Study of the Austin Independent School District's Redesign and High School Reform Initiative

Interim Report

Submitted to the Texas Education Agency

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Exhibits

Acronyms

AEIS	Academic Excellence Indicator System
AISD	Austin Independent School District
AP	Advanced Placement
BMGF	Bill & Melinda Gates Foundation
CFT	Communities Foundation of Texas
CMO	Charter Management Organization
CTE	Career and Technical Education
DSRD	District Redesign
HLM	Hierarchical Linear Model
HSTW	High Schools That Work Enhanced Design Network
NCLB	No Child Left Behind Act
PD	Professional Development
PLC	Professional Learning Community
SIF	School Improvement Facilitator
SLC	Small Learning Community
SREB	Southern Regional Education Board
TA	Technical Assistance
TAKS	Texas Assessment of Knowledge and Skills
TEA	Texas Education Agency
TEKS	Texas Essential Knowledge and Skills
THSP	Texas High School Project
TOC	Theory of Change

Executive Summary

This report describes the Austin Independent School District's recent effort to improve its high schools through a variety of initiatives led by the Office of District Redesign. The Bill & Melinda Gates Foundation supported the reform effort, as well as this evaluation through a grant to the Texas Education Agency. TEA contracted with SRI International to conduct the evaluation.[1]

The research questions that guided the evaluation focused on the implementation of district-level changes, capacity-building efforts, and multiple supports for all high schools in the district. In addition, the evaluation examined student achievement and other outcomes. Researchers used a mixed method approach that included case studies of the district's central office and a sample of high schools, surveys of a sample of students and teachers, and all high school principals, and the analysis of extant outcomes data.

From 1999 through 2009, AISD enjoyed stable and strong leadership, a pattern of rising test scores, and an ambitious reform agenda. With a diverse student population and evidence of closing the achievement gap between African-American and Latino, and white and Asian students, AISD earned a national reputation for innovation. Despite the progress, the achievement gap remained large and state accountability measures increased pressure on the district to make more rapid improvements. District Redesign began in earnest in the 2007–08 school year and came on the heels of a series of reform efforts including aligning district standards and curriculum to state standards, training educators in the Institute for Learning's Principles of Learning, developing Instructional Planning guides, and offering teachers and principals a generous array of professional development opportunities from a variety of outside experts.

Central to the District Redesign were three core structures designed to improve the effectiveness of the district's 11 comprehensive high schools: (1) a student advisory, (2) small learning communities (SLC or sometimes called academies), and (3) professional learning communities (PLCs). Each high school either selected or was assigned a particular reform strategy, including High Schools That Work (HSTW) and First Things First (FTF). The district established the Office of Redesign to oversee the implementation of the reform initiatives.

The implementation of District Redesign was a complex and challenging undertaking. Perceptions of its success or failure varied widely, as different individuals in different roles experienced the reform effort in different ways. Especially in the early stages of development, the initiatives suffered from a lack of communication and coordination among different district offices. Specifically, principals were concerned with having "two bosses"—the Office of High Schools and the Office of Redesign—who did not always agree. While better communication and coordination among district offices improved, the lack of clarity about lines of authority frustrated some principals. However, most principals and central office administrators believed

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[1] SRI International is contracted with TEA to conduct the evaluation of the Texas High School Project (THSP). The study of AISD's District Redesign (DSRD) was included as part of that evaluation contract. THSP, a public-private alliance that includes TEA, the Communities Foundation of Texas, BMGF, and the Michael & Susan Dell Foundation, supports high schools in implementing a variety of reform models such as Texas Science, Technology, Engineering, and Mathematics (T-STEM) academies, Early College High School (ECHS), High Schools That Work (HSTW), High School Redesign and Restructuring (HSRR), and New Schools and Charter Schools (NSCS).

that the Office of Redesign played an important role in sustaining pressure on the system for instructional improvement.

To enact the instructional reforms, a variety of organizations provided AISD teachers with extensive professional development. During the 2007–08 school year, AISD teachers reported that the plentiful professional development workshops resulted in them in missing an excessive number of instructional days. By the 2008–09 school year, the district reduced the number of days that teachers were taken away from their classrooms for professional development.

Each of the district's high schools introduced advisory (sometimes referred to as Family Advocacy) in slightly different ways. Some schools built advisory into the daily schedule, while others held advisory sessions once a week. Overall, we found a good deal of variation in the commitment to and quality of advisory between schools and within schools. Some schools developed and enacted a curriculum for advisory teachers and some teachers found advisory to be extremely valuable. Teacher buy-in and student buy-in to advisory remains a challenge across the district, but after two years of implementation, our interviewees were increasingly able to cite examples of the benefits of advisory.

Efforts to introduce both SLCs and PLCs in AISD high schools also faced implementation challenges. High schools with more experience in forming SLCs (academies) found that they needed several years to work out the structural and scheduling problems, as well as to gain teacher buy-in, before they could attend to instructional improvement. PLCs were expected to provide teachers the time they needed to meet, learn, and plan together. Schools needed time to clarify the purpose of the PLC, differentiate PLC work from departmental meetings, and help teachers learn how to collaborate.

AISD leadership encouraged the adoption of new instructional approaches, such as project-based learning, so as to increase the relevance and rigor of coursework. However, the heavy emphasis on test preparation and teachers' tendency to see projects as an add-on, limited the adoption of new strategies. Similarly, the district placed a major emphasis on the use of data by teachers and principals. Systems such as the Student Teacher Advisory Report (STAR) allowed teachers access to current information on individual student's course history, grades, attendance, TAKS scores, and other indicators of performance. Teachers reported that they were increasing their use of data for making instructional decisions, but teachers' use of data was uneven.

Overall, the majority of AISD high school teachers in the spring 2008 survey supported the reform goals in principle and agreed that the multiple efforts had students' best interests in mind. However, a sizeable minority of teachers criticized of the district's ambitious reform agenda. Teachers complained about too many reform initiatives at once, contradictions between the multiple strategies, and a lack of time to fully implement the reforms before they are replaced with new initiatives.

In addition, our interviews in spring 2008 and spring 2009 revealed a number of challenges facing the district in the near future. First, changes in district leadership often results in new directions and the replacement of the departing superintendent's initiatives. This unraveling simply reinforces teachers' skepticism about reform and reinforces their certainty that all initiatives are temporary. Second, teacher turnover, especially in the district's highest poverty schools, threatens improvement efforts and expands inequities as the least experienced and effective teachers are concentrated in the schools with the neediest students. Third, AISD's low-performing high schools have poor student attendance, and the attendance of Austin students who repeat 9th grade is worse than the 9th-grade repeaters in comparable schools. Poor student

attendance undermines all efforts to raise student learning. Fourth, AISD continues to undergo a major shift in the demographics of its student population with increasing numbers of economically disadvantaged and English language learners.

An important theme emerging from the evaluation is that implementation of a complex and ambitious set of reforms in the context of a high-stakes state accountability system results in a mix of challenges and emerging successes. The mixed results in implementation help explain why we found few positive measures of student outcomes. Overall, our analysis of student outcomes shows no statistically significant difference between the achievement of AISD high school students and those of a matched comparison group. While we found a slightly higher mathematics achievement among AISD student compared to the comparison group, those results were only marginally significant.

AISD's attempts to radically reform its high schools resulted in important changes in school structures, which are beginning to lead to changes in instruction and relationships on campus. These changes are in their infancy and will need to be given time to mature. Even as the district goes through likely changes in direction with the arrival of a new superintendant, the district would be wise to continue with the core of the present reforms.

Study of the Austin Independent School District's Redesign and High School Reform Initiative Interim Report

Introduction

The examination of the AISD high school reform efforts is important because AISD has developed a reputation as an improving urban district with strong and stable leadership and a willingness to engage in comprehensive reform. The district can point to steady overall academic improvement, national recognition for its reform agenda, and an impressive list of philanthropic investments.[2] As such, the findings presented here have implications for other urban school districts. The Bill & Melinda Gates Foundation (BMGF) made significant investments in the improvement of AISD high schools and funded this study through a grant to the Texas Education Agency (TEA). TEA contracted with SRI International (SRI) and its subcontractors to conduct the evaluation; TEA oversees the evaluation of THSP.[3]

The central interest of the AISD evaluation is to examine the implementation of the central office redesign and district-wide reform in AISD high schools. Our study considers the entire life of the reforms beginning in 2006, but focuses most directly on the status of reforms in the two years in which we collected data—namely the spring of 2008 and 2009. For most schools, the study covers the first and second years of reform implementation.[4] As in any study of educational reform, it is critical to remember that reform takes time—typically more time than the duration of this evaluation. As such, the findings reported here reflect the early stage of the reform effort. The report is organized around two sections: Early Implementation and Emerging Outcomes.

Research Questions

The research questions for this evaluation reflect the interest in implementation and outcomes. Under the category of district reform and implementation, there are a number of descriptive questions about the reform effort as planned and implemented. These questions are designed to lay the groundwork for understanding the link between the reform activities and the outcomes. Given that the ultimate goal of district redesign is to improve educational opportunities and outcomes for all students, the second set of research questions focuses on the early outcomes.

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2 Cuban, Larry. (2008). School reform in Austin, Texas 1954–2008. Stanford University LEADS Network and Austin Independent School District, June 2008. Available from: http://www.austinisd.org/inside/docs/superintendent_School_Reform_in_austin_Report.pdf

3 SRI International is contracted with TEA to conduct the evaluation of the Texas High School Project (THSP). The study of AISD's District Redesign (DSRD) was included as part of that evaluation contract. THSP, a public-private alliance that includes TEA, the Communities Foundation of Texas, BMGF, and the Michael & Susan Dell Foundation, supports high schools in implementing a variety of reform models such as Texas Science, Technology, Engineering, and Mathematics (T-STEM) academies, Early College High School (ECHS), High Schools That Work (HSTW), High School Redesign and Restructuring (HSRR), and New Schools and Charter Schools (NSCS).

4 Akins High School is the exception, because they received their own THSP Grant to implement High Schools That Work beginning in the 2006–07 school year. Thus, Akins began its reform implementation one year ahead of the other high schools in the district, which began their comprehensive reforms in the 2007–08 school year.

The research questions follow:

District Reform and Implementation

1. What changes have taken place at the district level as a result of district redesign and capacity-building efforts (particularly within the Office of Redesign, the Office of Curriculum and Instruction, and the Office of Educational Supports)?
2. To what extent does AISD exhibit characteristics of high-performing districts?[5]
    a. What systems are in place at the district level (i.e., administrative and instructional leadership, human resource development, school funding, and facility support) and to what extent do they support school change and improvement?
    b. What reforms and supports are in place to directly support the needs of low-achieving students, traditionally underserved students, and English language learners?
    c. What reforms and supports are in place to directly support the goal of "college-readiness" for all students?
    d. To what extent are district supports extended to all high schools in a district?
    e. To what extent do the district systems in place constitute a "sustainable, coherent, and aligned instructional system and school support system"[6] (including standards, assessments and accountability, and teacher supports)?
3. Which district leadership, policies, initiatives, and contextual factors are associated with school improvement?

Outcomes for Schools and Students

4. Did students in schools participating in the AISD reform efforts demonstrate higher achievement, higher attendance, and better course progression than students in a matched set of comparison schools?

This report begins with a brief description of the study methods, which were developed explicitly to provide data that address the research questions for this study. It continues with a description of the district and its recent history of reform initiatives. Drawing on interview and survey data, we then examine the various components of the high school redesign initiative and the various challenges that emerged during early implementation. We then report on ninth-grade student outcomes, including attendance, achievement as measured by the 2007–08 TAKS assessment, and measures of being on-track to graduate.

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[5] Research question #2 builds on a literature review conducted under the overall THSP evaluation (Padilla, et al., 2008) (and on the Gates white paper and Parthenon report for AISD) to identify the ways in which AISD exemplifies the characteristics of high performing districts. Based on that literature, we will also examine how those district characteristics have influenced the support for AISD high schools and their implementation of school-level reforms.

[6] Austin Independent School District proposal to the Bill and Melinda Gates Foundation. *Redesigning High School to Meet Student Needs*. September 19, 2006. p.14.

Study Methods

The majority of the data for this report came from a series of site visits and interviews at AISD high schools and at the AISD Central Office during two successive years, in spring 2008 and spring 2009. From among the 11 comprehensive high schools in AISD,[7] we selected a purposive sample of four high schools to visit in each year.

We selected Akins High School because Akins received its own THSP grant to implement the High Schools That Work (HSTW) reform model. In addition, we selected a lower-performing school, an average school, and a higher-performing school in order to include a range of schools within the district. To select a school in each category, we first created an approximate rank-order of the 11 comprehensive high schools in the district, and divided that list into high, medium, and low categories. We then randomly selected one school from each category. In 2008, we visited Akins, Anderson, Reagan, and Lanier high schools. In 2009, we revisited three of the schools (Akins, Anderson, and Reagan) from the previous year to follow the progress of reform over time. However, we also decided to switch one school (Lanier) for a new school of comparable achievement (Crockett) to broaden our sample of schools.

In both years, we spent a full day conducting interviews at each of the four schools selected for site visits. Specifically, we interviewed the following types of respondents: principal, assistant principal or instructional coach, guidance counselor or student supports administrator, school improvement facilitator, and two teachers each in mathematics, science, and English.[8] In 2009, we also conducted three 15-minute classroom observations, one in each subject area with a teacher that we interviewed. We conducted a student focus group at each school, with about six tenth-grade students who represented the demographic range and academic performance of the school. Whenever possible, we took a brief tour of the school to get a general sense of the school climate (e.g. student and teacher demeanor in the hallways and the focus of school posters and decorations).

Interviews followed role-specific protocols that had a common core of questions covering topics mapped to the research questions. Topics included school background, reform goals and strategies, communicating about the reforms, district leadership and other external supports, school leadership, professional learning community (PLC), teacher professional development (PD), classroom attributes, nature of relationships between teachers and students, student experiences and outcomes, using data, accountability, and sustainability of the reforms. Protocols were also tailored to reflect the areas in which the respondent would be most informative given his or her role in the organization.

In addition to our school site visits, we also interviewed district administrators. In both years, we interviewed the Associate Superintendent of High Schools, the Assistant Superintendent of Curriculum & Instruction, the Executive Director for the Office of Redesign and his staff, and the Director of Accountability. In addition, in 2008, we interviewed administrators specializing in mathematics instruction, English language learners, guidance and student supports, college readiness programs, and career and technical education. We also

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[7] The 11 comprehensive high schools in AISD are Akins, Anderson, Austin, Bowie, Crockett, Eastside Memorial, Lanier, LBJ, McCallum, Reagan, and Travis. These comprehensive high schools serve neighborhood students (with exceptions made through NCLB bussing programs) in grades 9 through 12.

[8] The interview sample varied slightly from Year 1 to Year 2, and at each school depended on the composition of the staff and their roles.

interviewed a technical support provider from Educators for Social Responsibility, an organization working with the district and with individual high schools to implement the student advisory program.

In the spring of 2008 we conducted surveys of principals, teachers, and students in THSP schools and at the 11 AISD comprehensive high schools. At the 11 AISD schools, we surveyed all principals (10 of 11 principals responded, 91% response rate), a sample of ninth-grade English, mathematics, and science teachers (*N*=80 teachers at 10 schools, 51% response rate), and a sample of ninth-grade students (*N*=1021 students at 7 schools[9]). Researchers analyzed the survey data at the district level, and also drew comparisons between the AISD and all other THSP schools and THSP schools from seven large urban Texas districts. We did not use survey results to make any statements or claims about individual schools.

Finally, the study includes student outcomes analysis for AISD high schools. TEA provided unmasked campus-level and student-level datasets from the Academic Excellence Indicator System (AEIS) and the Public Education Information Management System (PEIMS). The datasets included school- and student-level unique identifiers that allowed the data to be linked across years. The comparative outcomes analysis used a rigorous approach first to identify appropriate comparison schools and then to analyze differences in key outcomes between District Redesign (i.e., AISD schools) and matched non-District Redesign schools. Our quasi-experimental approach combined matching on specific school characteristics and propensity score modeling to match District Redesign schools to comparison schools on a host of school and student demographics and other characteristics and on past performance. Using two-level hierarchical models, we analyzed the District Redesign effect on ninth-grade student outcomes including attendance, TAKS scores, and measures of being on track to graduate. We provide more details of our approach in Appendix A.

[9] As schools administered surveys to their own students, we do not know the total number of students sampled at the schools, only the number returned. That said, we estimate, based on daily attendance statistics and the student rosters that the district provided, that our response rate was approximately 90%.

Early Implementation of District Redesign and High School Reform

The bulk of this report examines the implementation of District Redesign and high school reform in AISD. Not surprisingly, the implementation story was complex, as individuals in different roles in the system experienced the changes in different ways. What may have seemed to some like a smooth transition to a new way of operating, felt like unproductive disruption to others. This report tries to capture the variety of views on reform implementation held by district officials, school leaders, teachers, and students.

District Context

AISD leaders, principals, and teachers sustained a long-term effort to improve the educational opportunities and experiences of the district's high school students. From 1999 through 2009, AISD enjoyed stable leadership, rising test scores, and an ambitious reform agenda. Under the leadership of the superintendent, AISD saw a variety of initiatives aimed at reforming the district organization, improving curriculum and instruction, and reducing the achievement gap between white and minority students.[10]

AISD serves a diverse student body of about 82,000 students. In 2008-09, the district's student population was 59% Hispanic, 26% Caucasian, 12% African-American, and 3% Asian. Sixty-one percent of these students came from households classified by the state as Economically Disadvantaged.[11] Twenty-eight percent of AISD students were English Language Learners.

At the high school level, Texas Assessment of Knowledge and Skills (TAKS) results have shown impressive gains. On average, ninth-, tenth-, and eleventh-grade AISD students' passing rates in Reading and Math improved by 18%, 19%, and 27% respectively from 2003 to 2008.[12] In addition, the improvements among minority students were greater than those among Caucasian students. Despite this improvement, AISD readily acknowledged the wide gaps between the district's African-American and Hispanic students, and Caucasian and Asian students.

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[10] Cuban, Larry. (2008). School reform in Austin, Texas 1954-2008. Stanford University LEADS Network and Austin Independent School District, June 2008. Available from: http://www.austinisd.org/inside/docs/superintendent_School_Reform_in_austin_Report.pdf

[11] Harner, D. D. (2008). Demographic analysis and enrollment projections for the Austin independent school district. Available from: http://www.austinisd.org/inside/docs/factsfigures_report_0809.pdf. A student is considered economically disadvantaged if he or she is eligible for free or reduced-priced meals under the National School Lunch and Child Nutrition Program or if the student's family has other economic disadvantages, such as an annual income at or below federal poverty guidelines, eligibility for public assistance, or eligibility for food stamps.

[12] Information retrieved from data files available on the AISD website: http://www.austinisd.org/inside/accountability/taks/

Exhibit 1
Percentage of Students Meeting Standards on All TAKS Tests, 2008

	African American	Hispanic	White	Asian/Pacific Islander
9th Grade	40%	45%	86%	85%
10th Grade	33%	38%	78%	82%
11th Grade	50%	57%	89%	89%

Source: Texas Education Agency. Available at: http://www.tea.state.tx.us/index3.aspx?id=3631&menu_id=793

During the past 10 years, the district employed a series of strategies to raise achievement levels and narrow the achievement gap.[13] Between 1999 and 2002, AISD focused on aligning district content standards with state standards to improve the core curriculum. To help teachers and administrators address these standards and develop common principles and vocabulary around teaching and learning, the district contracted with the Institute for Learning from the University of Pittsburgh to provide PD to staff on their Principles of Learning. From 2002 until 2006, the district turned its attention to strengthening classroom teaching and learning through the development of Instructional Planning Guides. The purpose of the Instructional Planning Guides was to help teachers align instruction with standards, and to use benchmark assessments to monitor students' academic growth and to identify areas of need. Throughout both stages of reform, the district provided AISD teachers and administrators with an ample assortment of PD.

