an independent evaluation of CAPP's HSLI initiative. This third and final report in the series incorporates findings from all three years of data collection to tell the story of HSLI.

HSLI's supports were flexible and responsive to the individual needs of participating schools and proved to be valued by principals, teachers, and other school administrators. The HSLI partner was the linchpin of these supports, ensuring that the different HSLI supports were woven together to meet individual school needs. Although leadership development needs did vary by school, we found that HSLI partners focused on developing a similar set of leadership practices and structures, including the following:

1. Encouraging principals to abandon authoritarian leadership styles
2. Identifying and building the skills of potential leaders
3. Helping schools improve communication and action through effective meetings
4. Strengthening existing leadership structures and processes
5. Building or strengthening consensus for school-level decisions
6. Maintaining focus in a changing environment.

Partners' effectiveness was due in large part to their coaching skills and their ability to draw on their experiences and on experiences of their colleagues and the HSLI director. The other HSLI supports worked in concert with and in support of the efforts of the HSLI partners, creating a coherent set of supports that enabled schools to focus on their improvement efforts.

Principals and staff in most HSLI schools reported that schoolwide structures and processes, schoolwide culture, and professional practices have changed and now incorporate important components that make effective leadership possible in their schools. Through 5 years of HSLI-supported efforts to establish and nurture distributed leadership structures, most schools had well-functioning leadership teams with effective operational practices in place by the end of the grant. As a result, staff shared a common vision for school improvement, leadership teams met regularly, and meetings were goal oriented and structured to support the school improvement work to be done. Taken together, these features created time and space for staff to systematically reflect on school progress, voice concerns and discuss their resolution, and identify plans for moving forward, resulting in the trust and unity of purpose necessary to build consensus.

As principals and staff at each school worked toward more effective leadership, student outcomes measuring academic rigor, college-going culture, and student engagement showed that, for the most part, students in HSLI schools performed at a similar level to their peers statewide as well as their peers in a set of comparable schools. Two notable exceptions are the math portion of the California High School Exit Exam, in which HSLI students outperformed their peers and the graduation rate, in which the HSLI cohort continues to outperform high schools statewide.

HSLI has shown that it is possible to develop new leadership systems and leadership capacity in high schools. Although such changes were not universal across the cohort of schools, where they did take hold they were deep and lasting. However, whether or not student outcomes will improve, especially in those schools where leadership changes were evident, remains to be seen. Although the full impact of HSLI is not yet known, CAPP's innovative program to support effective high school leadership has illuminated the importance of comprehensive, tailored, and intensive supports in creating effective school leadership. School leaders relied on the combination of expertise, money, and collegial support to broaden their perspectives, provide honest feedback, question their motives and decisions, support collaboration, and secure needed resources. School leaders needed support that was tailored so that they could capitalize on strengths, address weaknesses, and respond to the internal and external circumstances pushing on the schools. Finally, school leaders needed the opportunity to dive deep into all of the factors affecting school level decision making so that changes would be meaningful rather than superficial.

As HSLI schools move beyond the grant, translating new leadership systems and leadership capacity into improved outcomes for students will be critically important. To begin that process, HSLI schools will need to determine what success looks like for their students and the ways in which leadership systems support that success. The metrics to measure success are likely to include standardized exams, as well as metrics collected by the schools to capture important student outcomes such as school climate and percentage of students enrolling in postsecondary institutions. In addition to establishing metrics to measure success, HSLI schools will need to create interim measures that allow them to monitor their progress toward achieving their definition of success. Many HSLI schools are well positioned to take these next steps of defining and measuring success, given their efforts under HSLI to build capacity to use data for decision making.

In keeping with the CAPP tradition of reflecting on previous grants to inform future efforts, we offer a few big lessons from HSLI to consider for future grant planning:

- **Positioning the HSLI partner as both an insider and outsider facilitated productive partnerships.** Throughout this evaluation, we have documented the critical role of the HSLI partners. Important to their success was that the partner was seen as an “insider,” or as part of their school, because of his or her frequent presence on campus and the resulting deep understanding of the school, its culture, its strengths, and the challenges it faced. At the same time, the partner’s status as outsider, independent from school and district agenda, allowed school staff to talk openly about challenges without concern that those discussions would influence an individual’s performance evaluation. This outsider status also supported candid discussions about challenges with district

directives and programs, as well as discussions about effective strategies for navigating district politics. The ability to understand the school context, including the district in which it operates, and also maintain independence from school and district agenda, fostered the trust and credibility necessary for productive partnerships.

- **Nurturing leadership pathways maintained stability and increased capacity.** Most HSLI schools experienced turnover of principals, and that turnover presented challenges to the momentum of the grant. HSLI partners paid close attention to the need to build leadership pathways in their schools by helping principals identify potential leaders. Partners also worked directly with individuals to help build their individual leadership skills. Building leadership pathways was one strategy some partners used to help schools mitigate the effects of turnover in leadership and increase the overall leadership capacity in a school.
- **Institutionalizing time for planning and implementation enabled schools to be strategic.** School administrators and teachers consistently reported that time was a scarce commodity. In such an environment, triage often trumps strategy as a guiding force. Prior to HSLI, many schools had not carved out time during the school day for school leaders to step away from immediate needs in order to collaborate and plan. Without built-in time, efforts to develop leadership structures and capacity are likely to fail. However, as demonstrated through HSLI, having resources that enable regular, structured time for collaboration and joint work can facilitate more strategic and less reactive decision making.
- **Taking time to create shared understandings fostered a strong foundation for ongoing work.** Although all HSLI principals applied for the grant and recognized its focus on shared leadership, not all principals understood what shared leadership practices looked like or were committed to implementing shared leadership structures that gave teachers and other administrators the authority to make decisions. HSLI partners spent time with many principals discussing shared leadership and principal practices that supported shared leadership so that principals could establish systems and practices that gave authentic leadership responsibility and authority to teachers and other administrators. HSLI partner efforts to help principals “let go” was a key activity in the first years of the grant, as well as in the first year of a new principal’s tenure at an HSLI school. Eliciting leaders’ candid perspective on constructs core to the initiative limited the risk that change would be in name only and established a common foundation from which to move forward.
- **Establishing a community of practice for experts enabled them to provide the best support possible.** CAPP acknowledged the need for HSLI partners to grow into their new roles by providing them opportunities to meet with their partner colleagues three times per year. These meetings included time to discuss general leadership and school reform topics, as well as engage in discussions around specific challenges partners faced in their work with school leaders. Because the HSLI grant did not prescribe a particular program or intervention, the community of practice provided an important venue for partners to share their strategies and challenges. It also enabled them to learn and draw on the experiences of their colleagues to better support their schools.

As CAPP continues to pursue its mission of improving secondary schools, the following are questions for further research on school leadership:

1. Are there specific shared leadership policies or practices that result in better student outcomes?
2. What are the roles of district leadership and union leadership in supporting or hindering schools' ability to establish shared leadership policies and practices?
3. Is there a relationship between schools' practice of effective shared leadership and their ability to implement the Common Core successfully?
4. Why did some HSLI schools with improved leadership structures and practices not show evidence of improved student outcomes?
5. What supports are needed for schools that are developing, modifying, or implementing new leadership systems and practices to ensure that those leadership systems and practices address and support improved instructional practices?
6. Is there a pathway to establishing effective distributed leadership in schools? Is there a progression or a continuum that schools can or should follow to achieve effective distributed leadership?

Through HSLI, CAPP has had an opportunity to contribute to the growing research on developing leadership capacity in schools. Lessons from HSLI will be valuable as CAPP and other organizations consider future efforts to support secondary school improvement in California.

Appendix A. Research Methods

The 2012–13 school year was the final year of our evaluation of HSLI. During the final year, we conducted two data collection and analysis efforts: a comparison of student outcomes between HSLI and a similar pool of non-HSLI schools, and on-site interviews at all 11 participating high schools. This appendix details our data collection procedures and analysis methods for the 2012–13 data collection activities. This report also includes data included in the previous two annual evaluation reports submitted to CAPP. For more information on data collection procedures and methods for data collected in 2010–11 or 2011–12, please refer to the 2011 and 2012 reports.

Site Visits

In spring 2013, researchers made their final visits to all 11 HSLI schools. In all but one of the 11 schools, researchers interviewed the principal as well as teacher leaders, teachers new to the school, and at least one school administrator such as an assistant principal or counselor. One of the HSLI schools experienced turnover in the principal position in 2012–13 (the fourth principal in 6 years). This principal had limited contact with HSLI and did not make the HSLI site visit a priority for his staff. This principal did make time for a short in-person interview, and researchers were able to contact two additional school staff members—the assistant principal and one teacher leader—for phone interviews.

Interviews followed a semi-structured protocol and focused on collecting information about important changes that occurred in 2012–13 and the reasons for those changes. These “change” questions were divided into five general topic areas: (1) school organizational structures and general school context; (2) school leadership roles, responsibilities, and structures; (3) teacher practice; (4) student outcomes; and (5) views on leadership. The protocol also included questions about the ways in which HSLI schools used their carryover funds and whether the schools continued to receive support from their HSLI partners in 2012–13 (the first year without HSLI supports). Researchers developed a thematic coding scheme and coded all interviews. The research team then analyzed the coded interview data to identify the themes reported under the five general topic areas listed above. The most commonly reported themes shaped the structure and content of this final evaluation report.

Comparisons of Student Outcomes

In the Year 1 and Year 2 HSLI evaluation reports, the research team presented student outcome data for the HSLI school cohort (i.e., the average student outcome result for HSLI schools) compared with the state average. Comparing HSLI schools with the state average on key indicators allowed the research team to place the HSLI cohort trends within the context of overall state trends and demonstrated how HSLI schools performed relative to all high schools in the state. However, these comparisons did not allow the research team to isolate the effect of being in an HSLI school on student outcomes from original differences between the schools, because HSLI schools differed in important ways from many of the other schools in the state. For example, the average API rank for the state of California will be near 5 by definition because the rank is based on deciles of performance, whereas HSLI schools have API ranks ranging from 1 to 5 because of the selection criteria for the grant. HSLI schools may also differ from the state

average in other characteristics that are strong predictors of student outcomes, such as demographics and the socioeconomic status of their student populations. Thus, these differences need to be accounted for at baseline to ensure the comparison of HSLI schools with comparable non-HSLI schools. In an experimental study, schools would be randomly assigned to HSLI and non-HSLI conditions to ensure the comparability of treatment and comparison schools. However, because school selection for participation in the HSLI initiative was not random, we conducted a quasi-experimental evaluation, making it necessary to construct a comparison group in order to obtain unbiased estimates of the effect of participation in the HSLI initiative on the academic outcomes of students.