Throughout the process of reform, AISD has sought expertise from a variety of outside consultants and technical assistance (TA) providers. Beginning in 2004, AISD officials requested that the Southern Regional Education Board and the University of Texas assess the strengths and weaknesses of AISD high schools. Using this information and other data, the AISD School Board approved the superintendent's reform recommendation to allow the high schools to select the improvement strategy that best fits their circumstances and ensures buy-in from various stakeholders. To this end, the district contracted with Stanford's School Redesign Network to work with each high school from 2004 to 2006 to select programs and plan reform efforts. School leaders and teachers from each of the eleven comprehensive high schools had opportunities to discuss the upcoming reforms and provide input regarding the reform model that their campus would adopt (although the degree of autonomy for the campus to determine its own reform agenda depended in part of the achievement of the school and current accountability standings). During the 2006–07 school year, AISD leadership began planning the High School Redesign initiative and developed a strategy to overhaul all of the district's 11 comprehensive high schools.

The full scale High School Redesign initiative began in 2007–08. The district's Request for Design process specified three structures—a student advisory, small learning communities (SLCs; also called Academies at some schools), and professional learning communities (PLCs).

[13] The achievement gap is an observed disparity in educational achievement and attainment between groups of students as determined by a standardized measure, such as standardized test scores, grade-point average, high school graduation rates, or college enrollment and completion rates. Throughout the United States, educational disparities consistently and negatively impact minority students and students from low socio-economic backgrounds.

Akins High School led the way with a grant from the THSP High School Redesign Initiative to implement HSTW reform strategies, including the adoption of the New Tech High School model as one of the Academies. Three schools selected First Things First (FTF), developed by the Institute for Research and Reform in Education (IRRE). The FTF model establishes SLCs based on selected themes and student interest, a Family Advocacy System (which serves as a student advisory), and PD support for instructional improvement. In the other eight high schools not implementing FTF, Educators for Social Responsibility (ESR) began supporting the development and implementation of student advisory. At the same time, all district high schools established PLCs, with assistance from different models and support providers, including FTF and the University of Pittsburgh's Institute for Learning (IFL) Disciplinary Literacy-Professional Learning Communities (DL-PLC), both of which promote the use of teaching and learning principles that engender rigor and engagement for students.[14]

At the district level, AISD proposed to create the Office of Redesign, to oversee the implementation of the high school reform initiative and build district capacity to support high schools with reform implementation. In addition, the district greatly improved its data systems to more closely monitor school and individual student progress.

At the beginning of the research project in 2007, AISD appeared to have all of the attributes of a successful district identified in our review of the research. That review identified eight key attributes of successful school districts:

- Uniform vision
- Clear theory of action
- Comprehensive, coherent set of strategies
- Ongoing data collection and data-based decision making
- Support for staff capacity building
- Shared responsibility and accountability
- Equitable planning and resource allocation
- Sustained implementation of district vision[15]

AISD's proposal to BMGF in September 2006 painted a picture of a district well in line with these attributes. The district had an ambitious reform agenda grounded in standards documents and strategic plans. The district developed an expansive data system and invested considerable resources in equipping everyone in the district with timely information for decision-making at the district, school, and classroom levels. The district also invested heavily in building the capacity and expertise of principals and teacher leaders, established an accountability system, and demonstrated a commitment to equity.

Our analysis of the reform of AISD is organized around the multiple initiatives, including the establishment of the Office of Redesign, extensive investments in the PD of teachers, the introduction of student advisories, the establishment of SLCs and PLCs, and the use of data to

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[14] Additional information on each of these programs can be found on the official program websites.

[15] Padilla, C., Park, C., Park, J, Tse, V., & Young, V. (2008). *Evaluation of the Texas High School Project. Leadership literature review (final).* Menlo Park, CA: SRI International.

inform instruction and school improvement. Through a discussion of the implementation of these key reform initiatives, we strive to answer the research questions regarding district characteristics that support school change and improved student learning opportunities and outcomes. Next, we examine the various components of the redesign initiative beginning with the creation of the Office of Redesign.

Office of Redesign

To help realize their ambitious agenda, the district created the Office of Redesign, a central body designated to oversee the design and implementation of the AISD High School Reform efforts.[16] The Office of Redesign was tasked with guiding the implementation of the reform initiatives across the district high schools by working with school leadership and teachers, and facilitating communication and coordination among district departments in support of high school reform. District leaders reported that the Office of Redesign was established out of a belief that the district needed a single entity charged with shepherding the reforms. As they reasoned, each of the existing departments within the Central Office already had distinct roles to play, each one being an important piece of the larger picture but none overseeing the collective process of high school reform. As one of the TA providers reported:

> The other thing that's been really critical [in AISD] is that they're getting district systems in place. […] The fact that the Office of Redesign has a significant status as opposed to a marginal status is unbelievably different and important in making things work.

During its initial years in existence, the Office of Redesign was dedicated to building systems and processes that support central office functions and sustain the work of High School Redesign. The Office of Redesign collaborated with the Parthenon Group to develop project management tools and processes to closely track project implementation; instituted district-level decision-making process and PD planning protocols and processes; and designed tools and processes in anticipation of the challenges of first-year implementation. Through their work with the Parthenon Group, the Office of Redesign successfully implemented multiple project management processes and catalyzed numerous reform efforts at the campus level. A primary focus at the Office of Redesign is to work directly with schools to support the implementation of the reform efforts. The Office of Redesign has also undertaken multiple community engagement initiatives to garner support from families and businesses in the community. (Most recently, for example, they have been working with faith-based organizations to capitalize on the ability of the church to galvanize the community and to help parents understand their role in supporting students to become college-ready.)

District Administrator Perspectives

Despite these successes, in the first year of the study most district officials reported a number of challenges associated with the creation of the Office of Redesign. Specifically, district officials described communication challenges between the district's departments and the Office of Redesign, a lack of clear understanding of roles, and some confusion by the schools about how the new structure functioned. As one district official explained: "If we could do it again, we would have more clarity around role; be able to introduce what this office was and what it is

[16] The Office of Redesign comprised approximately six staff, led by the Executive Director for the Office of Redesign, who reported directly to the superintendent. The Redesign staff also included a Director for Operations and Community Engagement, a Director for Campus Programs, and other support staff.

going to be and how it functions regarding everyone else." District officials also recognized school leaders' concerns. Describing the situation from the school leaders' perspective, one official told us:

> …You [as high school principals] sort of have two bosses: the normal chain of command and you have the High School Redesign saying "and don't forget this." …but you can't always have two bosses forever and ever. But you just have that until you get to know how to do it yourself—until it becomes natural. I've said, "You guys [Office of Redesign] are not going to be here and we're going to be here." You have to let us [other district departments] learn how to do it so that it becomes part of our normal routine.

Many of the district officials we interviewed mentioned the difficulty of overcoming the territoriality of some departments. Others mentioned the inevitable "growing pains" of a new organizational structure. As one district official reported: "It's still not crystal clear. [There is] still a lot of confusion and we have some vacancies, which is going to throw the whole thing off again. …So part of it was that, us falling on our faces a couple of times."

By the spring 2009, district officials noted both important progress and ongoing challenges facing the Office of Redesign. Most district officials were optimistic about the direction of the reform effort and improved communications, if realistic about the challenges. Typical of the comments were these:

> I think we've defined our role better; don't know that what we're really doing has changed. We've been more of a convener—and by that I mean we try to, one of our roles is to identify issues and convene cross-functional teams. We were always doing that, but I guess in some ways we have articulated best practice and tried to integrate that and use those practices more.

> I just feel like this past year we have really I guess sort of settled into the work that we have to do. … I feel like we have more of a rhythm. … We know where the sticking points are always gonna be… Not everything is a 20-hour conversation; there still are those, but there's fewer of them. … For me this year has been more… a little more settled into the flow of what we have to do. And I think it's been great for the district. I look forward to having high schools that are really deeply revised and changed in the ways we think about kids.

Within the Office of Redesign itself, there was a conceptual shift to organize their work around the ongoing goal of college and career readiness, rather than around the finite process of redesign. One district administrator described this shift and the accompanying development of the new redesign motto.

> Redesign really is the process, and what we really want to brand…is our outcome…. So we now have a real logo, which is *Graduate Ready—College, Career, Life*. So we've really changed kind of from redesign, which is the process, to the outcome. So that has begun to frame particularly what we're doing in the community, but [also] how we're viewing our work with the district, and I think that's a really important change.

School Leader Perspectives

The principals' perspectives on the Office of Redesign and the central office overall were not dissimilar from the perspectives we heard from district administrators themselves. In the first year of the study, all of the AISD principals whom we interviewed reported that the establishment of the Office of Redesign initially resulted in concerns about lines of authority and clear communications. To illustrate this confusion, some principals gave examples of instances

during 2007–08 school year in which the Office of Redesign and other district offices (particularly the Office of High Schools) made contradictory decisions.

These and other concerns are reflected in the principals' reports on our survey (administered in spring 2008). As Exhibit 2 illustrates, a majority of principals agreed with key statements about the central office, but some found areas of concern.

Exhibit 2
Principal Perceptions of District Office

	Percentage of Principals (*N*=10)		
The District Office…	**Disagree or Strongly Disagree**	**Agree or Strongly Agree**	**Mean Scale Score (*SE*)**
a. Demonstrates its commitment to high standards for every student.	.	100	3.60 (0.16)
b. Supports our school's reform efforts.	.	100	3.50 (0.17)
c. Respects school-based decision making.	10	90	3.20 (0.20)
d. Ensures that student learning is the primary focus in our school.	.	100	3.40 (0.16)
e. Promotes the professional development of teachers.	.	100	3.40 (0.16)
f. Supports the development of teacher professional learning communities in our school.	.	100	3.50 (0.17)
g. Allows high schools the flexibility to choose and adapt new programs and practices.	40	60	2.80 (0.25)
h. Seeks input from teachers and listens to their ideas and concerns.	50	50	2.80 (0.29)
i. Is committed to high quality in the implementation of its policies, programs, and procedures.	.	100	3.50 (0.17)
j. Clearly communicates its priorities.	20	80	3.10 (0.23)
k. Has priorities consistent with this school's priorities.	10	90	3.10 (0.18)
l. Establishes policies and procedures that help address important needs at our school.	10	90	3.00 (0.15)
m. Provides the school with an adequate amount of resources for reform efforts.	20	80	2.90 (0.18)
n. Allocates resources to schools equitably.	50	50	2.80 (0.29)
o. Allows schools flexibility in allocating resources.	10	90	3.20 (0.20)
p. Has a clear vision for school reform at our school.	30	70	2.80 (0.20)
q. Has developed and clearly articulated a plan to achieve this vision.	40	60	2.70 (0.21)
r. Has developed and implemented strategies to achieve this vision.	40	60	2.60 (0.16)

Source: Evaluation of the Texas High School Project principal surveys, spring 2008.

Notes: Survey items used a 4-point scale, where 1 = Strongly disagree, 2 = Disagree, 3 = Agree, and 4 = Strongly agree. Also note that SE means Standard Error.

As Exhibit 2 illustrates, AISD principals were largely supportive of the district office, particularly regarding the district's commitment to high standards, student learning, and support for the PD of teachers. However, half of the principals believed that the district did not seek input from teachers, nor equitably allocated resources to the schools. In addition, 4 out of 10 principals expressed concerns that the district had not developed and articulated a plan, nor developed and implemented strategies, to achieve its vision. As one principal reported:

> There are initiatives that occur within the district and with our redesign that I see as being completely coherent and complementary. But our teachers don't necessarily see it, and our service providers don't necessarily see it.

Four of 10 principals also did not believe that the district allows high schools the flexibility to choose and adapt new programs and practices. Some veteran principals managed to navigate these challenges—and formulate a more coherent effort that aligned with their particular school situation—by pointing to their past success and communicating with the district about what parts of the redesign fit with their school's strategy and what did not. As one principal reported:

> When you have a published theory of action, and you say this is what we believe in and we're going to fine-tune it to just these things and nothing else fits into it, you can fend off the other stuff. You can say that does not fit in to our fundamental beliefs. It will not marry with the other programs we're doing. …I had the credibility to be able to back the so-called experts off, if you will.

By the end of the 2008–09 school year, all but one of the principals we interviewed described improvements with regard to district office operations and school relationships with the district. One principal appreciated the flexibility of the district saying, "Once the district got the hang of what we were doing, they were supportive." Another principal reported that he was able to try new things and was encouraged to take risks, saying:

> The High School Redesign Office and the District have been unbelievably supportive of innovation. … I think there are a lot of people who are working hard in the best interests of children. … I am able to do some wonderful things that would not have existed without the Office of Redesign. [District administrators] are giving me the license to try things. … I have never had a sit-down conversation where I have felt as a principal undermined or not supported or not trusted.

This principal, for example, created a unique data system for tracking students (described further below) that allowed teachers and administrators at the school to remain updated about student progress and needs—and to address any problems as soon as they emerged. He is also planning job-embedded professional development where teachers will receive training once every other week, during the school day, on something they can actively use within their classroom. The Assistant Principals will monitor the quality of the training, and also use classroom walkthroughs to monitor implementation of the new strategies.

One principal, however, still had pressing concerns about the coherence of the reform initiatives and the clarity of roles and responsibilities within the district. This principal reported:

> There is still no coherence. That hasn't changed at all. One person needs to be in charge of what's going on in the high schools. There is the High School Office and the Office of Redesign, and we're trying to implement two different initiative programs at the same time. Please don't let another TA provider on our campus. We don't see a positive change. Teachers do feel that the principal has heard the message though, even if the district has not.

The School Improvement Facilitators (SIFs), who are charged with overseeing the reform initiatives at individual campuses, reported having positive experiences with the Office of Redesign. At each school we visited, the SIF reported that the Office of Redesign was a helpful resource. Moreover, the SIFs reported that they had a direct line to the Office of Redesign, which mitigated the lack of clarity about district roles experienced by others on their campus. One SIF reported,

> There's sometimes some confusion as to whom we're supposed to go to for what. I think that's getting better. They're at least talking about it. They heard the message, which is always a good thing. … My line of communication in my work is the Office of Redesign because that's the kind of stuff I work on. … Yeah, I had a clear line. I've just heard that there's been some problems. And I think maybe it's principals, they're a little confused as to how redesign fits in with everything else. And it is confusing, to create a whole new area.… To me, the Office of Redesign is all about innovation, about changing how we teach, how we work together, how we do all of that... and everything else should be, in my mind, about operations: how do we structure the day, how do we discipline students. To me, it's a very clear understanding of the difference between the two. But maybe the High School Office and the Curriculum Department, maybe they were doing innovation some before, so they feel kind of responsible for innovation too.

The introduction of the Office of Redesign into the operations of the district was a bold effort to bring focus and leadership to the district's multiple reform efforts on improvements in teaching and learning. District officials and principals initially found the reorganization to be problematic due to communication challenges and confusion about roles and lines of authority. Our follow-up interviews during spring 2009 suggested that the Office of Redesign had made significant progress in bringing clarity and coherence to the effort. However, some challenges remained. In particular, many principals and district officials advocated for changing the district's organizational structure to connect the Office of Redesign more directly with the Office of High Schools (such as having it report to or be subsumed within the High School Office). The challenge going forward will be to sustain the pressure for instructional improvement that the Office of Redesign provided, while clarifying lines of authority and improving communications.

Professional Development for Teachers

At the time of this research, AISD teachers received extensive PD. Further, survey responses suggested AISD teachers were more likely to participate in PD during the regular school day than teachers in other THSP districts. Specifically, 55% of AISD teachers reported that they participated in PD during the school day on a monthly or more frequent basis compared with 34% of teachers in the other THSP districts. Teachers found this amount of PD to be overwhelming, as evidenced by the fact that one of the most consistent messages coming from AISD teachers in the first year of the study was that there was too much PD.

In interviews, AISD teachers reported that they were willing to learn new strategies and to adapt and improve their practice, but that being in the classroom with students was a top priority. As a result, some reported that they resented being pulled out of class so frequently for PD. The following comments from one teacher in 2008 reflect a widespread perspective among teachers in the district at that time:

> There has been so much… that I'm bitter against professional development. I have done IFL-DL. I have done SIP. I have done SREB, you know, High Schools That Work, science. I have done Gifted and Talented. I have done Safety Training. I have done new teacher training, even though I'm a ninth-year teacher, but a new teacher in the district. PDAS

> training… At one time I think I had had 17 days of pull-out for teacher training. No time to actually implement what I'm learning. I'm getting a little bitter about that.

PD Changes in the Second Year of the Study

In our discussions with district administrators in 2009, there was no question that they had heard the message from teachers regarding PD. One administrator said,

> The literacy piece [new professional development focus] we're going to really approach so that we do the coherence piece first. We've really learned that. So I think in some ways we're starting to get our arms around the coherence between these issues. It still is professional development for teachers, no question, but we're getting a little better at trying to figure out how to make all that fit together.

District administrators reported that they were focusing more on job-embedded PD as a strategy for augmenting teachers' skills in a way that was highly relevant to their own practice, and that did not require them to leave during class time. For example, the district was using planning periods, late-start days, and instructional coaching within the school as key opportunities for PD. In addition, district administrators reported that the district was giving schools more autonomy with regard to PD, so that PD could be more tightly aligned with teachers' needs. A leader at one school confirmed that the district was successful in these regards, saying:

> I think there's much better buy-in in the Late Start days. Basically it's those instructional coaches who have a pulse on their PLCs who are focusing their PD on what the PLCs need. So it's not as much being forced down from downtown [district office]. And downtown has done a better job as far as common district wide staff planning.

When we asked about PD in the second year of the study, most principals reported that they had some control over the amount of time that teachers were out of class for PD—and that the PD burden on teachers had dissipated. All three principals who discussed PD, however, reported that controlling the amount of PD that their teachers received involved negotiation with the district. Principals see this type of negotiation with the district as part of their responsibilities to protect their teachers and do what is best for their campus.

In line with what we heard from district and school leaders, by the second year of the study, many teachers reported that the PD demands on their time had been somewhat alleviated. These teachers reported that they were not pulled out of class for PD as frequently as they had been in the past, and that this reduced burden was an improvement over previous years. The situation was somewhat different for mathematics teachers, who still reported that they had too much PD. Mathematics teachers typically attended more PD than teachers in other subject areas because mathematics instruction has been a district-wide focal area as part of the current reforms. Specifically, mathematics teachers participated in PD associated with the mathematics instructional improvement initiative supported by the Charles A. Dana Center in addition to other PD that they might typically attend.

Implementing Advisory

AISD was committed to building stronger relationships between students and school staff. To that end, Advisory or Family Advocacy System was designed to ensure that every student

had at least one adult at school who knew them well and aided them in succeeding in high school. Advisory was intended to help build high school success by[17]:

- Building a sense of community and shared ownership in school success
- Teaching learning-to-learn skills
- Monitoring grades, attendance, and progress toward graduation
- Developing postsecondary plans for college and/or career.

Educators for Social Responsibility (ESR) provided technical support for the implementation of Advisory at eight out of the 11 AISD high schools: Akins, Anderson, Austin, Bowie, Crockett, Johnston, Lanier, and McCallum. First Things First (FTF) provided technical support for the implementation of the student advisory program (referred to as Family Advocacy) at LBJ, Reagan, and Travis high schools.

While all of the schools shared a common set of goals, each campus implemented a unique form of Advisory. Some schools had Advisory for all grades, five days a week, while other schools started with only a ninth-grade Advisory that met once a week. By the second year of the study, each of the schools we visited had a whole-school advisory program in place. Schools generally had a school-based committee made up of teachers and school leaders—and supported by the external TA providers—who designed the Advisory program for the school and created the Advisory curriculum.

Each of the schools we visited was working on a variety of program design issues. Teachers voiced different opinions about the value of having Advisory students who were in their classes or not, with the majority saying that they preferred having Advisees whom they also had in class. Students also stated that they preferred having an Advisor with whom they had an existing relationship (whether as a classroom teacher, coach, etc.). Educators also voiced different perspectives on the benefits of providing Advisors with a structured curriculum versus giving them freedom to develop their own. A more structured curriculum reduces the burden on teachers and provides support for Advisors who are still adjusting to this new role. On the other hand, an open curriculum provides Advisors with more flexibility to address the immediate concerns of students in their Advisory. Many schools are settling on a hybrid approach whereby the implementation team provides a binder of lessons and activities, most of which are optional or flexible, giving Advisors the ultimate decision over how to conduct their Advisory.