Comparison Group Construction

Schools with an Academic Performance Index (API) statewide rank ranging from 1 to 5 in academic year 2005–06 were eligible to apply to participate in the HSLI initiative. By definition, this group includes half of the high schools in the state, and specifically those high schools in the bottom 50th percentile in the state in terms of academic achievement. We selected this eligible applicant pool as the comparison group for the 11 HSLI schools. The schools in this group could be expected to be comparable to HSLI schools in terms of academic achievement at baseline on average because of their similar API statewide ranks.¹⁷ A comparison group of this size is advantageous because a large sample size allows for more statistical power and therefore makes it easier to detect the effects of participation on outcomes. However, one drawback to using the eligible applicant pool as a comparison to HSLI schools is that these schools did not apply for the grant and therefore demonstrated a potential difference in motivation or other unmeasurable differences from HSLI schools.¹⁸ Therefore, it is important to note that because of the non-experimental nature of this study, the inferences drawn from it are correlational only and cannot be construed as causal.

To construct a group as comparable as possible to the group of HSLI schools, we further restricted the group of schools in the bottom 50th percentile of API scores to those schools serving student populations similar to those of the schools in the HSLI grant. Traditional public high schools (including charters) were retained for comparison; schools serving special populations, such as continuation high schools and adult education centers, were excluded from the sample. We also eliminated schools that opened after the fall of 2005 to ensure that we were including schools for which baseline data were available.

¹⁷ Indeed, an examination of baseline descriptive statistics demonstrated that the eligible applicant pool was comparable to HSLI schools, on average, on key demographic and achievement indicators.

¹⁸ The research team also considered the 48 schools that applied for the HSLI grant but were not selected for participation. While the rejected applicants for the HSLI grant demonstrated a similar motivation to apply, they ultimately were not selected and therefore differed in important ways from the schools that were eventually selected to receive the grant. The much smaller sample size of the rejected applicant pool would have made it harder to detect the true effect of participation in HSLI, and also would have increased the chance that results would be biased by outliers. Finally, the rejected applicants were included in the much larger eligible applicant pool, which was another factor favorable to selecting the eligible applicant pool for comparison.

Data Sources

All data used in the analysis are publicly available datasets found on the California Department of Education website. Datasets with demographic, student assessment, and school performance data were downloaded for academic years 2005–06, 2006–07, 2010–11, and 2011–12.

Student Outcome Analysis

In Chapter 5 we present regression estimates of HSLI participation on students' standardized test scores, rates of graduation, “a-g” attainment, and API. To estimate the impact of the HSLI grant on student achievement outcomes at participating schools, the research team conducted outcome analysis using available data for academic year 2011–12, which was the final year of the grant. We used ordinary least squares (OLS) regression with classical standard errors for all outcomes. The results of this final model are presented in this section. Exhibit A.1 provides details on all the student achievement measures included in the final analysis.

Exhibit A.1
Student Outcomes Examined

Student Outcome Measure	Type of Measure	Grade Level				Group		
		Ninth Grade	Tenth Grade	Eleventh Grade	Twelfth Grade	All Students	Latino	SED
ACT % 12th Grade Students Tested	Percentage				X	X		
ACT Average Score	Continuous				X	X		
ACT % of Takers with Score of 21 or Above	Percentage				X	X		
ACT % of 12th Graders with Score of 21 or Above	Percentage				X	X		
ACT Test Takers as a Proportion of SAT Test Takers	Proportion				X	X		
AP Number of Tests with Score of 3 or Above as % of 11th and 12th Graders	Percentage			X	X	X		
AP % of Tests with Score of 3 or Above	Percentage			X	X	X		
AP % of 11th and 12th Graders Taking	Percentage			X	X	X		
API Growth	Continuous	X	X	X	X	X	X	X
CAHSEE Math % Passing	Percentage		X			X	X	X
CAHSEE ELA % Passing	Percentage		X			X	X	X
CST Algebra I % Proficient or Above	Percentage	X	X			X	X	X
CST Algebra II % Proficient or Above	Percentage		X			X	X	X
CST ELA % Proficient or Above	Percentage		X			X	X	X
Graduates as % of Total Enrollment ^a	Percentage				X	X		
% Graduates Fulfilling A-G Requirements	Percentage				X	X	X	
EAP ELA % Ready	Percentage			X		X		
EAP Math % Ready or Conditionally Ready	Percentage			X		X		
EAP Math % Ready	Percentage			X		X		
ELA EAP Takers as Proportion of CST Takers	Proportion			X		X		
Math EAP Takers as Proportion of CST Takers	Proportion			X		X		
SAT % 12th Grade Students Tested	Percentage				X	X		
SAT Average Score	Continuous				X	X		

^a The definition of the graduation measure reported here differs from the graduation rate presented in the graphs with statewide averages.