Teacher Support for Advisory

Based on teacher interviews and the AISD Department of Program Evaluation's January 2009 report on Advisory, we identified teacher buy-in as a key factor in the implementation of the Advisory program. Consistent with that report, our interviews suggested that there remained a sizeable proportion of teachers (approximately half of the teachers we interviewed) who had some resistance to the program. Teacher buy-in, as we heard about it from teachers themselves, depended on a variety of factors, including: a) teachers' perceptions of the need for Advisory at their school; b) the extent to which teachers at the school were involved in establishing the Advisory program; c) the structure of the Advisory program that was ultimately

[17] Retrieved from AISD website, October 2009: http://www.austin.isd.tenet.edu/inside/initiatives/redesign/StudentAdvisory_FamilyAdvocacy.phtml

implemented; d) teachers' understanding of the goals of the program; and e) teachers' comfort and confidence with their new role as Advisors. Our interviews revealed that teachers at lower-performing schools typically saw Advisory as more critical for their students, compared with their peers at higher-performing schools. This finding is not surprising, given that teachers generally see Advisory as a way of supporting students who are struggling in school. At one high-performing school, teachers saw the Advisory program as something imposed by the district but not really necessary for their students.

The following teacher quotes were typical of the perspectives of those teachers who did not fully support the Advisory program:

> They [the school and district administrators] didn't ask the teachers. They said, "This is part of HS Redesign. We need to do this…" … Having an Advisory period for all grade levels, my understanding is it's mandated by the district. But it was up to our campus as to how we would implement that mandate. … So I would say this year we've had a lot of opportunity to voice our opinions about how to implement Advisory. Even though most people would say, no, don't have Advisory at all because it's just gonna create chaos during the day and the kids, no matter what you do, they're not gonna like it. So I think if you were to take a poll today, vote for an Advisory period or against, I wouldn't be surprised if 100% of the teachers voted against it. So I don't really see how that's gonna necessarily help the kids that really need that help here on campus.

> I have mixed feelings about Advisory. I understand its purpose and I understand what it's for. But ultimately I'm an English teacher; I'm not a counselor, I don't have a background in psychology. So, some of the things that I'm expected to discuss in Advisory, I'm not trained for. Like, for example, we were expected to do three lessons on suicide prevention. And I'm not trained in that. … It's not something I can really manage as an individual person, given all the other responsibilities that I have. And my main priority is teaching English. … It just seems a little bit unmanageable in terms of all the things we're being asked to do. And I don't have time to think about it on a weekly basis; my priority is English.

In the second year of the study, we found that an unstable focus, leading to a lack of clarity about the goals of the program could exacerbate the problem of teacher ambivalence toward Advisory. At one school, the Advisory program shifted mid-year from a focus on "navigating school" to a focus on "literacy." This abrupt change left teachers and students confused and made it difficult for them to see the potential benefits of the program. One teacher reported, "I don't know what the purpose of Advocacy is anymore."

Every district administrator with whom we spoke about the issue expressed an awareness of the difficulties stemming from the limited teacher support for the Advisory program. In the second year of the study, one key district administrator identified "teacher buy-in" overall, and for the advisory program in particular, as a key remaining challenge. One administrator presented a possible explanation, saying:

> In some cases, many cases, teachers feel like it is something that they were told to do, as opposed to being something they really wanted to do. So I think that if I were advising someone else, I would ask them to approach the implementation of Advisory in a different way.

Another administrator believed that this lack of support stemmed from teachers' uneasiness about their role as Advisors. This administrator explained:

> I believe that 99% of that disengagement is a low sense of self-efficacy of the skills it would take to confer with students one on one, to intervene when they see it's necessary. You don't have to be a counselor, but you have to pay attention. I think there's a major PD issue in general, and that would be my argument all along. This is not about adults who don't care for children; this is about adults who don't feel equipped to serve in this new role.

The misperception that advisors serve essentially as guidance counselors is one that we heard echoed frequently from both teachers and counselors, and was the source of some dissatisfaction with the premise of the Advisory program. Indeed, teachers do not want to be guidance counselors, and guidance counselors do not want teachers to appropriate their jobs. One of the technical service providers working with Advisory expounded on the situation:

> Another one of the big disconnects in people's heads: they are accustomed to thinking of themselves in one word. I am a teacher; I am a chemistry teacher; I am a counselor. And not thinking of whole kids. One of the things that's been really important is the redesign of basic roles, so that adults are generalists, at least a little bit more than they have been. And at the moment in your typical big American high school, that is such a disconnect. To talk to a kid about time management feels to a chemistry teacher like being a counselor, even though it is so not being a counselor…. All these roles in schools have had such separated territory, which is so not helpful to kids.

Student Support for Advisory

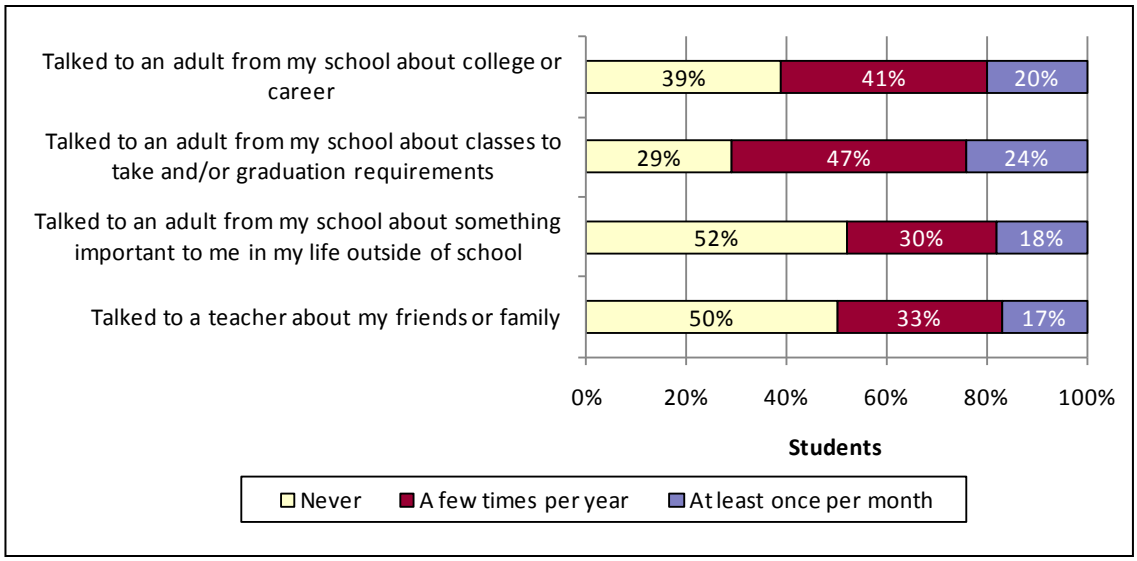
As critical as teacher buy-in was to Advisory, students' acceptance of this new program was also an important factor. Students, like teachers, vary in their opinions of the Advisory program. Our focus groups suggest that students agreed that the value of Advisory depended on the qualities of their Advisor. Some students reported that they liked their Advisor and that they could talk to their Advisor about anything. However, even some of those students who valued the strong relationship they had with their advisor concurred with other students who reported that the Advisory class itself was unnecessary. One student said, "My Advisory teacher is really cool and I can talk to him. But it's only because he's a caring teacher. But I don't think we really need the class." Students did not see the class itself as helping them to form a strong relationship with their Advisor. As one student reported, "I don't think we should have Advisory. Most of us see that teacher [the Advisor] once a week. It's pointless going to talk to them when you don't really know them." A substantial portion of the students we spoke with did not take Advisory very seriously, saying, "it's like an off period," "it's a waste of time," "we don't do anything in Advisory."

One of the challenges that schools have faced in implementing Advisory is getting students to attend their Advisory class. The fact that some students did not value the class was compounded by the fact that students did not feel accountable for their participation (because they did not receive a grade for Advisory)—and both factors contributed to the problem with attendance. (On the other hand, one principal warned against introducing grades for Advisory, saying: "Disciplining children who don't go to Advisory is an oxymoron. There is something wrong with the way we're doing it if there are that many kids skipping out.") As some of the educators we spoke with acknowledged, the two issues were interrelated: if teachers supported the strategy, then students would be more likely to take it seriously; and if students took Advisory seriously, then teachers would feel more able to make a difference.

Results from our student survey suggest that students are not yet taking full advantage of—and thus are not yet fully benefitting from—the Advisory program. Toward the end of the first year of implementation (in spring 2008), we surveyed a sample of ninth-grade students and

asked them about their relationships with adults in their schools among other related topics. Exhibit 3 displays their responses to questions about their communications with adults in their school.

Exhibit 3
Frequency of Specific Student Interactions with Adults in School



Source: Evaluation of the Texas High School Project student survey, spring 2008.

As Exhibit 3 illustrates, a majority of students reported that, at least a few times per year, they had some conversations with an adult from their school about college or a career (61%) and about classes to take and/or graduation requirements (71%). However, about half reported that they never had conversations with an adult from their school about non-academic issues (specifically, "something important to me from my life outside of school" or "my friends and family"). Perhaps most notable is the sizeable portion of students—from 29% to 52%—who never talked with an adult at their school about either academic or non-academic issues, despite the introduction of Advisory.

Emerging Successes for Advisory

Although the Advisory program remained a work in progress, some successes were emerging—and these initial successes are likely to reinforce the value of the program and spawn further success. In spite of the challenges associated with the district-wide implementation of Advisory, teachers and leaders alike shared anecdotal reports about the important and positive role that Advisory played for some students. In an encouraging sign, the teachers at one school asked to meet with their Advisory every day during the first week of school the following year (2009–10). One teacher reported,

> My advisory is working very well…I feel like I'm their [the students'] advocate. I make sure that they get their choice sheets done in and I advise them…I'm the person they come to; I'm like that safe haven. If they have a project due, they know I have poster boards and markers and glue and…So it's been very nice; been nice to be an advocate to these twelve students.

The technical service provider relayed some of the encouraging reports from teachers, saying:

> Increasingly, I hear Advisors say that they get it, that there's some kid who confided in them that they blew up at a teacher and didn't know how to go back in the classroom. They had that conversation only because this person was their non-academic advisor. I hear stories about problems surfacing that would have gone unnoticed until [they] got to crisis level. So what I'm hearing does sound like signs of a stronger safety net, which is one thing I would want Advisory to produce.

In sum, support for the Advisory program—from both teachers and students—was limited, and this lack of full support posed a barrier to a completely successful program implementation. The lack of full support stemmed from a variety of factors including teachers' and students' perceptions that the program was not necessary or valuable; uncertainty as to the goals of the program; and dissatisfaction based on the perception that the program was imposed on schools. Nonetheless, some teachers and students saw value in the program and gave anecdotal reports of success, including strengthened teacher-student relationships and improved support for students.

Implementing Small Learning Communities

SLCs (also called Academies on some campuses) are a key vehicle for addressing both relevance and relationships in some high schools—to improve the educational experience for all students, and particularly for those who are not well-served by traditional school structures. Of the schools we visited, only two (Akins High School and Reagan High School) were actively involved with the implementation of SLCs/Academies at the time that we visited.[18] Based on our interviews, it appeared that the schools implementing SLCs successfully made the transition to the new school structure, insofar as the schools were reorganized into smaller sub-groups, schedules were built around those groupings, and teachers and students functioned within their SLCs/Academies. However, schools still struggled with some of the structural technicalities associated with SLCs and Academies. Reports from our interviews indicated that the new structures had not yet fully translated into stronger relationships between teachers and students or increased relevance of schooling to students. That said, interviews and observations at Akins High School during spring 2009 suggested that good progress was made at that school: teachers and students identify with their Academy and were beginning to build stronger relationships as a result, and teachers were beginning to create interdisciplinary projects connected to the theme of their Academy to connect learning to student interests and real-world applications.[19]

Structural Factors in SLC Implementation

Both of the schools we visited that were implementing SLCs/Academies encountered similar issues with the new structure. For example, the question of purity—that is, the extent to which teachers and students must teach or attend classes exclusively within their own

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[18] One other school has grade-level Academies, which were not very active at the time of our visit. The faculty has Academy meetings, but teachers reported that they attend only intermittently (teachers who teach multiple grades can choose at any given time which Academy meeting to attend) and that their department meetings are more useful. Students did not mention the Academies at all, possibly because they are largely unaware of their existence.

[19] Note that Akins HS began implementation of the reforms, including Academies, in the 2006-07 school year, one year before the other Austin high schools began implementation.

community—has been challenging at both schools. Advocates of the "pure" model argue that it strengthens the association that teachers and students build within their communities. Others, however, believe that purity is neither realistic nor necessarily optimal, because it inevitably limits the variety of classes available to students and requires teachers to be generalists. This challenge became manifest in the science department at Reagan: typically science teachers specialize in one area of science and teach that course to many classes of students, but SLC purity required these teachers to teach different science disciplines within their own communities. Ultimately, the science teachers challenged this practice, and now science courses are taught across communities.

Similarly, both schools struggled to integrate existing programs like Advancement Via Individual Determination (AVID), and Advanced Placement (AP) into the SLC structure. Specialized classes and those requiring specially trained teachers were difficult to implement within small communities. As one district official explained in the case of AP:

> Some of the campuses are trying to build pre-AP and AP in every one of their SLCs. That's been a disaster this year, because that's one more prep that the teachers have to do on top of their other periods. And some don't want to be doing that. That has really diminished the quality of teaching in some of those classes. [We] have some teachers who really don't want to be teaching college-level work and have never been trained in that level of rigor.

SLCs to Support Relationships and Relevance

SLCs are supposed to support stronger relationships because teachers are responsible for a lower number of students overall, and because students are in smaller peer-cohorts.[20] At Reagan, where SLCs were only implemented within the past two years (beginning in 2007), teachers and students alike reported that they did not have a very strong connection with their learning community. One student summed up the views of many, saying: "We don't do much. It doesn't help with anything. I don't know what's the difference." At Akins, where Academies had a longer time to take hold, teachers and students reported that they did identify with their Academy. It is also important to note that the Academies at Akins are not strictly pure; students might cross Academies for some classes. (In fact, students in the New Tech Academy take their core classes in New Tech but are also part of another Academy in which they take all of their elective classes.) Teachers here also talked about the increased ability to support individual students because of the fact that they know the students' other teachers, and because they can communicate easily (with both teachers and students) thanks to the physical proximity afforded by the Academy structure. So far, however, reports from teachers and students suggest that the SLCs had not yet contributed to stronger relationships for students across the board.

SLCs were designed to help make schoolwork more relevant to students' lives. At both schools implementing SLCs, each Academy had its own theme (such as arts and humanities; social services; science and engineering) and students were grouped into Academies based on their interests. Teachers could then relate coursework to the theme of the Academy, to make it more relevant to student interests. Indeed, in the second year of the study, we saw a handful of

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[20] Gladden, R. (1998, May). The Small School Movement: A Review of the Literature. In M. Fine & J. I. Somerville, (Eds.), *Small Schools, Big Imaginations: A Creative Look at Urban Public Schools* (pp.113-133). Chicago, IL: Cross City Campaign for Urban School Reform. Quint, J. (2006). *Meeting Five Critical Challenges of High School Reform*. New York: Manpower Development Research Corporation.

good examples of relevant project-based curriculum (described in the instructional reform section below).

Overall, the experience at Austin high schools with the introduction of SLCs was consistent with the research on small schools.[21] Teachers at both Akins and Reagan reported that their school spent the early years working hard on the new SLC structure and thus had not been able to focus their energy as much on instructional practice. But at Akins High School, where the school had more years to solidify its SLC structure, teachers told us during interviews that they were now focused on the challenging work of improving instruction. While time is clearly a key factor in the extent to which SLCs/Academies have begun to serve their intended purpose at these schools, it is also likely that other factors play a role as well. As was the case with other elements of the reforms, we note that clarity of vision and goals as well as teacher and student buy-in influence the success of SLCs/Academies.

Implementing Professional Learning Communities

Schools in AISD created PLCs for teachers to collaborate and discuss instruction, lesson plans, student needs, and other issues. A PLC is any officially designated grouping of teachers that works together to improve their practice and to better support students, for example, through common planning. However, just as the creation of an SLC did not guarantee instructional improvements, neither did the creation of a PLC guarantee effective teacher collaboration. The extent to which the PLC or common planning time spurred effective collaboration depended on the clarity around the goals of the PLC, how the collaborative time was structured, and the extent to which teachers knew how to work collaboratively for instructional purposes. (Most teachers did receive some professional development related to PLC-work, particularly those at schools participating in Disciplinary Literacy or those implementing SLCs.)

Structure and Organization of PLCs

At AISD schools, PLCs were organized around departments, SLCs, or grade-level teams, and in many cases teachers were part of multiple PLCs. We found that regardless of the structure, in the first year of the study, teachers expressed a lack of clarity regarding the role or purpose of the newly created PLC and how the PLC fit with existing collegial structures at the school. At one school, for example, the principal explained that implementing PLCs had been difficult because teachers did not yet understand the difference between "PLC work" and "department work." (For this principal, the PLC should be focused purely on professional learning and collaborative planning, while the department is charged more with the logistical aspects of running the department, such as supplies and schedules.)

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[21] Gladden, R. (1998, May). The Small School Movement: A Review of the Literature. In M. Fine & J. I. Somerville, (Eds.), *Small Schools, Big Imaginations: A Creative Look at Urban Public Schools* (pp.113-133). Chicago, IL: Cross City Campaign for Urban School Reform. Mohr, N. (2000). Small Schools Are Not Miniature Large Schools. Potential Pitfalls and Implications for Leadership. In W. Ayers, M. Klonsky, & G. Lyon (Eds.), *A Simple Justice: The Challenge of Small Schools* (pp. 139-158). New York: Teachers College Press. Available: http://www.smallschoolsproject.org/articles/download/MOHRleadership.PDF. Quint, J, Bloom, H. S., Rebeck Black, A., & Stephens, L. with Akey, T. M. (2005). *The Challenge of Scaling Up Educational Reform: Findings and Lessons from First Things First.* New York: Manpower Development Research Corporation. Quint, J. (2006). *Meeting Five Critical Challenges of High School Reform.* New York: Manpower Development Research Corporation.

In our interviews, we found that individual school leaders, teachers, and district administrators had different perspectives on the best way to organize PLCs. These perspectives reflected their different priorities for the work of the PLCs and point to the multiple purposes that PLCs can serve. Research suggests that teachers need time to plan instruction collaboratively, preferably with colleagues who teach the same course or at least the same discipline.[22] This need would point to the benefits of organizing PLCs around departments, so that teachers can benefit from working with other teachers who have a specialized knowledge for teaching that particular subject area. At the same time, one of the intended benefits of SLCs is to create a community of teachers who work together to plan interdisciplinary projects and support the needs of a specific group of students. In order to do this effectively, teachers in the same SLC would also need allocated time for collaboration.

Teacher Collaboration within PLCs

Overall, teachers' and school leaders' reports suggest that there had been substantial progress with regard to teacher collaboration over the course of the last two years. At one school where there had previously been marked tensions between departments and Academies due to lack of clarity about roles, the principal solved the problem by establishing and communicating a clear system for teacher collaboration. Now, teachers in the same department have designated common planning time during the school day to plan lessons; teachers in the same SLC use Late Start days to work on larger issues for the Academies, such as planning interdisciplinary projects. We heard consistently in our interviews with teachers and administrators at this school that the new system was a vast improvement from last year because it clarified the roles of the departments and the Academies and alleviated tensions between the two, making both collegial groupings more effective.

Even at two schools where common planning periods were not built into the school day, teachers reported that they were collaborating with one another more frequently than they had before. At one school, teachers collaborated with their subject-area cohorts during Late Start days, and they also made time to meet during lunch and after school. Overall, teachers' reports illustrate that the creation of the PLCs and the accompanying focus on teacher collaboration did in fact increase collaboration at the school. Moreover, teachers' reports indicate that the creation of the PLCs led to more substantive collaboration and an increased level of professionalism at the school. One teacher reported,

> That professionalism in the school changes the environment. … One thing we've adopted as a department is going into each other's classrooms and observing and thinking about how practices could be used in our own classroom or improved. It's been really good in terms of our professionalism and our craft.