Exhibit A.2 lists the school-level control variables used in the model. We included student demographic indicators to account for differences in the racial, linguistic, and socioeconomic status of the schools' students. The variables we included are the percentage of English language learner enrollment, the percentage of the student body that is minority or nonwhite, and the percentage of the student population eligible for free or reduced-price lunch. Additionally, we included variables to control for school characteristics such as the size of the school, whether the school was in Program Improvement (PI) status, and whether the school received Title I funds. These variables were selected for inclusion because they account for important differences in school attributes. California high schools range in size from a few hundred to several thousand students, and these large size differences may lead to very different types of school environments. In addition, schools in Program Improvement status face sanctions and programmatic requirements under the federal accountability system that do not apply to non-Program Improvement schools. A school's Title I status also indicates whether the school is receiving additional funds to educate its students. The inclusion of this group of control variables allows us to isolate more accurately the effects of HSLI participation by accounting for school-level differences that are highly correlated with student achievement.

Exhibit A.2
Control Variables Used in Analysis

Control Variable	Type of Measure	Year
Student Population Demographics		
% English Language Learner Enrollment	Percentage	2011–12
% Nonwhite	Percentage	2011–12
% Free and Reduced-Price Lunch	Percentage	2011–12
School Characteristics		
Medium school (enrollment from 500 to 2,000)	Dichotomous	2011–12
Large school (enrollment of more than 2,000)	Dichotomous	2011–12
Program Improvement status	Dichotomous	2006–07
Title I Status	Dichotomous	2006–07

Exhibit A.3 includes descriptive statistics for each of the student achievement measures included in the final analysis for baseline (2006–07) and for the final year of the initiative (2011–12). The descriptive statistics are shown separately for HSLI and comparison schools. Included are the sample sizes and means for all outcome measures, as well as standard deviations for continuous measures.

Exhibit A.3
Student Outcome Descriptive Statistics

Student Outcome Measure	Baseline (2006–07)						Final Year (2011–12)					
	HSLI Schools			Comparison Schools			HSLI Schools			Comparison Schools		
	n	Mean	SD	n	Mean	SD	n	Mean	SD	n	Mean	SD
ACT % 12th Grade Students Tested - Overall	8	15.0		352	12.5		11	20.2		395	20.8	
ACT Average Score - Overall	8	18.9	1.9	352	19.3	2.1	11	19.0	94.8	395	19.4	2.0
ACT % of Takers with Score of 21 or Above - Overall	8	36.0		347	37.3		11	33.7		395	37.2	
ACT % of 12th Graders with Score of 21 or Above - Overall	8	4.6		347	4.0		11	6.6		395	6.9	
ACT Test Takers as a Proportion of SAT Test Takers - Overall	11	0.32		437	0.34		11	0.53		450	0.50	
AP Number of Tests with Score of 3 or Above as % of 11th and 12th Graders - Overall	11	13.0		421	12.3		11	18.4		420	17.5	
AP % of Tests with Score of 3 or Above - Overall	11	34.4		421	36.9		11	32.1		420	38.0	
AP % of 11th and 12th Graders Taking - Overall	11	23.2		441	20.2		11	32.7		481	24.1	
API Growth - Overall	11	9.6	13.7	486	5.7	28.5	11	9.8	14.0	467	8.2	21.0
API Growth - Latino	11	11.2	14.0	418	8.6	23.0	11	11.1	12.1	421	10.2	21.5
API Growth - SED	11	10.0	16.3	439	8.2	25.0	10	7.5	15.2	425	10.8	21.3
CAHSEE Math % Passing - Overall	11	71.0		494	68.9		11	83.3		467	79.2	
CAHSEE Math % Passing - Latino	11	67.2		451	65.0		11	81.8		443	77.2	
CAHSEE Math % Passing - SED	11	68.1		471	65.2		11	82.1		456	77.4	
CAHSEE ELA % Passing - Overall	11	69.5		495	69.3		11	78.3		468	77.9	
CAHSEE ELA % Passing - Latino	11	65.7		451	63.9		11	76.9		442	75.9	
CAHSEE ELA % Passing - SED	11	65.5		472	63.7		11	76.5		456	75.4	
CST Algebra I % Proficient or Above - 9th Grade - Overall	11	16.3		468	11.6		11	17.5		448	18.0	
CST Algebra I % Proficient or Above - 9th Grade - Latino	11	15.9		428	10.3		11	16.0		421	16.8	
CST Algebra I % Proficient or Above - 9th Grade - SED	11	15.9		446	10.5		11	16.5		435	17.4	
CST Algebra I % Proficient or Above - 10th Grade	11	7.5		443	5.5		10	8.0		407	9.7	
CST Algebra II % Proficient or Above - 10th Grade - Overall	10	23.1		418	22.3		11	34.6		416	32.5	
CST Algebra II % Proficient or Above - 10th Grade - Latino	9	17.3		338	18.4		11	29.2		369	29.9	
CST Algebra II % Proficient or Above - 10th Grade - SED	10	22.8		357	20.1		11	33.5		388	31.5	
CST ELA % Proficient or Above - 10th Grade - Overall	11	25.7		496	26.8		11	40.1		466	39.9	
CST ELA % Proficient or Above - 10th Grade - Latino	11	21.8		452	20.4		11	36.3		443	34.9	
CST ELA % Proficient or Above - 10th Grade - SED	11	21.9		471	20.5		11	37.5		457	35.3	

Exhibit A.3
Student Outcome Descriptive Statistics (concluded)

Student Outcome Measure	Baseline (2006–07)						Final Year (2011–12)					
	HSLI Schools			Comparison Schools			HSLI Schools			Comparison Schools		
	n	Mean	SD	n	Mean	SD	n	Mean	SD	n	Mean	SD
Graduates as % of Total Enrollment ^a - Overall	11	16.5		492	16.6		11	19.3		481	19.8	
% Graduates Fulfilling A-G Requirements - Overall	11	32.5		492	29.2		11	35.2		481	33.6	
% Graduates Fulfilling A-G Requirements - Latino	11	27.6		484	24.9		11	31.1		473	29.6	
EAP ELA % Ready - Overall	11	8.6		470	8.0		11	12.8		460	13.4	
EAP Math % Ready or Conditionally Ready - Overall	11	39.0		429	40.4		11	49.5		431	48.8	
EAP Math % Ready - Overall	11	4.0		429	5.0		11	5.0		431	7.4	
ELA EAP Takers as Proportion of CST Takers - Overall	11	0.86		495	0.80		11	0.96		475	0.92	
Math EAP Takers as Proportion of CST Takers - Overall	11	0.83		473	0.70		11	0.88		467	0.81	
SAT % 12th Grade Students Tested - Overall	11	35.0		472	35.9		11	39.2		472	40.1	
SAT Average Score - Overall	11	1310.5	70.1	428	1339.1	116.3	11	1326.3	37.0	436	1338.7	104.7

^a The definition of the graduation measure reported here differs from the graduation rate presented in the graphs with statewide averages.

The final model uses participation in the HSLI initiative to predict each individual outcome measure in 2011-12, controlling for the baseline value of that measure in 2006-07, as well as for student population demographics and other school characteristics. The regression results estimate the extent to which students enrolled in HSLI schools performed differently on each of these outcomes, on average, compared with students in similar schools in the state. Exhibit A.4 displays the results from the final analyses performed, including sample sizes, coefficients, and standard errors. For many measures, the available data allowed us to perform analyses for the overall student population as well as separately for Latino students and for socioeconomically disadvantaged students, allowing us to differentiate effects of the schools' participation in the HSLI initiative on these distinct student subgroups.

Exhibit A.4
Student Outcome Analysis

Student Outcome Measure	n	All Students		Latino Students			Socioeconomically Disadvantaged Students		
		Coefficient	SE	n	Coefficient	SE	n	Coefficient	SE
ACT % 12th Grade Students Tested	346	-2.43	3.52						
ACT Average Score	346	0.45	0.38						
ACT % of Takers with Score of 21 or Above	343	0.03	0.04						
ACT % of 12th Graders with Score of 21 or Above	343	0.00	0.01						
ACT Test Takers as a Proportion of SAT Test Takers	430	0.03	0.12						
AP Number of Tests with Score of 3 or Above as % of 11th and 12th Graders	412	0.01	0.02						
AP % of Tests with Score of 3 or Above	412	-0.03	0.04						
AP % of 11th and 12th Graders Taking	437	0.04	0.03						
API Growth	455	-0.98	6.04	411	1.02	6.29	412	-2.34	6.75
CAHSEE Math % Passing	464	0.04 *	0.02	443	0.04 **	0.02	454	0.04 *	0.02
CAHSEE ELA % Passing	466	0.02	0.02	442	0.02	0.02	455	0.02	0.02
CST Algebra I % Proficient or Above - 9th Grade	440	-0.03	0.04	415	-0.04	0.04	430	-0.04	0.04
CST Algebra I % Proficient or Above - 10th Grade	399	-0.03	0.03						
CST Algebra II % Proficient or Above - 10th Grade	403	0.01	0.06	330	-0.03	0.06	348	0.00	0.06
CST ELA % Proficient or Above - 10th Grade	466	0.01	0.03	443	0.00	0.03	457	0.01	0.03
Graduates as % of Total Enrollment ^a	469	0.00	0.01	469	0.00	0.01	469	0.00	0.01
% Graduates Fulfilling A-G Requirements	469	0.01	0.05	462	0.01	0.05			
EAP ELA % Ready	451	0.00	0.02						
EAP Math % Ready or Conditionally Ready	419	0.02	0.04						
EAP Math % Ready	419	-0.02	0.02						
ELA EAP Takers as Proportion of CST Takers	472	0.01	0.04						
Math EAP Takers as Proportion of CST Takers	456	0.00	0.05						
SAT % 12th Grade Students Tested	455	0.00	0.04						
SAT Average Score	421	17.15	14.40						