Although teacher collaboration reportedly increased at AISD high schools, certain factors still present challenges to effective collaboration. The attempt to introduce multiple reform initiatives, for example, can disrupt existing opportunities for teachers to work together. One department chair expressed dismay over the fact that the introduction of Advisory made it impossible for teachers within the department to collaborate during lunch, as they had done previously. This department chair said:

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[22] Little, J. W. (1990). The persistence of privacy: Autonomy and initiative in teachers' professional relations. *Teacher College Record, 91*(4), 509-536. Louis, K. S., Marks, H. M., & Kruse, S. (1996). Professional community in restructuring schools. *American Educational Research Journal, 33*(4), 757-798.

> In the science department when I was chair, we all had the same lunch period and that was a great time for us to hold our meetings. But then when we started Advisories and we no longer had a common lunch period even. That split us apart. It was a tragedy.

Finding the balance between structure and flexibility for the PLC meetings themselves has been a challenge as well. Many teachers noted that their PLC meetings often had scripted agendas set by people outside the school or by a small group of leaders within the school. In those cases, teachers felt frustrated that they had not had any input into the content of the meeting, and moreover that they ultimately had no time to discuss issues of immediate relevance to the PLC. On the other hand, a number of school leaders noted that collaborative planning was a learned skill, and that most teachers still needed to learn how to make the most productive use of their PLCs.

In spite of these ongoing challenges, our interviews suggested that educators at AISD high schools made great strides in the area of teacher collaboration over the past couple years, and especially in the past year. Certainly the pace of progress varied from school to school, but at some schools teachers spoke enthusiastically about the collaboration that was taking place. According to their own reports, teachers were meeting with each other more frequently and learning to collaborate more effectively.

Instructional Reform

The goal of new instructional models, such as project-based learning, is to increase the relevance and rigor of coursework, and to better meet the needs of students who are not well-served by traditional pedagogical practices. As we noted in the discussion of SLCs, structural changes in the high schools preceded instructional changes. This chronology was most apparent in schools implementing SLCs/Academies, but was also observed in schools that were focusing on Advisory and PLCs. Although the district and many of the individual reform models emphasized project-based and multi-disciplinary learning, principals and teacher leaders told us that most teachers had not fully incorporated those strategies into their practice. Reports from teachers corroborated this information and suggested that they typically saw projects as an add-on to "real" instruction, rather than as a viable central mode of instruction.

According to our interviewees during spring 2008, there were at least two explanations for the fact that instruction had not yet changed appreciably or in a widespread way at the schools. One explanation for the initial focus on structural rather than instructional reform is that it is simply not feasible to do everything at once. As our earlier discussion of teacher-reported overload suggests, teachers may have focused on dealing with the change in assignments and responsibilities without changing their instructional practice. A second explanation is that the pressure to raise scores on state tests has restricted teachers' willingness to explore new instructional approaches. Our interviews with teachers showed that meeting accountability standards is foremost on their minds and weighs heavily on their practice. These pressures often crowded out intentions to try new instructional approaches: the new approaches are more unknown and often require more time than traditional approaches, making teachers hesitant to try them given the high-stakes accountability context. One teacher explained:

> Our big idea is that we deepen the project-based learning. Of course, and again here, we've had a little bit of friction, in terms of definition: What does that mean? What does that look like? Can I still do that and do the TEKS and the things that are being asked of me by the TAKS test? … We still need to do a lot of professional development in terms of teaching

> teachers how to make that happen. … There's been a lot of confusion about how to change instruction while maintaining the standards. So that's the big leap that we're taking next.

During our interviews in 2009, there was evidence that teachers were indeed focusing more on instructional reform than they had been previously. In keeping with the intention of the reform initiatives, teachers reported a shift toward more project-based and interdisciplinary learning. While interview data suggested that projects were still predominantly seen as supplemental to regular instruction, reports indicated that they were nonetheless happening more frequently. At one school, teachers in the same Academy were working together to create interdisciplinary projects, designed around a theme that students would connect to each of their classes. For example, the Arts and Humanities Academy did a project on "What is Beauty," and connected the theme to the golden ratio in math, to the human body and circulatory system in biology, and to renaissance and Greek civilization notions of beauty in social studies. Other interdisciplinary project themes included "Empathy to Action" and "How Am I Going to Make a Difference?"

Teachers also reported that they were implementing specific instructional strategies that came from the instructional models and TA providers that they were working with. In particular, teachers at one school conscientiously implemented many of the Institute for Learning's Disciplinary Literacy strategies, including "accountable talk," recapping, giving praise, assessing student progress, and emphasizing that effort creates ability. In addition, one of the schools we visited was planning to implement block schedules in the following year. School leaders reported that teachers cannot simply lecture for 90 minutes, and consequently block schedules will force the issue of instructional change, making it essential for teachers to introduce new forms of instruction into their practice.

Use of Data by Teachers and Principals

Along with a stronger focus on instruction, in the second year of the study teachers reported making greater use of data than they had in previous years. Austin ISD has emphasized data use as a means for tracking student progress in order to identify and support student needs in a wide variety of areas. The reported increase in data-use occurred because teachers were given new tools for accessing data and because, like instruction, by the second year the practice had had more time to take hold. As one school leader explained,

> In the past, people rested on their laurels. …as Austin has changed demographics, so has this school changed demographics. So, we've made a big emphasis beginning last year and continuing this year on data analysis and data-driven intervention strategies...

Teachers reported that they recently had been given more access to data. At one school we visited, teachers reported having laptops, internet connectivity, and access to a number of data reports. The main data source that teachers mentioned was the STAR (Student Teacher Advisory Report), which became available online in the summer of 2008. The STAR provides current information on individual students regarding course history, grades, attendance, TAKS scores, indicators of on-track to graduate, discipline and behavior, and ELL and special education status.

Some principals developed their own systems for using the data. At one school, the principal had a system for assigning values for each category of data and then assigning each student a color code (green, yellow, red) based on their composite numerical value. This system enabled educators to identify students who needed extra support or intervention in particular

areas. It also allowed teachers and administrators to quickly identify students who encountered attendance, behavior, or academic problems. One district administrator reported: "What I've heard from the faculty at the campus is there's a significant increase in awareness of who the students are in their class, what sort of differentiation is needed."

The most notable and promising finding about data use, however, was that in some places teachers were using data as a regular and integral part of their practice. One district administrator highlighted this point, saying: "Several things have jumped into the DNA really quickly. And the newness has worn off around it. It's just what folks do. Student-level data is a really good example of that."

Overall, teacher reports in 2009 revealed increases in instructional changes, teacher collaboration, collaboratively planned interdisciplinary projects, and data-use, as well as modest increases in teacher buy-in for Advisory in the second year of the study. This initial progress suggests a promising trend for teaching and learning in AISD high schools.

Educator Support for the Reform Initiatives

AISD can boast of a comprehensive and ambitious reform agenda. The district was well-informed about much of the newest educational research and adopted new "best practices" for school improvement. In addition, the district drew upon leading national experts and researchers to help guide the reforms. Overall, our interviews and surveys suggest that a majority of AISD teachers and principals supported the reform goals in principle and concurred that all of the multiple efforts and parties involved had students' best interests in mind.

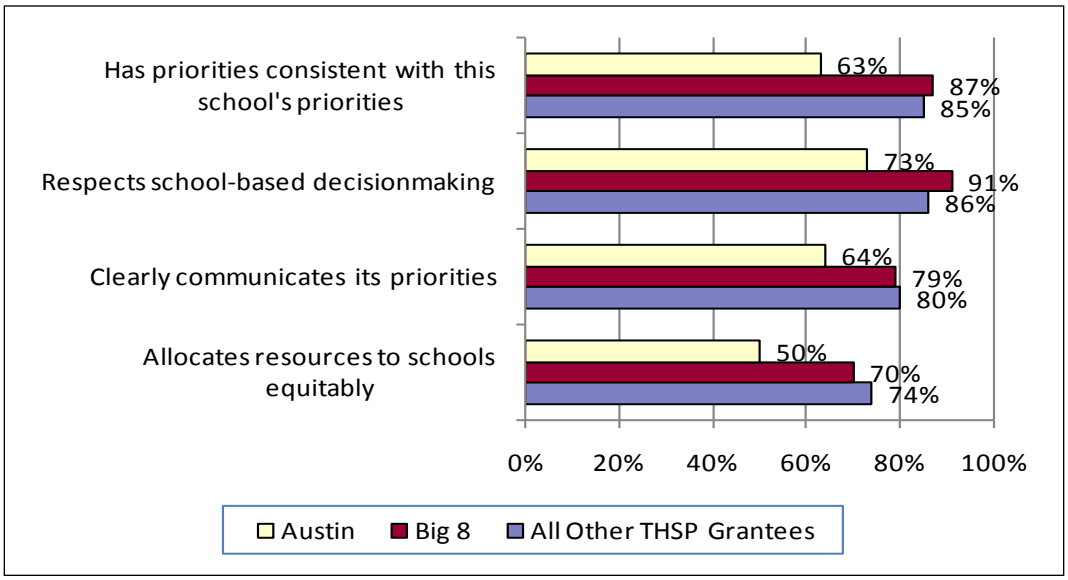
The following quotes from teachers exemplify this general sense of support for the reform effort:

> There's a few things that conflict, but I think that they [the various reforms] do mesh in the tone of what they're trying to do—they're trying to make every student successful; they're trying to make teachers … realize the job that they have. … But I really think that the district goal is to make students successful, and I know that the campus goal is the same thing.

> I think there's always gonna be lots of things going on. … Every program is aimed at getting the kids better prepared after they leave here; that's kind of a common goal. I don't think there's anything that's conflicting that I can think of. But there are a lot of things going on, all the time.

Our analysis of teacher survey data revealed that although a solid majority of AISD teachers reported positive views of the district, a sizeable minority of AISD teachers was critical of the district. To get a sense of how the level of the criticism compared with other districts, we compared the responses of AISD teachers with those of teachers from all other THSP districts, as well as teachers from the seven largest districts, which together with AISD comprise the "Big 8" in Texas. The results of the analysis appear in Exhibit 4. We used these comparisons because we wanted to provide some point of reference. While we recognize the important differences between AISD and the two comparison groups, we found it useful to examine whether the level of criticism of the reform effort evidenced in our survey data and interviews with AISD teachers was typical when compared to similar large urban school districts in Texas.

Exhibit 4
Teacher Perceptions of District, AISD



Notes: Chi-square tests for all items displayed are statistically significant at the $p < .05$. Ns for AISD teachers ranged from 35 to 51, depending on the item. Ns for non-AISD THSP teachers ranged from 249 to 313. Ns for non-AISD Big 8 teachers ranged from 62 to 88.

Source: Evaluation of the Texas High School Project teacher survey, spring 2008.

As Exhibit 4 illustrates, a majority of AISD teachers have positive views of various aspects of the district and its reform efforts. However, the proportion of AISD teachers who are critical of the district is larger than that in the comparison groups and the difference is statistically significant. While the difference may be explained by the ambitious nature of the multiple AISD reforms, it does suggest that AISD may be facing a larger challenge in building support from teachers for the reforms than other districts. Certainly, AISD should be aware of the resistance that exists in order to be able to address teachers' concerns and build greater support for the reform efforts.

Understanding Teacher Perspectives on the Reforms

Our interviews with teachers and principals suggest at least three reasons why the percentage of AISD teachers with negative reports on district reform efforts is higher than the percentage in the comparison groups:

1. Reform overload: Teachers found that there were too many initiatives being implemented at once and that the district was too quick to replace existing reforms with new ones.
2. Reform incoherence: Teachers found that although the goals were often compatible, the multiple reforms sometimes had different means for reaching similar ends, creating confusion around which protocols and practices to follow.
3. Reform sustainability: Teachers voiced concern that in spite of the enormous effort around implementing the present reforms, district leadership would not sustain the current initiatives long enough for them to achieve the desired results.

With regard to reform overload, we heard repeated complaints in our teacher and principal interviews that the multiple reforms were, especially in the first year of the study, too much to do all at once. Each of the high schools we visited had a long list of reforms being implemented, including advisory programs, SLCs or Academies, PLCs, and the introduction of new instructional strategies through on-going PD programs. Typical of the comments made by the teachers we interviewed was the following:

> We've got all these balls to juggle and sometimes the High School Redesign Office, I don't feel, is talking to the GT Office [Gifted and Talented Office], which is talking to the math district office, which is talking to the advisory training office, which is talking to ESR [Educators for Social Responsibility]. And so we have all these initiatives that are being thrown at us. And we sometimes wish just give us one thing this year and let us do that well, instead of giving us five balls to juggle and then say, "oh wait, here's one more."

One factor that adds to the reform overload, as experienced by educators in AISD, is the belief that the district has had a tendency to introduce new reforms before previous ones had been fully implemented (with the result that reforms pile up on top of one another making it difficult to do any given reform thoroughly). Specifically, survey results from 2008 show that 87% of teachers in AISD high schools believed that new reforms were introduced before previous ones are fully implemented (compared with 74% of teachers across other THSP grantees). Thus, although this challenge is not unique to AISD, it is slightly more pronounced in AISD than in other THSP schools and districts. When asked to articulate the most important message about the reform process, one school leader said she wanted to communicate the following:

> We have got to allow this process to work, and we cannot allow this process to work with constant interference. You [the district leadership] have got to trust that we're going to do smaller learning communities, Family Advocacy system, and improved instruction, and that's all we're gonna do. … And when I call you and say this is interfering with our process, you're gonna have to back me up and say, you know what, you're right, and pull it off. … But give us the time to implement this with fidelity. And then judge whether or not it's a good program. But it's not fair to judge whether this is working or not working as long as you've got this other stuff [interfering].

Teachers also frequently expressed the concern that the multiple reform initiatives lacked coherence. This concern echoes the concerns of administrators and principals, described above, about challenges stemming from a lack of communication and coordination within the district

office. Teachers reported during our interviews that different district departments each carved out their own initiatives without first coordinating with each other. One teacher described the problem as a lack of communication:

> To me there's a big schism between the Office of Redesign and the Secondary Office.[…] So it just seems like there's a lot of people who are downtown who might even have their offices next door to each other but aren't communicating.

Similarly, teachers and administrators reported that the multiple external providers were not always aligned with the district vision or with the work of other providers. One principal described how the teachers received competing guidance from outside providers, which caused confusion and frustration. But, he went on the make that point that all of the initiatives share a common goal:

> There's a lot of great stuff out of the IFL [Institute for Learning]. But where the challenge comes in is that's not all our teachers do. I have to soothe teachers as far as helping them understand where things fit together. Have to do that with IFL too. When the consultant came one day and put down a protocol that we learned through SREB / HSTW… I had been talking about that one, but IFL had a different one. What it comes down to it, they're all doing the same thing--and I don't care what you call it--it's about looking at teachers' practice and looking at data. I have to make sure it's clear in teachers' minds.

The comments from another teacher illustrate how the factors contributing to incoherence, including both from reform overload and inadequate communication, are all tightly intermingled:

> We have a lot of eyes on us. …they'll come for a day, visit some classrooms and then say y'all need to this, this, and this. Then another group comes in and same thing. Then we have FTF who comes in. That was difficult. A lot of inconsistencies. OK, we're trying to work on these engagement strategies. Then someone comes and says that advocacy thing is really falling apart and we need to focus. Nothing that anybody said was wrong. None of these are things that we don't need to work on. But we can't fix everything at the same time. …They would come in and switch things. Professional development on different things. Engagement, then advocacy, then being a reflective practitioner, then on attendance, But we never gained traction on any one of them.

Finally, teachers and administrators reported concerns about the likelihood that the district would sustain the reforms. As one principal told us:

> Possibly the biggest challenge is laying to rest the idea that, "Oh, here comes another initiative. It will be gone in another year or two." And trying to get people to accept that maybe we can take these on and make them a part of our way.

Teachers who were deeply involved in the reform efforts were particularly concerned about sustaining the reform effort. One teacher explained her hopes for sustainability in the context of the reform process itself:

> We've talked a lot about the cycle of organizational development: forming, storming, norming. And we're definitely in the storming stage. And so getting through the storming stage is making sure people don't abandon it before it's been worked out. You know, storming is finding out what the problems are and working through them and not abandoning the whole thing because of the issues that need to be dealt with. … So those are the challenges that I think we face: stick to it, don't abandon it now. ... We're almost there.

Another teacher leader said:

> I think that one of the fears that I have is that the data will be hastily reviewed and that all things won't be considered in evaluating whether or not things are working. Because you know I've been in education long enough to know that that's kind of a pattern, and we throw things out and say it didn't work and try something new and insert a new thing. I've been observing and listening and learning about redesign long enough to have hope that it's not going away. And [to know] that the reform really is data-driven and that it has been proven in other places, and I just am really hopeful that we look at more than test scores. That we, again, are trusted as professionals to continue to take some risks, take responsible risks, in order to enrich the experiences of our students. I hear a lot of buzz about people thinking that the Academies are gonna fizzle … and I just feel like that would be a real disservice to our kids because I feel like it's a good way to help them.

AISD is going through a transition to new leadership during the 2009–10 school year. Despite the time of transition, our follow-up interviews with teachers in the spring of 2009 suggest a maturing of the reform efforts and a more positive attitude toward the reform initiatives. While it remains to be seen how the new leadership will build on the ambitious improvement efforts of the past decade, our teacher and district interviews suggest that most AISD educators are welcoming a period of refining current reforms, rather than overhauling current efforts to make room for new initiatives.

Challenges Going Forward

Based on the results from our surveys and interviews with district officials, principals, teachers, and students, we identified a set of challenges to maintaining the reform momentum that the district is likely to face in the coming years.

1. Strong and stable leadership at both the district and school levels is critical to the ongoing success of the reforms.
2. Teacher turnover, particularly in the lower performing schools, makes improvement efforts more difficult.
3. Poor student attendance at the schools most in need of improvement and (particularly among students who repeat a grade) could continue to undermine the reform efforts.
4. Changing student demographics, particularly in schools on the city's west side, is likely to present a growing challenge for the district.

Each of these identified challenges is likely to influence the core task at hand for AISD moving forward—namely to bring coherence to the multiple efforts, sustain the level of effort required to maintain a positive trajectory, and overcome the skepticism and sense of overload of a significant portion of teachers in the district. Next, we discuss each of these challenges and provide an overview about specific district efforts to support the sustainability of the reforms.

District and School Leadership

Bringing coherence to the multiple reform efforts was helped or hindered by the leadership at the district and the school. At the end of the 2007–08 school year, five of the 11 comprehensive high schools had departing principals (two principals were promoted and three left for performance or personal reasons). At the same time, we noted the departure of some of the teacher leaders who had been key proponents of the reform efforts in their schools. The retirement of the superintendent and the departure of a number of district officials in the following year (at the end of 2008–09) left the district in a transition period. The results of these changes were not entirely clear, but it appears that some stability was achieved to carry schools through the 2009–10 year, as the district did not expect any principal turnover in that year.

Even with some measure of stability going forward, we were struck by the principals' reports of the enormous and unrealistic demands placed on them. In the context of a discussion about high-stakes accountability, multiple reform initiatives, and confounded reporting structures, one high-ranking district official, when asked if he/she would take a principal's job in AISD, simply said: "I would not." This official had the same response again in the second year of the study, further elaborating:

> No, I still wouldn't go back. Part of the issue is that we have too many initiatives in this district, with push from the Office of Redesign and [the High School Office]. It drives the principals crazy. I don't know that I would go back to being a high school principal. I understand how difficult their jobs are. Knowing what they face, I don't know that I would go back. I don't know [that] I have the energy; I don't have the energy. It's a different job now than it was. There are more initiatives they have to focus on. Actually I had much more autonomy than some of them do. … I think we as a society have placed unrealistic expectations on high school principals. The accountability system is unrealistic.

Strong and effective school principals often move up quickly through the ranks, thus leaving gaps in the schools they came from. To compound the problem, district officials and school principals expressed concern about the shortage of principal candidates coming from the ranks of assistant principals. One district administrator explained (in 2008):

> Replacing high school principals is difficult to do. … We do not have a very strong system in place now to build our own leadership. … To just give you an example, four high schools are open now, and we combed our ranks, went through all the assistant principals to identify a potential principal candidate from among those and could not find one.