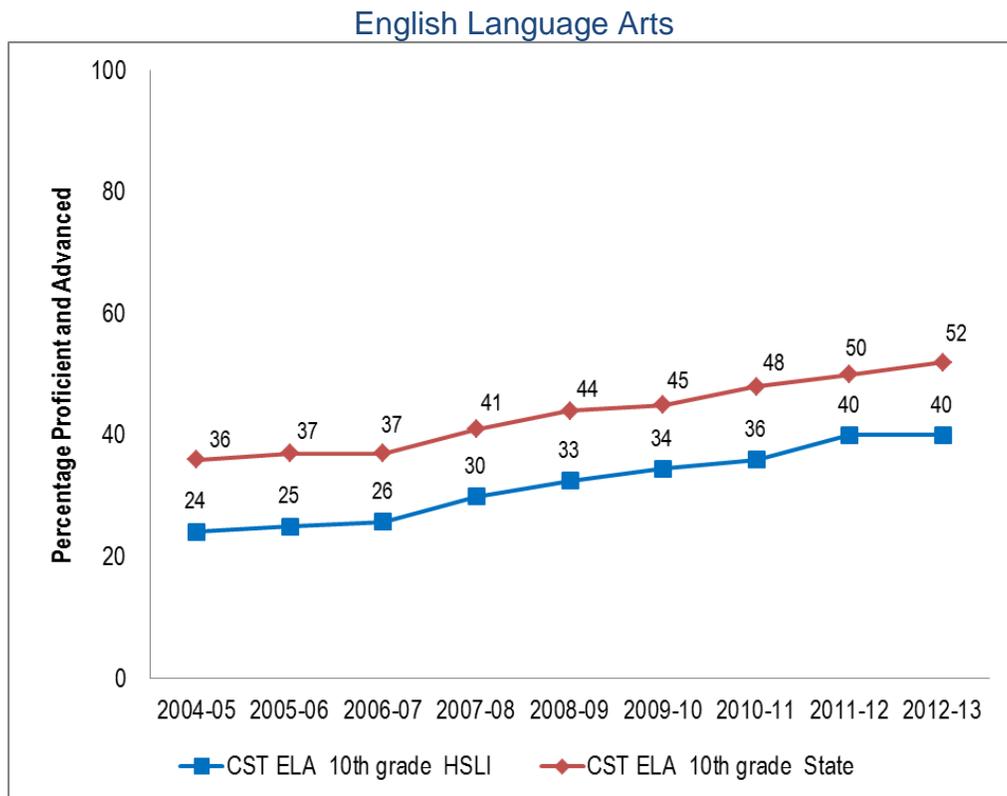
* $p < .10$, ** $p < .05$

^aThe definition of the graduation measure reported here differs from the graduation rate presented in the graphs with statewide averages.

Appendix B. Additional Student Outcome Analyses

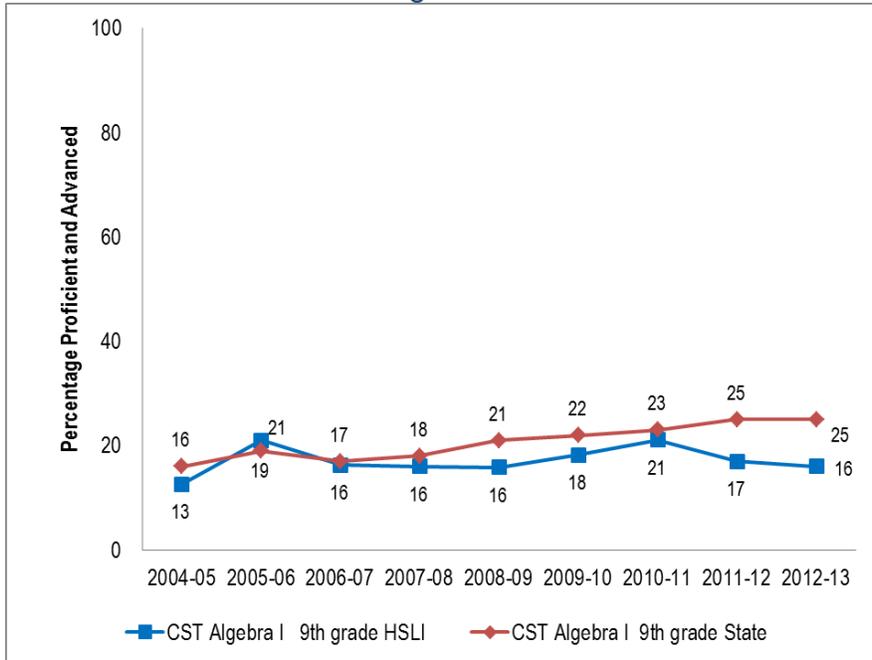
HSLI and Statewide Trends

Exhibit B.1
HSLI and Statewide CST Results for English Language Arts, Algebra I, and Algebra II, 2004–05 to 2011–12



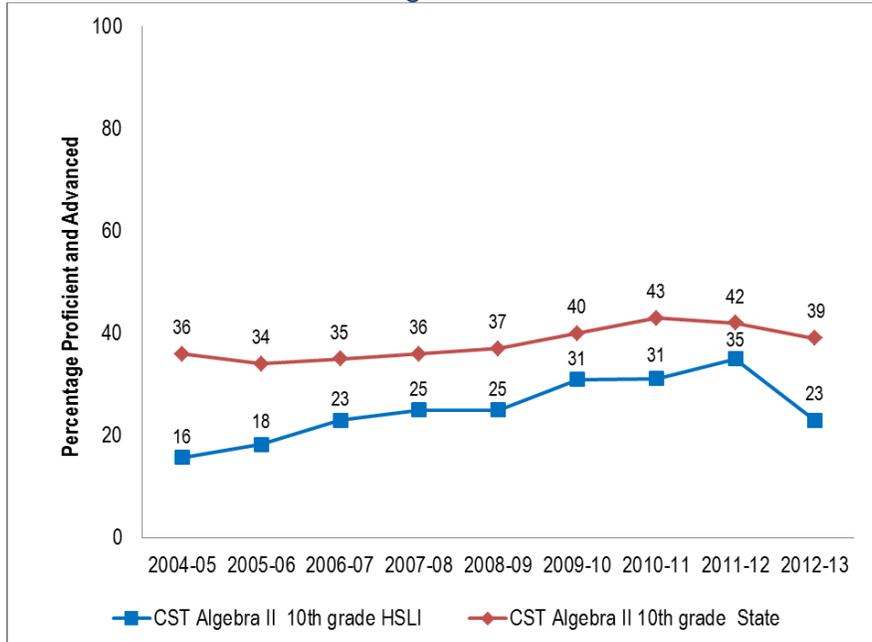
Source: DataQuest 2013

Algebra I



Source: DataQuest 2013

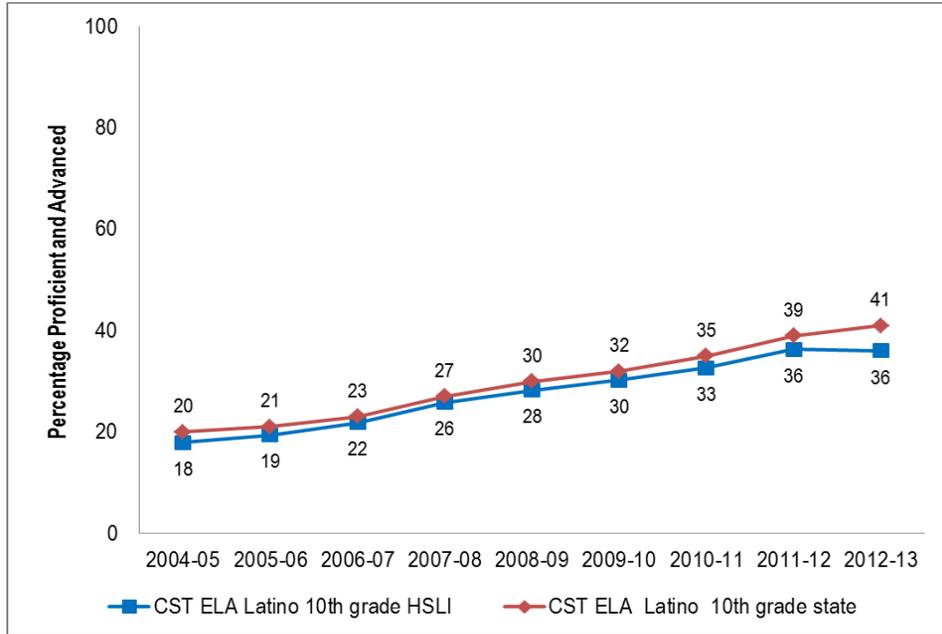
Algebra II



Source: DataQuest 2013

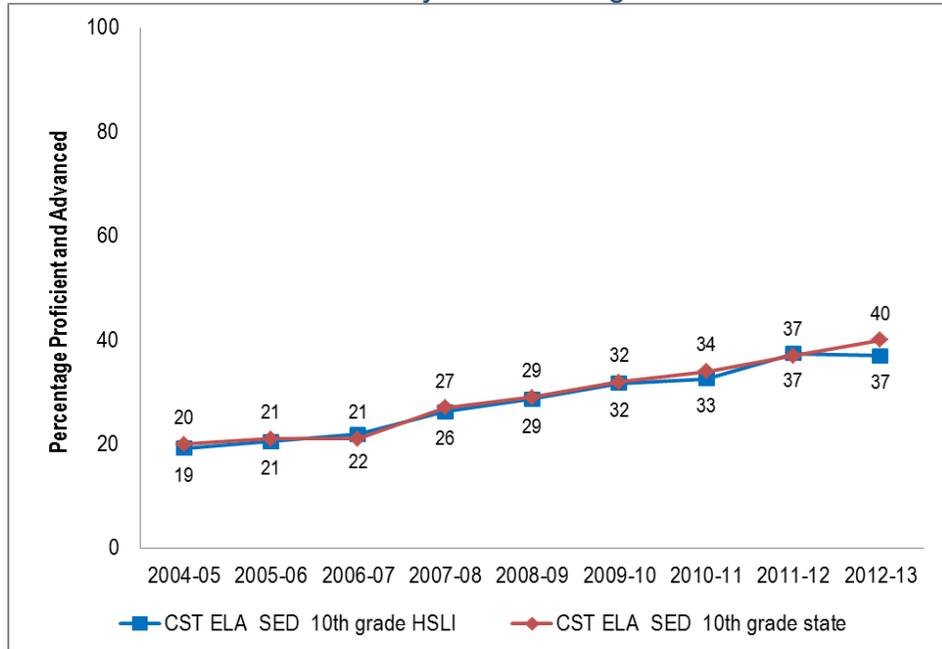
Exhibit B.2 HSLI and Statewide ELA CST Results for Student Subgroups