One promising approach was the introduction of the Executive Principal position. In AISD, the executive principal oversaw and supported the principals in two low-performing schools, relieving the building principal of some of the responsibilities of running the school. We heard very positive reports about the success of this arrangement from those who were directly involved. One school leader's comments reveal strongly positive opinions about the Executive Principal, while also highlighting that role as a "buffer" between the district and the school.

> It is a perfect system. We sit here at this table. I am not threatened by an executive principal even if he were breathing right here over my shoulder. We've been a good team. I trust him because he has been a principal at hard schools for a good long time. He never tries to just tell me what to do, he consults with me... this has worked beautifully. … The good thing about having the EP and somebody who had already been in AISD, with all that stuff that was already going on, had I been here alone, and the district thinking, "Oh, let us help [him/her] with all these things." He [the Executive Principal] was able to fend that off. Once the district got the hang of what we were doing, they were supportive. I don't know if

that would have happened, had I not had that interference, of keeping everyone's good idea out; he [the Executive Principal] was able to fend them off.

Teacher Experience and Teacher Turnover

In February 2008, Education Trust released a report about Texas, describing differences in the quality of teachers serving low-income and minority students compared to their more advantaged peers.[23] The report found that across the state the least experienced teachers were concentrated in high-poverty and high-minority schools and that those schools also had far higher teacher turnover rates. In AISD, the contrasting rates of teacher experience and turnover were as displayed in Exhibit 5:

Exhibit 5
Teacher Experience and Teacher Turnover in All AISD Schools

	Lowest-poverty Schools	Highest-poverty Schools	Lowest-minority Schools	Highest-minority Schools
Percentage of teachers with less than 3 years of teaching experience	7.9	22.7	8.2	20.9
5-year average teacher turnover rate	12.6	28.7	13.0	28.0

Note: The five-year average teacher turnover rate is the average of the one-year teacher turnover rates over five consecutive school years, 2001–02, 2002–03, 2003–04, 2004-05 and 2005–06. The one-year turnover rate is the percentage of teachers who leave the school during one school year. That is, the one-year turnover is the percentage of teachers at a school during the 2001–02 school year who were no longer at the school in 2002-03 school year.

Source: Their Fair Share; How Texas-Sized Gaps in Teacher Quality Shortchange Low-Income and Minority Students. Washington, D.C.: The Education Trust. February 2008. Available from: http://www.theirfairshare.org/resources.dyn/TheirFairShareFeb08.pdf. (Note: data is analysis of publicly available 2006 data from the Texas Education Agency's Public Education Information Management System by Ed Fuller, Ph.D., University of Texas at Austin.)

Principals, teachers, and students readily described the consequences of the distribution of experienced teachers and the teacher turnover in our interviews and focus groups. As one teacher shared in an interview, a student from Reagan High School (a high-poverty, high-minority school) wrote in an essay that, "Reagan is the place where teachers come to learn how to teach." Turnover of teachers at struggling schools threatened the implementation and sustainability of reforms at those schools. Moreover, in Austin as in other districts, turnover perpetuates an unfair system in which students at failing schools have a succession of inexperienced teachers, while their more advantaged peers benefit from more experienced and accomplished teachers.[24]

AISD high schools, like those around the country, also had an unequal distribution of teachers *within* schools. Typically, experienced teachers with seniority teach the advanced classes,

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[23] Education Trust (February 2008). Their Fair Share: How Texas-sized Gaps in Teacher Quality Shortchange Low-income and Minority Students. Washington, DC: Education Trust.

[24] Ingersoll, R. (2001). Teacher Turnover and Teacher Shortages: an Organizational Analysis. American Educational Research Journal, 38(3), 499-534. Darling-Hammond, L. (2004). Inequality and the right to learn: Access to qualified teachers in California's public schools. *Teachers College Record, 106*(10), 1936–1966. Lankford, H., Loeb, S., & Wyckoff, J. (2002). Teacher Sorting and the Plight of Urban Schools: A Descriptive Analysis, *Educational Evaluation and Policy Analysis*, *24*(1), 38-62.

while the newer, inexperienced teachers teach the regular and remedial classes. Teachers confirmed that more experienced teachers typically choose to teach more advanced classes where they are less likely to have discipline problems and where the content is more interesting. Moreover, teachers confirmed that the culture of teaching (among teachers) seems to associate more pride and prestige with having advanced students score high marks on an AP exam than getting struggling students to pass TAKS.

AISD took some steps to address the challenge of teacher turnover and the unequal distribution of effective teachers within and across schools. The district's 2005–10 Strategic Plan included a compensation pilot, called AISD REACH[25], that was designed to recruit and retain high quality teachers and principals. An external evaluation of AISD REACH found mixed results, but some reason for optimism.[26] In addition, teacher retention and the distribution of teacher experience was part of the district's proposed framework for its 2010–13 Strategic Plan (currently under development).

Student Attendance

Principals and teachers from AISD's low-performing high schools frequently pointed to poor student attendance as a major obstacle to raising student achievement. Low attendance was certainly deleterious for the absent students themselves, but it also undermined the reform initiatives. Teachers explained that they find it difficult to focus on the details of new instructional strategies, for example, when they face the more pressing problem that students simply aren't coming to school. High rates of truancy and absenteeism also likely hinder the continuity and momentum of the reforms at the classroom level.

While AISD's overall attendance rate of 94.2% was only slightly lower than the state average, some AISD high schools had attendance rates around 85%. Our analysis of attendance rates in 2007–08 looked at statistically comparable schools and found that first-time ninth-grade AISD students did not have higher absence rates than those in matched schools. However, we did find that ninth-grade repeaters in AISD high schools had statistically significant higher absence rates than ninth-grade repeaters in matched schools. While we do not have an explanation for this difference, it does suggest the need for efforts targeted at improving the attendance of AISD's population of repeaters.

Changing Student Demographics

Like other urban districts, AISD has seen dramatic changes in the demographics of its student population. As Exhibit 6 illustrates, AISD student population has become increasingly Hispanic and economically disadvantaged.

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[25] For more information on the AISD REACH program, see: http://www.austinisd.org/inside/initiatives/compensation/index.phtml

[26] National Center on Performance Incentives (August 2009). *An Interim Evaluation of Teacher and Principal Experiences during the Pilot Phase of AISD REACH*. Available at http://www.austinisd.org/inside/initiatives/compensation/docs/SCI_Interim_Report.pdf. The report found that teachers had not fully engaged with the program, but the program had not interfered with teacher collaboration.

Exhibit 6
Characteristics of AISD Students

	Percentage of AISD Students					
	Hispanic	White	African American	Other	Economically Disadvantaged	Bilingual/ESL
2002–03	52	31	14	3	53	20
2003–04	53	30	14	3	54	21
2004–05	55	29	13	3	58	21
2005–06	56	28	13	3	61	23
2006–07	57	27	13	3	63	22
2007–08	58	26	12	3	57	24
2008–09	59	26	12	4	61	28

Source: Harner, D. D. (2008). Demographic analysis and enrollment projections for the Austin independent school district. Available from: http://www.austinisd.org/inside/docs/factsfigures_report_0809.pdf

In addition to these overall demographic shifts, principals and teachers reported that some traditionally high-performing schools with large Caucasian populations saw an influx of minority students. The demographic changes in those schools will likely continue as increasing numbers of students exercise their school choice option according to the provisions of NCLB.

The changing demographics within the district overall and at high-performing schools in particular are directly relevant to high school reform because schools must tailor their reform efforts to meet the needs of the specific population of students that they serve. The changing demographics create new challenges for the schools, and any effort to improve schools must address those new challenges; if schools do not keep pace with their changing demographics, then groups of students are likely to remain unsupported. As one district official noted when asked about the readiness of these traditionally high-performing schools to meet the needs of these new students:

> You would think that as a district, we would prepare those schools, give them additional teachers and resources. But we don't. For the kids going to the west [more affluent] side, it depends on the principal. Some principals have had the foresight enough to see they need to provide a different instructional program. But some, they're just in the same classes, doing the same things.

Some teacher and administrator comments regarding students exercising their school choice option (i.e. students from neighborhoods with lower-performing schools who were commuting to higher-performing schools) raised concerns. During our interviews, we repeatedly heard about the problems related to the "No Child Left Behind (NCLB) kids." This phraseology is indicative of an underlying perception of the bussed students as a separate and outside group of students—students who are not an integral part of the school community. Indeed, a number of teachers and school leaders talked about their struggle to integrate the students who are bussed in from other neighborhoods into the culture and community of the school. As one informant told us:

> There's resentment toward those kids because the west AISD schools don't want them over there. And here's the thing, we think simply moving them over there, they're suddenly going to become A+ students, without doing anything differently.

Some principals leading these schools appeared to be making efforts to meet the needs of these new students. For example, we learned of one effort to form a special club for African-American girls designed to help them address the challenges of their new school environment. Indeed, many of the district-led efforts to increase the personalization of students' school experience (e.g., student advisory or Academies and SLCs) were, in part, in response to the demographic shifts. Careful monitoring of the success of these efforts for students who transfer to schools out of their community seems essential.

Sustainability of the Reforms

In the second year of the study, we heard much more of a concerted focus on sustainability, including strategies for sustaining the reforms that were being implemented. Although funding was one part of sustainability, district administrators emphasized the need to implement systems that would support the continuation of the current reforms in particular, as well as continuous improvement processes more broadly.

A number of district administrators acknowledged that they had not fully reached a point at which the systemic structure supported sustainability. One district administrator described the current situation, saying:

> The sustainability of any reforms we put in place will depend on the professional development in place and systems of support in place.…Right now any one [reform program] could be doomed if 2-3 people left. The initiatives have not yet become part of the culture.…Right now our programs are dependent on people, as opposed to structures and systems.

However, both the Office of Redesign and the district as a whole were taking a number of concerted measures to support sustainability. One approach that the district had taken was to acknowledge the turnover at all levels of the system, from teachers to principals to district administrators. Given that some degree of turnover was unavoidable, systems had to be implemented to handle that turnover, and the reforms had to be designed to withstand that turnover. To that end, the district planned induction systems for teachers and leaders that enabled educators who were new to the system to come on board quickly with school and district programs. The district also thought about ways to develop distributed leadership structures, so that specific reforms were not reliant on a particular individual for their long-term vitality. Further, the district was building digital content warehouses, so that as teachers and leaders created new instructional materials (e.g. lesson plans and projects), they were documenting those innovations that would then live on.

In addition to rolling out systems that enabled reforms to withstand turnover, the district also thought about ways to make changes at the central office level that would support sustainable changes at the school level. For example, the district was building stipends for teacher leaders into the AISD budget so that the district could reward teacher leadership (for example, for serving as an Advisory co-chair) in ways that were not dependent on grants.

Although there was more work to do to create systems for sustainability and to embed current reforms into district culture, there was a sense among administrators that the district was

on the right path. Administrators reported that the district had become more sophisticated and more purposeful in their approach to sustainability.

The first section of this report examined the implementation of the district redesign and high school reform efforts taking place in AISD. Given that this research was conducted during the first two years of the district-wide implementation of the reforms, it is not surprising that the implementation story to date is a mixture of both challenges and some important emerging successes. Thus as we review the findings from the student outcomes analysis next, it is useful to consider them within the context of the progress and challenges of reform implementation reported thus far. The typical mixture of early implementation success and continued challenges accounts for why improvements in student outcomes—and particularly student achievement on standardized tests—are often difficult to detect within the first few years of reform.

Effects of District Redesign and High School Reform on 2007–08 Student Outcomes

Our analysis of student outcomes may initially be disappointing to district leadership, school leaders, teachers, parents, and policymakers. Stakeholders will note that our analysis of student outcomes shows no statistically significant difference between the achievement of AISD high school students and those of a matched comparison group. In fact, the only statistically significant difference we found between AISD students and a matched comparison group of students is that AISD students who repeated ninth-grade had lower attendance rates than ninth-grade repeaters in comparison schools. While we uncovered slightly higher mathematics achievement among AISD students compared to the comparison group, those results were only marginally significant. The next section of this report provides an overview of the findings.

We believe that these outcomes were consistent with our findings about the implementation of the District Redesign and High School Reform efforts. AISD's attempts to radically reform its high schools resulted in important changes in school structures, which are beginning to lead to changes in instruction and relationships on campus; but these changes are now in their infancy. Given the research-based implementation dip that typically occurs in the initial years of a major reform implementation,[27] the outcomes presented here should by no means be interpreted as an indication of failure. While there are no guarantees that the outcomes will be more positive in the future, our assessment is that AISD's reform efforts need more time before significant impact on student achievement are likely to be seen.

In interpreting the lack of positive outcomes findings, we suggest district leaders would be best served by redoubling their efforts to refine reform implementation fidelity rather than assuming that these early outcomes findings suggest a failed approach. To that end, we present the outcomes data and then provide a set of recommendations based on what we learned from the AISD leaders, teachers, and students.

Outcomes Methods Overview

To understand whether participation in the District Redesign grant program was related to student outcomes, the evaluation team compared key ninth-grade student outcomes at AISD schools to those at well-matched comparison schools. As we described earlier, we employed the

[27] Fullan, M. (2001). Leading in a Culture of Change. San Francisco, CA: John Wiley & Sons, Inc.

most rigorous quasi-experimental approach available to determine if the AISD efforts resulted in greater student achievement and other outcomes compared to matched Texas high schools. We provide details of our approach in Appendix A. Characteristics of the AISD and matched schools can be found in Appendix B.

Overall District Redesign Effect on Ninth-Grade Students

Exhibit 7 presents the overall District Redesign effects for ninth-grade nonrepeaters and repeaters using a two-level HLM model for each outcome listed in Exhibit 7. All of the models controlled for a wide range of student-level and school-level covariates. The complete specification for each model can be found in Appendix C; the presentation here focuses on just the estimated District Redesign effects.

Exhibit 7
DSRD Overall and Grant Program Effects on Ninth-Grade Student Outcomes in 2007–08

Student Outcome	DSRD[a] Non-repeaters	Repeaters
TAKS Math		
Coefficient	16.71◊	4.15
SE	9.40	14.69
Effect size	0.07	0.02
TAKS Reading		
Coefficient	4.10	-11.83
SE	7.77	11.71
Effect size	0.02	-0.07
Passing Algebra I		
Coefficient	-0.07	-0.31
SE	0.23	0.22
Effect size	-0.04	-0.19
Absence rate		
Coefficient	0.07	0.36*
SE	0.06	0.08
Effect size	0.04	0.22
"Four by four" on track		
Coefficient	0.42	
SE	0.43	
Effect size	0.25	
Number of students in the analysis[b]		
DSRD program	3,868	568
Comparison	27,570	5,198
Total	31,438	5,766
Number of schools in the analysis[b]		
DSRD program	11	11
Comparison	66	65
Total	77	76

[a]Models with DSRD dummy variable and control variables as predictors. See Exhibit C-1 to C-9 for details.

[b]The Ns are the number of students and schools used in the passing Algebra I outcome analysis. The Ns for other outcome variables have slightly more missing data.

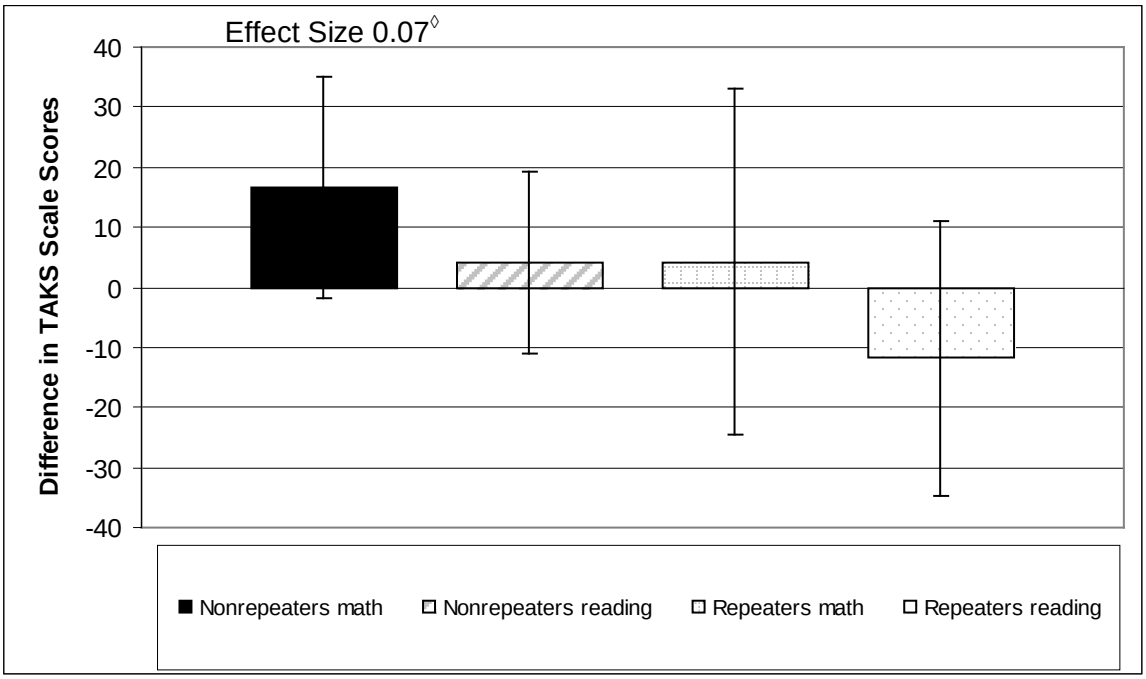
Notes . Passing Algebra 1, absent rate and "four by four" are logits and coefficients need to be interpreted as odds ratio. See our explanations in the text.
*$p < 0.05$. ◊$p < .10$.

Source: Evaluation of the Texas High School Project. See Appendix A for methods.

TAKS Mathematics and Reading Achievement

Exhibit 8 presents a boxplot of the District Redesign effects on ninth-grade TAKS scores for repeaters and nonrepeaters in math and reading. A boxplot is a convenient way to display the magnitude of an effect and to indicate whether it is statistically distinguishable from zero. The height of each bar (i.e., the box) indicates the size of the coefficient or the difference between the TAKS scores of students in District Redesign schools and comparison schools after controlling for previous year achievement and other important student- and school-level characteristics. For convenience, the effect sizes are labeled on top of the coefficient bars for each District Redesign effect that reaches statistical significance or marginal significance ($p < .10$).

Exhibit 8
District Redesign Effect on Ninth-Grade TAKS Mathematics and Reading Scores in 2007–08



Note: The height of the bar represents the difference in TAKS scores between students in THSP and comparison schools after controlling for important student and school characteristics. The line through each bar represents the 95% confidence interval around estimated TAKS score difference. If the line does not cross zero, then the difference is statistically significant at p <.05; if the line crosses zero, then the difference is not statistically significant. Effect sizes are labeled on top of the bars for significant TAKS score differences.

◊$p < .10$

As presented in Exhibit 7 and 8, the analysis of TAKS math and reading achievement suggests that District Redesign schools were associated with slightly higher TAKS mathematics achievement for ninth-grade nonrepeaters compared to the matched schools, but at marginal statistical significance ($p<.10$). District Redesign students on average scored about 17 points higher than similar students in the matched schools, which translated into a very small effect size

of 0.07.[28] There were no differences in TAKS reading achievement between students in District Redesign schools and similar students in comparison schools.

Passing Algebra I

The evaluators examined passing Algebra I by ninth grade—traditionally a gate-keeping course—as a proxy for whether students were likely to graduate from high school in four years. More importantly, mathematics skills are critical for future academic and labor market success.[29]Arguably, this is a medium- rather than a short-term outcome, as substantial supports may be necessary to boost students' success in Algebra I given high schools' reliance on middle school feeders to prepare students for a demanding high school curriculum.[30]Schools with high percentages of students passing Algebra I before the ninth grade may have had strong mathematics programs in their feeder middle schools prior to District Redesign implementation. To control for preexisting differences between schools in grading policy and the percentage of students who had passed Algebra I upon entering ninth grade, such a variable was included at the school level.

Generally speaking, District Redesign schools did not have a significant effect on the probability that students would pass Algebra I in ninth grade for either nonrepeaters or repeaters. Results for the fully specified Algebra I models can be found in Exhibits C-3 and C-4.