Latino Students



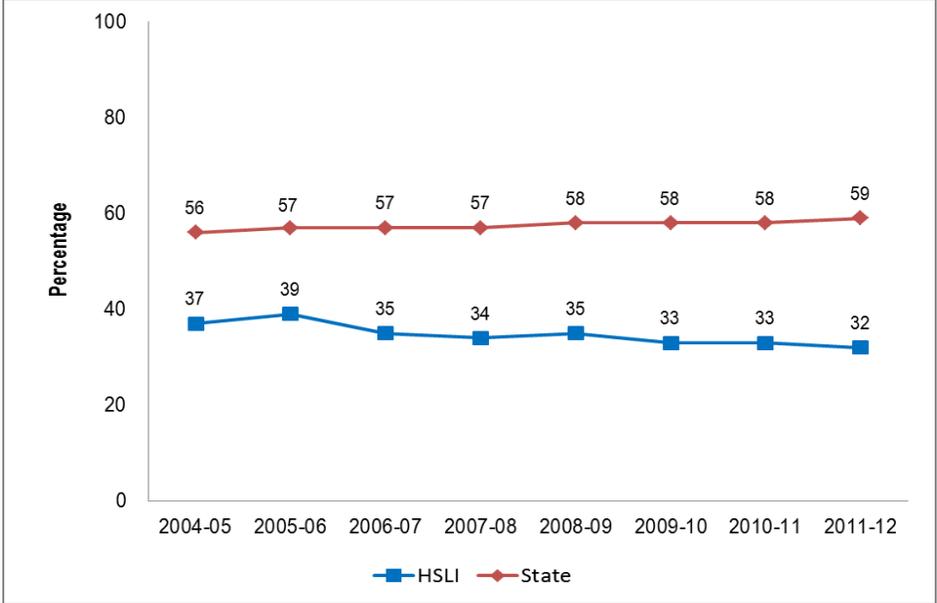
Source: DataQuest 2013

Socioeconomically Disadvantaged Students



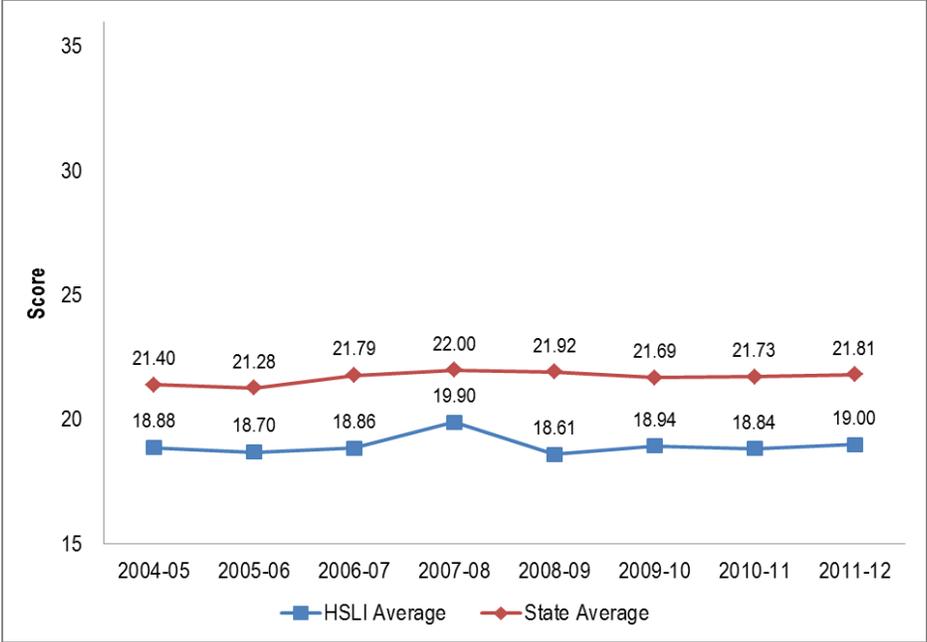
Source: DataQuest 2013

Exhibit B.3
AP Tests Receiving a Score of 3 or Better,
HSLI Average and State



Source: DataQuest 2013

Exhibit B.4
ACT Scores, HSLI and State Averages



Source: DataQuest 2013

HSLI and Comparison Schools

Exhibit B.5
Comparisons of Student Outcomes between HSLI and Comparison Schools

	Baseline (2006–07)						Final Grant Year (2011–12)					
	HSLI Schools			Comparison Schools			HSLI Schools			Comparison Schools		
	<i>n</i>	<i>Mean</i>	<i>SD</i>	<i>n</i>	<i>Mean</i>	<i>SD</i>	<i>n</i>	<i>Mean</i>	<i>SD</i>	<i>n</i>	<i>Mean</i>	<i>SD</i>
<i>Graduates as % of Total Enrollment^a</i>												
% Overall	11	16.5		492	16.6		11	19.3		481	19.8	
<i>API Growth</i>												
Overall	11	10	14	486	6	29	11	10	14	467	8	21
Latino	11	11	14	418	9	23	11	11	12	421	10	22
Socioeconomically Disadvantaged	11	10	16	439	8	25	10	8	15	425	11	21
<i>Graduates Fulfilling “a-g” Requirements</i>												
% Overall	11	32.5		492	29.2		11	35.2		481	33.6	
% Latino	11	27.6		484	24.9		11	31.1		473	29.6	
<i>CAHSEE Math Pass Rate</i>												
% Overall	11	71.0		494	68.9		11	83.3		467	79.2	
% Latino	11	67.2		451	65.0		11	81.8		443	77.2	
% Socioeconomically Disadvantaged	11	68.1		471	65.2		11	82.1		456	77.4	
<i>CAHSEE ELA Pass Rate</i>												
% Overall	11	69.5		495	69.3		11	78.3		468	77.9	
% Latino	11	65.7		451	63.9		11	76.9		442	75.9	
% Socioeconomically Disadvantaged	11	65.5		472	63.7		11	76.5		456	75.4	
<i>SAT</i>												
Average Score Overall	11	1311	70	428	1339	116	11	1326	37	436	1339	105
% 12th-Graders Tested	11	35.0		472	35.9		11	39.2		472	40.1	

^a The definition of the measure reported here differs from the graduation rate presented in the graphs with statewide averages.