Percentage of Days Absent from School

Reducing absences is a commonsense precursor to improving student learning because students cannot learn the curriculum if they are not in class. Evaluators constructed a dependent variable indicating students' percentage of total days absent from school using TEA's attendance files.[31]

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[28] The effect size was calculated by dividing the coefficient of the District Redesign indicator by the pooled within-group standard deviation of the outcome at the student level (What Works Clearinghouse, 2008). Note that both the *District Redesign effect* and the *effect size* are presented throughout the discussion of results. The former is the raw differences between students in THSP and comparison schools, whereas the latter puts all the raw differences on the same metric. Unlike District Redesign effects, effect sizes can be compared across different outcomes and indicate the strength of the intervention effect. Consistent with standard practice, the evaluation team considers an effect size of 0.20 as small, 0.50 as moderate, and 0.80 as large. Therefore, 0.07 is indeed very small (Cohen, 1988).

[29] Rose, H. & Betts, J. (2001). Math Matters: The Links Between High School Curriculum, College Graduation, and Earnings. San Francisco: Public Policy Institute of California.

[30] The evaluation team constructed the passing Algebra I variable from TEA's student course-completion data. The analysis categorized ninth-grade students who passed Algebra I or took more advanced mathematics courses than Algebra I (i.e., geometry and Algebra II) in ninth grade as having passed Algebra I. Students who did not take any mathematics courses in ninth grade were categorized as not passing Algebra I. Although students who did not take any math courses in ninth grade may include those who had taken Algebra I in previous grades, TEA does not collect eighth-grade course-taking data and therefore these students cannot be identified. Measurement error introduced by this limitation of the data is greatly reduced for ninth-grade students in 2007–08 who were subject to the legislative requirements of the "four by four" curriculum.

[31] The percent of days absent at the home school is calculated by dividing total days absent by the number of days taught. For students who attended more than one school during ninth grade, the analysis considered only the percentage of days they were absent from the "home" school, the school where they were enrolled on the 12th day and where they took the ninth-grade TAKS tests. Consequently, days in attendance at any school other than the "home school", including alternative schools, are excluded from the percent absent variable. To constrain the model prediction to between 0 and 1 and to adjust the standard errors for the nonnormality of the error

As listed in Exhibit 7, ninth-grade repeaters in District Redesign schools were 33% more likely to be absent than ninth-grade repeaters in comparison schools with a relatively small effect size of 0.22. Results for the fully specified attendance models can be found in Exhibits C-5 and C-6.

On Track to Graduate with "Four by Four" Curriculum

The state's "four by four" curriculum policy mandates that all students, beginning with the freshman class of 2007–08, take four years of English, mathematics, science, and social studies to graduate from high school with the recommended diploma. Our "On track on the 'four by four'" variable measured whether a student fulfilled the "four by four" course requirements at each grade level.

All Texas high schools are affected by the "four by four" policy beginning with the ninth-grade students in 2007–08, even though many schools and districts had made the "four by four" a requirement prior to the legislative mandate. Among schools without a "four by four" requirement already in place, however, those participating in THSP programs may have had some early advantage given their pledges to improve students' college readiness.

Evaluators ran the analysis on ninth-grade nonrepeaters and repeaters combined, and Exhibit 7 showed that no significant difference existed in the success of District Redesign and comparison schools in keeping students on track with the "four by four" curriculum.[32] Results for the fully specified "four by four" model can be found in Exhibit C-7.

Conclusion

The research questions that guided this study focus on key aspects of district redesign and high school reform in AISD, including:

1. Changes at the central office resulting from district redesign and capacity-building efforts
2. Characteristics of high-performing districts evidenced within AISD, including clear vision and goals; systems for data-based decision making and staff capacity building; and a coherent set of strategies
3. District characteristics and initiatives associated with school improvement

In addition, the research was designed to determine whether students participating in the AISD reform efforts demonstrated higher achievement, higher attendance, and better course progression that students in a matched set of comparison schools.

The primary organizational change at the central office was the creation of the Office of Redesign, which was intended to help the district better support the needs of the high schools, and thus in turn, the needs of their students. The establishment of the Office of Redesign into the organizational structure of the district has impacted reform in multiple ways. On one hand,

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term, the analysis uses the logit transformed percentage of days absent as the outcome variable. Consequently, the coefficients on the independent variables are interpreted in terms of odds ratios.

[32] Because passing all four core courses and grade promotion are simultaneously determined, splitting the sample by nonrepeaters and repeaters would bias the results. Consequently, the analysis uses one model for the two groups combined for both the ninth-grade and tenth-grade analyses.

the Office of Redesign sharpened the district's focus on structural and instructional improvement. On the other hand, reports from interviewees also revealed that the creation of this new office resulted in some uncertainties regarding communication, roles and responsibilities, and the chain of command—all of which contributed to uncertainty pertaining to some aspects of the reform initiatives themselves. During our data collection activities in the spring of 2009, district officials, principals, and teachers generally reported that there was some progress toward a more coherent reform effort, although the problem of incoherence had not been entirely alleviated.

At the outset of the study, it appeared that AISD had all of the characteristics of high-performing districts identified in our review of the research. While evidence of these attributes existed in district materials and discourse (e.g. within the AISD proposal to BMGF), our research provides a more thorough understanding of the ways in which AISD did or did not reflect these attributes in practice. For example, our research found that while district administrators and principals shared a common vision for reform, that overarching vision for reform did not always reach the teachers.

Similarly, the district had many systems in place that were designed to support school improvement, but in most cases further refinement was required to make those systems maximally effective. For example, the district focused heavily on human capital development at all levels of the system. Acknowledging the need for more internal leadership development, we heard reports that the district was planning new programs to train school administrators from within the system to become school principals. The district also provided extensive PD to teachers to support instructional reforms. Teachers appreciated the district's efforts to provide the support necessary to implement the reforms, but were frustrated by the amount of PD required, particularly when the PD took them out of their classes. With regard to data systems, the district provided extensive and timely data to schools—and school leaders regularly used those data to monitor campus performance (both behavioral and academic) and make decisions about campus programming. At some campuses, principals developed elaborate reports to present data to staff in relevant and actionable ways. While the increased availability and access to classroom- and student-level data led some teachers to incorporate data into their regular practice and instructional decision-making, our research revealed that regular data-use at the teacher level was inconsistent.

As articulated (e.g. in the AISD proposal to BMGF and on district websites), the AISD redesign initiative comprised a comprehensive and coherent set of strategies for achieving the goals of high school reform. Our research suggests, however, that many of the key agents in the reform (most notably teachers) did not see a single coherent initiative. Instead, teachers reported that the initiatives had compatible goals—but there were too many reforms underway at once and those reforms did not always align with one another in practice. Moreover, some teachers were reluctant to invest heavily in the current reforms for fear that new programming would soon supplant the current initiatives.

In spite of these concerns, educators and administrators at all levels of the system believed that the district was making strong efforts to support the needs of the district's neediest students, including low-achieving students, traditionally underserved students, and English language learners. The district redesign and high school reform initiatives were designed, in the broadest sense, to support improved learning opportunities and college- and career-readiness for all students, particularly those for whom traditional school structures and practices were not adequate. The Advisory program (which was a core component of the reform and was

implemented on all high school campuses) served all students, but particularly supported those who might otherwise fall through the cracks. Across all of the high schools we visited, academic tutoring was readily available and was a key strategy for providing supplemental supports for struggling students. Individual programs at particular schools such as the Quality Teaching for English Learners (QTEL) model from West Ed represented targeted efforts to support learning for particular populations.

The Office of Redesign's motto, *Graduate Ready: College, Career, Life*, reflected the district goal of supporting college readiness for all students. While most teachers that we interviewed echoed the goal of preparing all students for college, some voiced the perspective that college was not a realistic objective for all students, and that programs ought to be available to support those students. Accordingly, teachers reported that the different CTE programs available throughout the district reflected different levels of rigor, and reflected different goals for students. While some courses comprised rigorous coursework comparable to academic classes, others provided motivation to remain in school and improved employment options for students who might otherwise be likely to drop out of high school. In sum, while the district redesign and high school reform efforts were clearly intended to support college readiness for all students, there were some teachers who pragmatically reported that certain programs support "post-secondary success" for students—in whatever form that might take.

Because the student outcomes analysis did not reveal significant associations between reform initiatives and changes in student behavior or performance, it is not possible to determine which district policies, programs, and practices support school improvement, as measured quantitatively. However, our interviews with district administrators, school leaders, teachers, and students regarding campus-level implementation of the reforms revealed both important challenges that the schools are facing, as well as some promising successes schools have experienced in implementing the reforms. Moreover, our research revealed connections between district policies, programs, and practices on the one hand, and those implementation challenges and successes on the other—and point to a number of issues that warrant the district's attention. First, there are a substantial number of teachers who do not fully buy-into the reforms; this lack of support stems in part from a lack of clarity around the goals of certain reforms and from a general sense of overload and incoherence resulting from the large number of initiatives taking place at once. Second, contextual factors at the schools such as poor attendance and changing student demographics create obstacles for implementation. Third, the creation of the Office of Redesign led to significant communication challenges not only within the district office, but also for schools.

While acknowledging these challenges, the district should also be aware of the progress and initial successes that have taken place. Our interviews suggest that the reforms are being implemented with a good deal of fidelity at many campuses. Moreover, we heard that noticeable and positive changes are beginning to occur as a result. In places where Advisory is functioning well, we heard stories about students confiding in teachers on important matters and gaining valuable mentorship both academically and personally. Teachers reported that they are using data and collaborating with peers more frequently and more effectively. Further, teachers have begun using more project-based and interdisciplinary learning in an effort to boost relevance for students. Thus, while our analysis of student outcomes found no statistically significant gains in achievement of AISD students compared to those of a matched comparison group at this time, these emerging yet promising indications that improvement efforts are taking root should be noted. In order to support these initial successes, and to avoid undermining the initial progress

by prematurely changing course, the district should continue with the core of the present reforms so as to allow the reform efforts to mature.

To download the complete report, including appendices, please go to http://www.tea.state.tx.us/index4.aspx?id=2904&menu_id=949

Appendices
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Appendix A. Study Methods

Overview

This appendix details the design of and procedures for the major data collection methods and analyses. The study was based on a comprehensive and rigorous mixed-methods to develop an understanding of the implementation and outcomes of AISD and its various reform programs. The data collection strategy integrated robust qualitative and quantitative methods to capture perspectives at multiple levels of the educational system, investigating implementation and facilitating factors and barriers, and to analyze the effects of AISD reforms on AISD schools in comparison to rigorously matched non-AISD schools. Data collection activities included site visits to AISD participating schools and districts and to comparison schools; surveys of principals, teachers, and students in AISD schools; interviews with external intermediaries (e.g., network leaders, policymakers), and collection of TEA school and student characteristics including demographic information and outcomes. Analysis of implementation and outcome data will seek to describe implementation of reform at the participating schools; isolate school and classroom factors that account for differences in teacher attitude and classroom instructional activities as well as student attitudes and achievement; identify differences related to the type of program being implemented at the school; examine the role of the district in implementing school reform; and investigate policy factors that impacted the school reform taking place in Texas.

Comparative Outcomes Analysis

One part of the overall research activity was to conduct comparative analysis looking at outcomes for students at AISD schools compared to students at non-AISD schools. As we describe below, propensity score matching was used to create a pool of non-AISD schools for comparison purposes in determining the effect of AISD schools on a variety of student outcomes.

Matching Procedure

To ensure that AISD schools and non-AISD schools have similar demographic composition and achievement indicators, we applied a two-stage matching strategy combining propensity score matching and specific characteristics matching to find comparable schools for the AISD schools. To ensure that AISD schools and non-TSHP schools have similar demographic composition and achievement indicators, we applied a two-stage matching strategy combining propensity score matching and specific characteristics matching to find comparable schools for the AISD schools. To start, we took Texas schools with the same grade span (grades 9-12) as the AISD schools and posited a selection model to estimate what factors distinguish AISD schools from other schools in the Texas, using school-level information from the AEIS data. Based on the estimated propensity model, we calculated a propensity score (logit) of participating in the AISD initiatives for each school based on a set of school characteristics. Exhibit A-1 presents the results of the selection model. Unless otherwise noted, we interpret the results below at a significance level of 0.05, that is, coefficients with a p value of less than .05 are considered statistically significant.

Exhibit A-1
Propensity Score Model to Predict School-Level AISD Participation (N=377)

Variable	Coefficient	*SE*	*p*
Intercept	292.21	89.32	0.00
School size (log transformed)	-1.33	1.68	0.43
Ninth graders passing TAKS math (%)	0.22 ◊	0.11	0.06
Ninth graders passing TAKS reading (%)	-0.25	0.15	0.11
Students taking SAT or ACT (%)	0.01	0.01	0.23
Attendance rate	-3.01 *	0.91	0.00
Mobile students (%)	-0.36 ◊	0.19	0.06
Limited-English-proficient students (%)	0.08	0.11	0.46
Economically disadvantaged students (%)	-0.24 *	0.11	0.03
African-American students (%)	0.01	0.08	0.89
Hispanic students (%)	0.11	0.09	0.22
Special education students (%)	0.24	0.17	0.15
Accountability rating - Unacceptable	-4.95 ◊	2.62	0.06

*$p < .05$, ◊$p < .10$.

Compared with non-AISD schools in the state with the same grade span, AISD schools tended to have proportionally fewer economically disadvantaged students, adjusting for all school characteristics simultaneously. AISD schools tended to have a marginally significant ($p < .10$) lower percentages of mobile students when compared to other schools at the same level of economically disadvantaged students and other school characteristics. AISD schools tended to have a lower attendance rate than other THSP schools. At marginally significant statistical levels ($p < .10$), AISD schools had a larger proportion of ninth graders passing TAKS math, and were less likely to have an accountability rating of unacceptable.

We next selected a comparison group of schools that are very similar to each AISD school on a number of key school and district characteristics. Exhibit A-2 presents the selection criteria on variables that were used to choose comparison schools. The variables are listed in order of priority that we used for matching. Order of priority was determined by balancing achievement and structural measures that researchers deemed important indicators of a school culture of achievement. We followed the criteria in the majority of cases and matched each AISD school with six comparison schools. In addition, each comparison school is uniquely matched to an AISD school and no AISD schools share the same comparison school.

Exhibit A-2
Selection Criteria for Variables Used for Matching AISD Schools

Variable	Matching Criteria
Grade span	Exact matching
Campus rating	Exact matching
Ninth grade TAKS math passing rates	Within 15% difference
Ninth grade TAKS reading passing rates	Within 12% difference
Urbanicity	Exact matching
Enrollment	Within 500 difference
Title 1 status	Exact matching
Percentage African-American and Hispanic students	Within 25% difference

Student Outcomes Analysis

To address the nested nature of the data, we applied the same two-level hierarchical linear model with student and school levels to study each of the continuous student outcomes, for repeaters and nonrepeaters separately. For the dichotomous outcome variable, passing Algebra I at ninth grade, we used a two-level hierarchical model with a logit link function. For all the models, we used the same set of student and school-level predictors where possible.[33] To estimate AISD effects at the same level of student characteristics, we applied grand-mean centering for all student level predictors as well as continuous school-level predictors. The models are described below.

HLM for continuous student outcomes (TAKS reading and math and percentage of days absent) is shown below.

Student-level model:

$$
\begin{aligned}
Y_{ij} = \quad & \beta_{0j} + \beta_{1j}\,(\text{Reading\_g8})_{ij} + \beta_{2j}\,(\text{Math\_g8})_{ij} \\
& + \beta_{3j}\,(\text{Science\_g8})_{ij} + \beta_{4j}\,(\text{Social\_g8})_{ij} \\
& + \beta_{5j}\,(\text{Female})_{ij} \\
& + \beta_{6j}\,(\text{African-American})_{ij} + \beta_{7j}\,(\text{Hispanic})_{ij} + \beta_{8j}\,(\text{Asian})_{ij} \\
& + \beta_{9j}\,(\text{English learner})_{ij} + \beta_{10j}\,(\text{Immigrant})_{ij} \\
& + \beta_{11j}\,(\text{At risk})_{ij} + \beta_{12j}\,(\text{Economically disadvantaged})_{ij} \\
& + r_{ij}
\end{aligned}
$$

School-level model:

$$
\begin{aligned}
\beta_{0j} = \quad & \gamma_{00} + \gamma_{01}\,(\text{AISD})_j + \gamma_{0k}\,(k\text{th school level predictor})_j + u_{0j} \\
\beta_{pj} = \quad & \gamma_{p0} \qquad \text{for } p > 0.
\end{aligned}
$$

[33] Although THSPE specifies the use of five ethnicity categories, Native American (NA) are excluded from the HLM models. The number of NA students in these analyses was quite small, and including them had no impact on the HLM. In order to increase the power of the analyses, evaluators eliminated predictors that did not impact any of the HLM models, as was the case with the NA ethnicity category.

Where

Y_{ij} is the value of the outcome variable for student *i* in school *j*.

β_{0j} is the expected value of the outcome variable for school *j*, controlling for student and school level variables.

β_{pj} is the effect of the pth predictor on the outcome for school *j*, controlling for student and school-level variables. This effect is constrained to be the same (γ_{p0}) across schools.

γ_{00} is the average outcome, controlling for student and school-level variables.

γ_{01} is the effect of AISD schools on the outcome, controlling for student and school-level variables.

γ_{0k} is the effect of the *k*th predictor on the outcome, controlling for student and school-level variables.

r_{ij} is the unique effect of student *i* in school *j* on outcome, which is assumed to be normally distributed with a mean of 0 and a homogenous variance δ^2 across schools.

u_{0j} is the unique effect of school *j* on the outcome. It is assumed to be normally distributed with a mean of 0 and a homogenous variance of $\tau_{00.}$ A significant τ_{00} would indicate that the difference in the outcome between the students varies across schools.

Hierarchical model with logit link function for passing algebra 1 in ninth grade is shown below.

Student-level model:

$$\eta_{ij} = \beta_{0j} + \beta_{1j}(\text{Reading\_g8})_{ij} + \beta_{2j}(\text{Math\_g8})_{ij} + \beta_{3j}(\text{Science\_g8})_{ij} + \beta_{4j}(\text{Social\_g8})_{ij} + \beta_{5j}(\text{Female})_{ij} + \beta_{6j}(\text{African-American})_{ij} + \beta_{7j}(\text{Hispanic})_{ij} + \beta_{8j}(\text{Asian})_{ij} + \beta_{9j}(\text{English learner})_{ij} + \beta_{10j}(\text{Immigrant})_{ij} + \beta_{11j}(\text{At risk})_{ij} + \beta_{12j}(\text{Economically disadvantaged})_{ij}$$

School-level model:

$$\beta_{0j} = \gamma_{00} + \gamma_{01}(\text{AISD})_j + \gamma_{0k}(\text{kth school level predictor})_j + u_{0j}$$

$$\beta_{pj} = \gamma_{p0} \quad \text{for } p > 0.$$

Where

η_{ij} is the log-odds of passing algebra 1 for student *i* in school *j*.

β_{0j} is the expected log-odds of passing algebra 1 for school *j*, controlling for student and school-level variables.

β_{pj} is the effect of the *p*th predictor on log-odds of passing algebra 1 for school *j*, controlling for student and school-level variables. This effect is constrained to be the same (γ_{p0}) across schools.

γ_{00} is the average log-odds of passing algebra 1, controlling for student and school-level variables.

γ_{01} is the effect of AISD schools on the log-odds of passing algebra 1, controlling for student and school-level variables.

γ_{0k} is the effect of the *k*th predictor on the log-odds of passing algebra 1, controlling for student and school-level variables.

u_{0j} is the unique effect of school *j* on the outcome. It is assumed to be normally distributed with a mean of 0 and a homogenous variance of $\tau_{00.}$ A significant τ_{00} would indicate that the difference in the outcome between the students varies across schools.

To investigate whether AISD schools have a larger effect on students with certain characteristics, such as economically disadvantaged status or being African-American, we added interaction terms between AISD and the student characteristics whenever AISD schools were estimated to have a statistically significant effect on an outcome variable. The equation for β_{pj} thus becomes:

$$\beta_{pj} = \gamma_{p0} + \gamma_{0p} (\text{AISD})_j$$

where γ_{0p} indicates the extra effect AISD has on the *p*th student characteristics. To maintain a parsimonious model, we removed the interaction term if it was not statistically significant.

Because of limited sample size, there is not enough statistical power to include all available school-level variables in the analyses. We therefore included school-level variables we are most interested in, and that are not aggregated student demographics because we already included student demographics at the student-level model. The school-level variables we included in the final models are urbanicity, accountability rating (entered as a set of categorical variables, with Academically Acceptable as the reference category), percentage of mobile students, percentage of special education students, and percentage of teachers in their first year of teaching, with an additional percentage of passing Algebra I before ninth grade for the passing Algebra I analysis.

Principal, Teacher, and Student Surveys

As part of the overall research activity, surveys of principals, teachers, and students were conducted in THSP-supported schools. The surveys were designed to serve two purposes: (1) provide quantifiable data on implementation, school attributes, and classroom attributes for each of the different reform models and (2) provide information to help us assess the extent to which the different reform models lead to improved student outcomes. In this first year of the THSP evaluation, surveys were sent to all principals and a sample of teachers and students from THSP schools serving ninth-grade students. The surveys were administered online to principals and teachers, with a paper-based survey sent as requested. All student surveys were paper-based and administered in students' classrooms. Incentives were provided to principals and teachers to complete the survey, as well as to schools that completed administration of the student surveys.

In this section we describe (1) survey development, (2) school selection, (3) school contact, (4) principal, teacher, and student sampling, (5) survey administration procedures and response rates, and (6) analytic methods.

Survey Development

Principal, teacher, and student survey items were developed to measure the constructs in the THSP Theory of Change (TOC).[34] For each construct in the TOC, survey items were selected from existing, validated, and reliable scales, and modified as necessary to most closely measure the relevant constructs. As possible, individual items and answer scales were kept consistent both within and across surveys in order to facilitate later comparison across sources. Survey items were drawn from the following surveys: The BMGF's National School District and Networks Grants Program (principal, teacher, and student surveys) (AIR/SRI, 2004b), the Consortium on Chicago School Research (CCSR) (principal, teacher, and student surveys) (CCSR, 2005), and the Surveys of Enacted Curriculum (teacher surveys of math, science, and English language arts) (Council of Chief State School Officers and the Wisconsin Center for Education Research, 2005). Surveys were pilot tested to evaluate the modifications made to individual items as well as the overall flow, readability, and time to complete the surveys.

As is shown in Exhibit A-3, the principal, teacher, and student surveys measured the following constructs.[35]

[34] The THSP TOC illustrates the key components and desired goals of the THSP initiative, and the relationships therein. The public and private members within the THSP alliance share the common goal to increase high school graduation rates, college enrollment, and college graduation rates among the state's disadvantaged youth. To do so, the THSP funders believe that high schools need to create a normative climate conducive to learning (e.g. setting high expectations for achievement, building stronger relationships between students and teachers, and maintaining a safe environment) and structures to support the desired attributes of the school (e.g. SLCs). The theory of change also seeks to foster effective school leadership, invest in teachers' learning and collaboration, provide students with comprehensive academic and social supports, use data to inform decisions, and engage parents and the community in education. Specific classroom attributes (e.g. more rigorous, relevant, and data-informed instruction) combined with key experiences to prepare students for college and career (e.g. advanced and college-level coursework and internships) are expected to improve short-, medium-, and long-term student outcomes. The anticipated outcomes include increased student engagement in academics, aspirations to go to college, broader access to and success in advanced coursework, gains in student achievement and college preparatory exams, higher graduation rates, and postsecondary enrollment.

[35] The evaluation team developed items on for those constructs in the theory of change that could conceptually be assessed using a survey. Other constructs were assessed with the site visits, interviews, and/or the student achievement analysis.

Exhibit A-3
Crosswalk Between Survey Topics and Survey Items

Survey Topics	Survey Item by Respondent		
	Principal	Teacher	Student
District and External Supports			
District leadership (administration, instructional)	1	1, 2	
Role and effectiveness of the network	3–6	2–5	
Role and effectiveness of external support providers	7	6–8	
School Organizational Characteristics			
School leadership	8–12	9–11	
Professional development	11–14	9, 12–14	
Common focus and collaboration	8, 11–12, 15–17	9, 15–17	
Academic/social support for students – remediation, counseling, differentiation	18	18–19	
Data management and accountability	19–21		
Parent/community involvement	20, 21	22, 23	11, 12
School Climate			
High expectations – expectations for achievement and educational attainment	24	22–23	1–2
Respect and responsibility – degree of respect, responsibility, and relational trust	25–27	24–25	3–6
Personalization – nature of relationships between teachers and students, and among students	28	26–28	7–8
Safe environment	29	29–30	9–10
Classroom Attributes			
Coursework rigor and relevance		31–35	13–20
Formative assessments – Used to inform instruction		36, 37–38	21–22
Technology – Used in coursework		39, 40	23–24
Instructional practices (e.g., enacted curriculum, engaging instruction)		41	
Student Experiences			
Enrollment in advanced courses (AP, IB, AVID, college)			25–26, 29
Internship/work study participation			27–28
Peer attitudes towards academics			30–31
Student Attitudes			
Attitudes towards academics – Engagement in learning		41, 43–45	32–35
Educational aspirations – High school and college		46	36–41
Reform Progress/Implementation			
Challenges in implementation and Sustainability of reforms	30*	47*	

School Selection

All 11 comprehensive high schools in AISD were surveyed as they all participate under DSRD.

Principal, Teacher, and Student Sampling

Surveys were sent to each of the principals at the 11 schools. However, both to minimize cost and to minimize impact on the schools, only a sample of teachers and students were included. In addition, we also wanted to be sure we had sufficient numbers of teachers and students so that we could disaggregate any analyses by subject matter. We also wanted to link students to teachers and therefore needed to ensure that we had a minimum number of students per teacher. In consultation with statisticians and through power analyses, it was determined that we should include a random sample of between 12 to 15 ninth-grade English, math, and science teachers.[36] However, in practice we found that in order to get the required linkages with a sufficient number of students, it was necessary to include each instructor who taught English 9, Biology, or Algebra I at the school.

For our student sampling strategy, it was determined that we would need to ensure adequate sample sizes for each subject area—both because students' attitudes toward school and their classroom experiences were likely to differ by subject areas, and any potential linkages to student achievement data was to be analyzed by subject area. While initially we intended on randomly sampling students from within those 12 to 15 teachers' classes, we were unable to obtain classroom rosters. Without rosters, we were unable to implement a random sample. Therefore, we sampled all students from within the selected teachers' classrooms. Sampling for teacher and student surveys was done based on school schedules obtained directly from the schools.

Student Sample and Administration

The student survey examined the students' classroom experiences and detailed their goals for the future. For the administration of the student survey, the research team worked toward its key goals of collecting responses from a sufficient number of students to make valid conclusions, while minimizing disruption to the schools' instructional time. The following sample design was intended to balance these two competing goals.

Student Sample. In order to reduce the effect the survey had on classroom time, care was taken to ensure that no student was surveyed in multiple classes (i.e. in both their math and English classes). To accomplish this, students were sampled either within one period or from only one subject. Because students have only one class per period and take individual subjects once throughout the day, this design ensured that the vast majority of the students would lose no more than one class period to the survey. Where possible we avoided selecting the first or last period of the day, except in cases where it was the only period available or where it was greatly superior in terms of the courses being offered in that period.

In order to ensure sufficient numbers of students participated in the survey, at least six classrooms were sampled per school.

[36] For small schools, this number of teachers meant that all teachers in those disciplines would be surveyed.

Single Period. The preferred method of sampling was to survey at least three English I classes and at least three Algebra I classes within one class period. This approach assures that there is a sufficient number of Math and English classes and prevents surveying the same student multiple times. While this method is preferred, only larger schools were able to utilize this approach due to the large number of students required to make three Math and English classes within one period practical. When there were more than one period where three English I and Algebra I classes were offered, the sample was based on researcher discretion that attempted to maximize the number of classrooms sampled and to provide for representation of advanced, honors, and advanced placement courses. When no difference in class periods was available on these factors, the class period was randomly selected.

A total of 10 schools were sampled using the single period method.

Complete Sample. In any survey design, a complete sample eliminates biases caused by a poor sample distorting results; however, for most schools a complete sample would be inefficient and reduce school participation. Smaller schools, though, contained small enough numbers of students that a complete sample was prudent. The key difficulty in a complete sample is creating a sample of classes that eliminates the possibility of sampling a student multiple times and reducing the sampling of students in grades other than ninth. The utilization of English I classes provided a favorable avenue for sampling ninth grade students as students in Texas are required to have four years of English and that nearly all ninth grade students were in English I. Only in unusual circumstances would a non-ninth grade student attend an English I class. For those schools that offered six or fewer English I courses, each of the classes were sampled, providing a complete sample of each ninth grade student.

One school was sampled using the complete sample method.

Student Survey Administration

Once the classrooms were sampled, the research team shipped each school contact a box containing the necessary supplies to administer the survey. The package included a memorandum for the survey coordinator that detailed the other contents and highlighted the procedures for survey administration.

More detailed instructions were provided for the survey coordinator including details concerning the timeline for administering the survey. Schools had the ability to implement the surveys at a time of their choosing within broad limitations: parental notifications were required to be sent one week prior to survey administration and the surveys needed to be completed before the end of the school year. The more detailed instructions included instructions for contacting parents and draft parental notifications.

The survey contacts delivered envelopes to each sampled classroom. The cover of the envelopes contained brief instructions for the teacher and a description of the contents of the package. For each class, the package contained the following:

- Detailed administration instructions
- 31 student surveys
- Surveys for each student and five extra students sent when rosters were available
- An additional envelope to send de-identified student surveys to the survey administrator

Following completion of the surveys, each teacher returned the surveys to the primary survey contact. The contact then packaged all surveys together, completed verification of the parental notification form, provided basic payment information for the school incentive, and sent all materials to the research team. Once the completed surveys were received, the data were coded using the Telecom system and hand verified when necessary. Each school that completed the survey (including the parental notification verification and submission of a tax identification number for the school) was provided with a $1,000 token of appreciation for their efforts.

As shown in Exhibit A-4, student surveys were sent to 11 schools; 8 of these schools returned their surveys, for a response rate of 73%. Unfortunately, 1 of the schools did not return confirmation of parental consent. Due to privacy concerns, responses from this school were removed, resulting in 7 schools included in the analyses, an effective response rate of 64%. The research team made repeated requests to this school in an effort to obtain these forms. In all, 1,123 surveys were completed by DSRD students. However, due to lack of completed confirmation of parental consent forms, 1,021 student surveys are included in the analyses.

Exhibit A-4
School Response Rate for Student Survey

	Number of Schools	Response Rate
Received survey	11	--
Returned survey	8	72.7%
Returned permission form	7	63.6%

Teacher Survey Sample and Administration

Ninth-grade English, math, and science teachers were surveyed to determine their views concerning the educational environment of the school, resources available and the fidelity of the THSP reform implementation. Teachers who completed the survey were provided a $30 gift card as a token of appreciation.

The survey was web-based, created utilizing the Lime Survey platform. This approach allows for questions to be tailored to the teachers' responses to prior questions. For instance, teachers who indicate they teach science courses were not asked about the learning environment in math classes. Web-based surveys also facilitate the contact of many teachers in a cost-effective manner.

Teacher e-mails were collected from school websites. For those schools that did not provide e-mails via the web, schools were phoned to collect the addresses. Also, patterns were identified in school district e-mails and used to predict a teacher's e-mail address. For instance, many school districts used the teachers first initial and last name to begin their e-mail address and the districts' web address following. As an example John Doe at Fake High School in the Texas Independent School District might have jdoe@texasisd.org as an address. To the extent that these patterns existed, they were utilized.

Each sampled teacher was sent an e-mail that contained a link to the web-based survey. The e-mail gave a brief overview of the survey and noted that those who complete the survey would receive a $30 gift card as a token of appreciation. Lime Survey utilizes a "token" based system where the e-mail to the teacher is linked to a survey specifically for the individual. Upon completion of the survey, the teacher is automatically removed from the pending survey list.

Teachers were also able to start and stop the survey at their leisure, with their prior responses saved for them.

Teachers who had not completed the surveys were sent regular e-mail reminders. Also, due to the possibility of bad e-mail addresses, the teachers were mailed a request to participate, including the web address of the survey. As a final attempt, principals were sent e-mails and letters noting which teachers were sampled, and requesting they indicate their support of the survey to the teachers at their school.

In all, 149 teachers were sampled; 62 educators responded to the survey by the Spring 2008 deadline, for a response rate of 42%. Because many teachers received the survey requests at the end of the school year when their schedules become more hectic than usual, the research team provided the teachers with another opportunity to participate in August 2008. Teachers were e-mailed and sent a hard-copy request to participate. In addition, teachers were sent two e-mail reminders. Eleven teachers took advantage of this extended period, increasing the response rate to 49%.

The surveys were sent to teachers once the research team had access to their school schedules and could adequately sample them. Unfortunately, for a large number of teachers that was late in the school year. Nearly all of the teachers were sampled after May 20, 2008. Not surprisingly, those teachers who were sampled late were much less likely to participate. As the table below indicates, this group had a response rate of 47%, while the teachers sampled earlier had a response rate of 88%.

Exhibit A-5
Response Rate by Sample Date for Teacher Survey

	Sampled Prior to May 20	Sampled After May 20	Total
Total Sampled	**8**	**141**	**149**
Completed in spring 2008	7 (87.5%)	55 (39%)	62 (42%)
Completed in August 2008	0 (0%)	11 (8%)	11 (7%)
Total completed	7 (87.5%)	66 (47%)	73 (49%)
Unduplicated total			*73 (49%)*

Principal Survey Sample and Administration

Each principal of a school that qualified for the student survey was sampled to take a survey detailing the educational environment in the school and the supports available to them. As with the teacher survey, the research team created the web-based instrument using Lime Survey. Principals were initially provided with e-mail invitations using addresses provided by TEA. For those administrators for whom TEA did not have valid e-mail addresses, the research team searched websites for addresses or phoned the school to obtain the proper contact information.

Those principals who did not respond were sent letters requesting participation. Prior to ending the survey, each non-responding principal also was contacted and given the opportunity to take the survey over the phone. Those principals who completed the survey were given a $50 gift card as a token of appreciation. As shown in Exhibit A-6, 10 principals completed the survey, for a response rate of 91%.

Exhibit A-6
Response Rate for Principal Survey

Received Survey	11
Completed	10 (90.9%)

Data Cleaning

The research team utilized technologies that minimize data entry error. For instance, the student surveys were scanned using the Telecom optical scan system. Where Telecom was unable to make a clear determination, the entry was hand checked. The teacher and principal surveys were collected via Lime Survey. This platform ensures that data are directly entered by the individual, greatly reducing the likelihood of data-entry error.

Due to the low number of schools who provided school rosters, the research team asked students to write in which English, math and science course they took and who taught the class. The students' responses were then linked by hand to the rosters used to sample the teacher survey. This process was performed twice, with an initial agreement of 95.1%, the discrepancies in teacher assignment were identified, revisited, and recoded.

In addition, in order to link the student data to the statewide student achievement data provided by TEA, SRI undertook a matching procedure to match each student survey to a unique identifier provided by TEA. This unique identifier would enable us to match individual students to their student achievement data. We began by conducting a matching procedure to match student surveys to TEA data using their name, date of birth, and school. Initially matching by computer produced 418 matches. Where it was not possible to match with the computer (e.g., multiple students with the same name, students with the same name listed in different districts), SRI implemented a hand matching process. Additional matching by hand resulted in 941 total matches (out of a total of 1,021 student surveys).

Survey Analysis

The first analytic step was to run descriptive statistics on school characteristics, classroom attributes, and student experiences to understand how they are manifested in DSRD schools. Second, scales measuring aspects of reform implementation, organizational conditions, and individual teacher and student attitudes and behaviors were created with factor analysis using principle component analysis, which we describe below.

Factor Analysis Procedures

Factor analysis was conducted using data from the principal, teacher and student surveys to create scales from multiple survey items measuring key constructs related to reform and school improvement. Broadly the items fell into the following categories: district and school leadership, organizational structures and practices, normative climate, classroom attributes and student attitudes. Items within surveys considered to capture these constructs were identified and principal component factor analysis was used to refine the choice of items within each individual scale. Analysis used varimax rotation and listwise deletion, and was conducted in SAS.

The reliability, as measured by Cronbach's alpha, and items in each scale are presented in Exhibits A-7, A-8, and A-9 below[37]. When similar constructs were measured across surveys, similar items were used across surveys when possible. In some cases, items were not as highly correlated within particular surveys possibly due to differences in sample sizes and perceptions of respondents. Cross item averages for each observation were taken to create a mean value for each construct to create new variables. These measures are used to characterize DSRD schools as perceived by principals, teachers, and students and in comparison with schools participating in THSP.

Exhibit A-7
Texas High School Project Student Survey Factors

Scales	Survey Items	Reliability (α)
Access to Postsecondary Support and Preparatory Experiences	17g: College entrance exam prep assistance 17h: Career guidance 18b: College tours 18c: Enrollment in college courses (offered on a college campus, online, or at my school) 18d: Job shadowing or visits to observe work sites 18f: Internships	0.74
Access to Academic Supports	17a: One-to-one tutoring 17b: Classes and/or seminars on how to improve academically (e.g., homework strategies, organization, time management) 17d: Academic counseling 17e: Academic remediation 17h: Career guidance 17j: Advanced Placement Strategies (e.g., tutoring, prep sessions, or summer academies supporting your work in AP classes)	0.76
Student Report on Instruction Relevance	6a: Made connections between what I was learning in class to life outside the classroom. 6b: Made connections between what was covered in my class and what I covered in other classes. 6c: Made connections between what was covered in class and what I plan to do in life.	0.77

[37] The factor analysis that was used to create the factors described in these exhibits was based on all THSP schools as well as the schools participating in DSRD. We compared the factor scores for the THSP sample to the larger sample and found only minor differences in the reliability coefficients. The reliability scores presented here are for the initial, larger sample on which the factors were created.

Exhibit A-7 (continued)
Texas High School Project Student Survey Factors

Scales	Survey Items	Reliability (α)
Student Report on Instruction - English Advanced Skills	9d: Used my point of view about something I have read. 9e: Wrote papers and essays. 9f: Proposed an argument and supported it with ideas from books or other readings. 9h: Gathered information on a topic using books or materials other than my text book. 9i: Worked on assignments, reports, or projects that take multiple days to complete.	0.82
Student Report on Instruction - English Basic Skills	9a: Answered factual questions about passages the class has read. 9b: Learned parts of speech or how to diagram sentences. 9c: Edited text for grammar and clarity. 9g: Memorized and recalled literary facts (e.g., literary periods, authors, terms).	0.78
Student Report on Instruction - Math Basic Skills	13a: Watched the teacher demonstrate how to do a procedure or solve a problem. 13g: Took notes from lectures or the textbook. 13h: Completed exercises from a textbook or worksheet.	0.67
Student Report on Instruction - Math Advanced Skills	13c: Applied mathematical concepts to “real world” problems. 13d: Analyzed data to make inferences or draw conclusions. 13e: Explained to the class how I solved a math problem. 13k: Made estimates, predictions, or hypotheses. 13l: Work on projects or reports that take multiple days to complete.	0.79
Student Report on Instruction - Science Basic Skills	16c: Memorized facts. 16f: Found information from graphs and tables. 16h: Watched the teacher demonstrate or lecture.	0.74
Student Report on Instruction - Science Advanced Skills	16b: Wrote up results or prepared presentation from a lab activity, investigation, or experiment. 16d: Generated my own hypotheses. 16e: Used evidence/data to support an argument or hypotheses. 16g: Worked on projects that take multiple days to complete.	0.85
Student Report - Course-taking Requirements	1f: Students in this school are expected to take four years of math in high school. 1g: Students in this school are expected to take more than four years of science in high school. 1h: Students in this school are expected to take more than two years of a foreign language.	0.69

Exhibit A-7 (continued)
Texas High School Project Student Survey Factors

Scales	Survey Items	Reliability (α)
Student Perception of Teacher Expectations for Student Success	1a: The teachers at this school believe that all students in this school can do well. 1b: The teachers at this school have given up on some of their students. 1c: The teachers at this school expect very little from students. 1d: The teachers at this school work hard to make sure that all students are learning. 1j: Teachers at this school only care about smart students.	0.75
Student Perception of Respect Between Students and Adults	2a: Teachers always try to be fair. 2b: Students feel safe & comfortable with teachers. 2c: Teachers treat me with respect. 2d: Teachers can't be trusted. 2e: Teachers care about my opinions 2f: Teachers would be willing to give me extra help. 2h: Teachers care about how I am doing in school. 2i: Teachers are not willing to help students with their personal problems. 2j: Teachers treat some groups of students better/more fairly than others.	0.84
Student Report – Personal Connection with Teachers	3a. During this school year, how often have you… Talked to a teacher about my friends or family. 3b. During this school year, how often have you… Talked to an adult from my school about something important to me in my life outside of school. 3c. During this school year, how often have you… Talked to an adult from my school about classes to take and/or graduation requirements. 3d. During this school year, how often have you… Talked to an adult from my school about college or a career. 3e. During this school year, how often have you… Worked one-on-one with a teacher when I was having difficulty in a class.	0.77
Attitudes of Students' Friends Toward Academics	19a. My friends… Try hard in school. 19b. My friends… Think that it is important to get good grades in school. 19c. My friends… Help each other with school work. 19d. My friends… Believe that they can do well in school. 19e. My friends… Value learning. 19f. My friends… Want to go to college.	0.89

Exhibit A-7 (concluded)
Texas High School Project Student Survey Factors

Scales	Survey Items	Reliability (α)
Student Perception of Peer-Attitudes Towards Academics (English & Math Classes)	11a: Came to class on time. 11b: Attended class regularly. 11c: Came to class prepared with supplies and books. 11d: Regularly paid attention in class. 11e: Talked and shared ideas in class. 11g: Care about what grade they receive in class. 15a: Came to class on time. 15b: Attended class regularly. 15c: Came to class prepared with supplies and books. 15d: Regularly paid attention in class. 15e: Talked and shared ideas in class. 15g: Care about what grade they receive in class.	0.90
Student Attitudes Towards Academic Improvement	7a: Used suggestions from the teacher to change or make my work better. 7b: Kept track of my progress and improvement in class. 7c: Used suggestions from another student to change or make my work better. 7e: Talked to a teacher about what I could do to get better grades.	0.76
Student Attitudes Towards Effort-Based Learning	7f: Began to work harder to improve my grades. 7g: Spent enough time working on a school assignment to understand it really well. 23b: When my schoolwork became difficult I found a way to get help. 23c: I gave extra effort to challenging assignments or projects. 23d: I kept trying to do well on my schoolwork even when it wasn't interesting to me.	0.79
Student Attitudes Towards the Importance of School	22a: Getting good grades is important to me. 22b: I always study for tests 22c: I manage my time well enough to get all of my work done. 22d: High school teaches me valuable skills. 22e: Grades in high school matter for success in college 22f: Working hard in high school matters for success in the work force. 22h: I find my schoolwork interesting. 22i: I generally feel well prepared to complete my schoolwork.	0.86
Parental Involvement	20a: Talked to you about how you are doing in your classes. 20b: Talked to you about what you are studying in class. 20c: Talked to you about your homework assignments.	0.89

Exhibit A-8
Texas High School Project Teacher Survey Factors

Scales	Survey Items	Reliability (α)
Teacher-Reported Distributed School Leadership	Indicate whether you agree or disagree with the following statements about your school. 9a: Teachers are involved in making the important decisions in this school. 9b: Teachers have a lot of informal opportunities to influence what happens. 9c: Teachers are encouraged to express their opinions without fear of criticism or retaliation.	0.89
Teacher-Reported Overall School Leadership	Indicate how effective the school leadership has been at each of the following activities. 8a: Ensuring that the school runs smoothly. 8b: Inspiring the very best in the job performance of all teachers. 8c: Setting high standards for teaching. 8d: Making expectations for meeting instructional goals clear to the staff. 8e: Setting high standards for student learning. 8f: Supporting regular use of student assessment data. 8g: Promoting teachers' ongoing professional development (including the development of teacher professional learning communities). 8h: Identifying and implementing supports for improved student learning. 8i: Providing time and resources for teachers to collaborate and plan together. 8j: Knowing what's going on in my classroom. 8k: Developing and communicating a clear vision for school reform. 8l: Clearly articulating and implementing specific strategies to achieve reform in our school.	0.93

Exhibit A-8 (continued)
Texas High School Project Teacher Survey Factors

Scales	Survey Items	Reliability (α)
Teacher-Reported District Leadership for School Effectiveness	To what extent do you agree or disagree with the following statements about the district office? The district office… 1a: Demonstrates its commitment to high standards for every student. 1b: Supports my school's reform efforts. 1c: Respects school-based decision making. 1d: Promotes the professional development of teachers (including the development of teacher professional learning communities in our school). 1e: Allows high schools the flexibility to choose and adapt new programs and practices. 1f: Seeks input from teachers and listens to their ideas and concerns. 1g: Is committed to high quality in the implementation of its policies, programs, and procedures. 1h: Clearly communicates its priorities. 1i: Has priorities consistent with this school's priorities. 1j: Allocates resources to schools equitably. 1k: Has a clear vision for school reform at my school. 1l: Has developed and implemented strategies to achieve reform at my school.	0.95
Teacher-Reported Access to Professional Development	How often have you done the following during the current academic year? 11a: Created or reflected on individual professional development plans with the assistance of the school leadership (e.g., principal, lead teachers). 11b: Participated in professional development during regularly scheduled time during the school day. 11g: Had opportunities to work productively with teachers from other schools. 11h: Attended professional development activities sponsored by your school/district. 11i: Attended professional development activities provided by an organization other than your school/district.	0.72

Exhibit A-8 (continued)
Texas High School Project Teacher Survey Factors

Scales	Survey Items	Reliability (α)
Teacher-Reported Frequency of Participating in High-Quality Professional Development	How often have you done the following during the current academic year? 11a: Attended professional development that has been sustained and coherent, rather than short term and disconnected. 11d: Attended professional development that has been closely connected to our school's improvement plan. 11e: Attended professional development that has built on your previous knowledge. 11f: Attended subject-matter-specific professional development.	0.86
Teacher-Reported Frequency of Collaboration with Colleagues	Indicate how often most teachers at your school do each of the following activities. 14a: Sharing ideas on teaching. 14b: Discussing what was learned at a workshop or conference. 14c: Sharing and discussing student work. 14d: Discussing beliefs about strategies for teaching and learning. 14e: Sharing and discussing research on effective teaching methods. 14f: Observing each other's classroom instruction. 14g: Planning lessons and units together in a formal meeting structure. 14h: Discussing student assessment data with other teachers to make instructional decisions.	0.89
Teacher-Reported Shared Vision and Common Focus Across School	Indicate the extent to which you agree or disagree with the following statements about your school. 12a: Most teachers in this school do not share a vision common for student learning. 12b: Most teachers in this school share my beliefs and values about what the central mission of the school should be. 12c: Most teachers in this school are committed to developing strong relationships with students. 12d: The school leadership and teachers share beliefs and values about the vision for the school.	0.78
Teacher-Reported Academic Support Offered to Students	Supports provided. . . 40a_a: One-to-one tutoring 40a_b: Academic classes and/or seminars 40a_d: Academic counseling 40a_f: Academic remediation 40a_g: AP Strategies	0.68

Exhibit A-8 (continued)
Texas High School Project Teacher Survey Factors

Scales	Survey Items	Reliability (α)
Teacher-Reported Postsecondary Support and Preparatory experiences	Supports Provided. . . 40a_i: College entrance exam preparation 40a_j: Career guidance 41b: College tours 41c: Enrollment in college courses (offered on a college campus, online, or at your school) 41d: Job shadowing or visits to observe work sites 41f: Internships (work experience or employment)	0.75
Teacher-Reported Climate of High Expectations	To what extent do you agree or disagree with the following statements about your school? 15a: Teachers set high standards for teaching. 15d: Teachers are continually seeking new ideas about teaching and learning in the classroom. 15f: Most teachers work very hard to make sure that all students are learning. 15g: Teachers help students plan for after graduation (e.g., college or employment). 15i Teachers feel that it is part of their job to prepare students to succeed both in high school and after graduation. 16h: Teachers can usually get through to even the most difficult students.	0.82
Teacher-Reported Climate of Respect at School	To what extent do you agree or disagree with the following statements about you school? 16a: Teachers trust and respect one another. 16b: Students treat one another with respect. 16c: The relationship between students and teachers is based on mutual trust and respect. 16d: The teachers, administrators, and other staff model responsible behavior for the students to see. 16i: The principal and other school administrators respect and support the teachers in their work. 17a: Teachers and parents think of each other as partners in educating children. 17b: Parents have confidence in the expertise of the teachers. 17c: Staff at this school work hard to build trusting relationships with parents. 17d: This school makes an effort to reach out to the community. 17e: The community respects the teachers at this school.	0.88

Exhibit A-8 (continued)
Texas High School Project Teacher Survey Factors

Scales	Survey Items	Reliability (α)
Teacher-Reported Familiarity with School's Students	Of the students in your school, please estimate the percentage for whom you know the following. 18a: Their first and last names 18b: Their academic aspirations 18c: Their academic background prior to this year (e.g., whether they were held back a year) 18d: Their home life (e.g., family situations that may affect their learning) 18e: Who their friends are 19f: Their cultural and linguistic backgrounds	0.95
Teacher-Reported Frequency of Interaction with Students Regarding Student Concerns	During this school year, how often have students in your class done each of the following? 19a: Talked to you about their progress in your class. 19b: Talked to you about what they are doing in other classes. 19c: Told you about getting good grades or other academic achievements. 19d: Talked to you about their friends or family. 19e: Asked you for help with personal problems.	0.90
Teacher-Reported Schoolwide Use of Data	To what extent do you use data to do the following? 31a: Help develop a school plan. 31b: Help set schoolwide goals for student achievement. 31i: Compare performance of different groups of students (i.e., race/ethnicity, gender, special education, etc.) 31j: Share information with parents.	0.79
Teacher-Reported Use of Data for Instructional Purposes	To what extent do you use data to do the following? 31c: Set goals for individual student achievement. 31d: Modify instructional strategies. 31e: Select instructional materials. 31f: Track students' academic progress. 31g: Develop individual learning plans for students. 31h: Arrange for remediation, tutoring, or special instruction for students.	0.87

Exhibit A-8 (continued)
Texas High School Project Teacher Survey Factors

Scales	Survey Items	Reliability (α)
Teacher-Reported Supports for Data Use	To what extent do you agree or disagree with the following statements about the support your school provides for using data. 32a: Administrators or other leaders are available to assist teachers with reading and interpreting data. 32b: Instructional coaches, consultants, or mentor teachers are available to assist teachers in making instructional changes based on data. 32c: Professional development is offered to help teachers use data in decision making. 32d: Time is built into the school schedule to analyze and/or discuss data. 32e: Data are provided to teachers in a timely manner. 32f: The school's data system is useful for instructional planning. 32g: School leaders follow up with teachers about instructional or programmatic changes related to data analysis.	0.88
Teacher-Reported Student Engagement in Learning	How many students in your classes do each of the following? 37a: Come to class on time. 37b: Attend class regularly. 37c: Come to class prepared with the appropriate supplies and books. 37d: Regularly pay attention in class. 37e: Actively participate in class activities. 37f: Always turn in their homework. 37g: Take notes. 37h: Care about what grade they receive in this class.	0.88
Teacher-Reported Student Attitudes Toward Academics	To extent do you agree or disagree with the following statements? 38a: Most students do not show interest in their schoolwork. 38b: Most students believe that they can do well in school. 38c: Most students do not value learning. 38d: Most students want to go to college.	0.79

Exhibit A-8 (continued)
Texas High School Project Teacher Survey Factors

Scales	Survey Items	Reliability (α)
Teacher-Reported General Responsiveness to Student Differences	During this school year, how often have you done each of the following: 26a: Encouraged high-achieving students to do additional advanced work. 26b: Attempted to assess students' problem-solving processes, not just answers. 26c: Adjusted instructional strategies to respond to students' levels of understanding. 26d: Modified your lesson to meet students' needs.	0.80
Teacher-Reported Frequency of Teaching Advanced Skills	In an instructional period, how often are students asked to do the following? 24f: Evaluate and defend their ideas or views. 24h: Orally present their work to peers, staff, parents, or others. 24i: Work on multidisciplinary projects. How often are students asked to turn in assignments that require them to do the following? 25a: Use evidence to support their ideas. 25b: Report on or paraphrase a single text. 25c: Clearly state a main thesis or argument. 25d: Demonstrate original thought, ideas, or analysis. 25e: Consider multiple solutions or perspectives. 25f: Synthesize information from multiple sources. 25h: Present their own examples.	0.91
Teacher-Reported Instruction – Math Basic Skills	In a typical class, how often do students do each of the following types of activities? 27a_a: Practicing computations, procedures, or skills. 27a_b: Watching you demonstrate how to do a procedure or solve a problem. 27a_c: Taking notes from lectures or the textbook. 27a_d: Completing exercises from a textbook or a worksheet.	0.76

Exhibit A-8 (continued)
Texas High School Project Teacher Survey Factors

Scales	Survey Items	Reliability (α)
Teacher-Reported Instruction – Math Advanced Skills	In a typical class, how often do students do each of the following types of activities? 27a_e: Presenting or demonstrating solutions to a math problem to the whole class. 27a_f: Using manipulatives (e.g., geometric shapes or algebraic tiles), measurement instruments (e.g., rulers or protractors), or data collection devices. 27a_i: Applying math concepts to "real-world" problems. 27a_j: Making estimates, predictions, or hypotheses. 27a_k: Analyzing data to make inferences or draw conclusions 27a_l: Working on assignments, reports, or projects over an extended period of time.	0.83
Teacher-Reported Instruction – English Basic Skills	In a typical class, how often do students do each of the following types of activities? 27e_a: Answering factual questions about passages they and/or the class has read. 27e_d: Memorizing and recalling literary facts (e.g., literary periods, authors, terms). 27e_f: Learning parts of speech or diagramming sentences. 27e_g: Editing text for grammar and clarity.	0.72
Teacher-Reported Instruction – English Advanced Skills	In a typical class, how often do students do each of the following types of activities? 27e_b: Proposing an argument and supporting it using text references. 27e_c: Debating interpretations of a text. 27e_e: Gathering information on a topic from primary sources (besides the text book). 27e_h: Working on assignments, reports, or projects over an extended period of time. 27e_i: Writing a paper or essay.	0.74
Teacher-Reported Instruction – Science Basic Skills	In a typical class, how often do students do each of the following types of activities? 27b_a: Watching you demonstrate or lecture. 27b_j: Memorizing facts. 27b_k Finding information from graphs or tables.	0.62

Exhibit A-8 (concluded)
Texas High School Project Teacher Survey Factors

Scales	Survey Items	Reliability (α)
Teacher-Reported Instruction – Science Advanced Skills	In a typical class, how often do students do each of the following types of activities? 27b_b: Using probes, computers, calculators or other educational technology to learn science. 27b_e: Making predictions or hypotheses. 27b_f: Doing a laboratory activity, investigation, or experiment. 27b_g: Writing up results or preparing a presentation from a laboratory activity, investigation, experiment, or research project. 27b_h: Working on assignments, reports, or projects over an extended period of time.	0.73
Teacher-Reported Teachers' Responsibility for Student Learning	To what extent do you agree or disagree with the following statements about your school? 15a: Teachers set high standards for teaching. 15b: Teachers make their expectations for meeting instructional goals clear to students. 15c: Teachers carefully track students' academic progress. 15d: Teachers are continually seeking new ideas about teaching and learning in the classroom. 15e: Most teachers believe that all students in this school can do well academically. 15f: Most teachers work very hard to make sure that all students are learning. 15g: Teachers help students plan for after graduation (e.g., college or employment). 15i: Teachers feel that it is part of their job to prepare students to succeed both in high school and after graduation.	0.89

Exhibit A-9
Texas High School Project Principal Survey Factors

Scales	Survey Items	Reliability (α)
Principal-Reported Overall School Leadership	Indicate how effective you have been at each of the following activities. 12a: Ensuring that the school runs smoothly 12b: Inspiring the very best in the job performance of all teachers. 12c: Setting high standards for teaching. 12d: Making clear my expectations of staff for meeting instructional goals. 12e: Setting high standards for student learning. 12f: Supporting regular use of student assessment. 12g: Promoting teachers' ongoing professional development (including the development of teacher professional learning communities). 12h: Identifying and implementing supports for improved student learning. 12i: Providing time and resources for teachers to collaborate and plan together. 12j: Knowing what's going on in the classroom. 12k: Developing and communicating a clear vision for school reform. 12l: Clearly articulating and implementing specific strategies to achieve reform in our school.	0.87
Principal-Reported School Instructional Leadership	How often do you or your instructional leadership team (assistant principals, lead teachers, etc.) perform each of the following functions? 9a: Observe the instruction of individual teachers. 9b: Initiate new instructional improvement activities. 9c: Coordinate or organize specific instructional improvement activities. 9d: Monitor the progress of specific instructional improvement activities 9e: Establish or improve schoolwide or gradewide assessments. 9f: Examine and discuss data on students' academic performance	0.73

Exhibit A-9 (continued)
Texas High School Project Principal Survey Factors

Scales	Survey Items	Reliability (α)
Principal-Reported District Leadership for School Effectiveness	To what extent do you agree or disagree with the following statements about the district office? 1a: Demonstrates its commitment to high standards for every student. 1b: Supports our school's reform efforts. 1c: Respects school-based decision making. 1d: Ensures that student learning is the primary focus in our school. 1e: Promotes the professional development of teachers. 1f: Supports the development of teacher professional learning communities in our school (e.g., administrators and/or teachers working/learning collaboratively). 1g: Allows high schools the flexibility to choose and adapt new programs and practices. 1h: Seeks input from teachers and listens to their ideas and concerns. 1i: Is committed to high quality in the implementation of its policies, programs, and procedures. 1j: Clearly communicates its priorities. 1k: Has priorities consistent with this school's priorities. 1l: Establishes policies and procedures that help address important needs at our school. 1m: Provides the school with an adequate amount of resources for reform efforts. 1n: Allocates resources to schools equitably. 1o: Allows schools flexibility in allocating resources. 1p: Has a clear vision for school reform at our school. 1q: Has developed and clearly articulated a plan to achieve this vision. 1r: Has developed and implemented strategies to achieve this vision.	0.97

Exhibit A-9 (concluded)
Texas High School Project Principal Survey Factors

Scales	Survey Items	Reliability (α)
Principal-Reported Support for Use of Data	To what extent do you agree or disagree with the following statements about the support your school provides for using data? 20a: Administrators or other leaders are available to assist teachers with reading and interpreting data. 20b: Instructional coaches, consultants, or mentor teachers are available to assist teachers in making instructional changes based on data. 20c: Professional development is offered to help teachers use data in decision making. 20d: Time is built into the school schedule to analyze and/or discuss data. 20e: Teachers are provided opportunities to think about the implications of data for instruction. 20f: Data is provided to teachers in a timely manner. 20g: The school's data system is useful for instructional planning. 20h: Teachers are provided opportunities to discuss data with other teachers. 20i: School leaders follow up with teachers about instructional or programmatic changes related to data analysis.	0.92
Principal-Reported Data Use For Instructional Purposes	In general, to what extent do teachers and administrators at your school (including yourself) use data to do the following? 19c: Set goals for individual student achievement. 19d: Select instructional materials. 19g: Place students in particular courses. 19h: Track students' academic progress.	0.78
Principal-Reported Data Use for Program and Teacher Accountability	In general, to what extent do teachers and administrators at your school (including yourself) use data to do the following? 19e: Evaluate curricular or other programs (e.g., link instructional programs to student performance). 19f: Evaluate teachers. 19j: Examine student performance by teacher.	0.83

Exhibit A-9 (concluded)
Texas High School Project Principal Survey Factors

Scales	Survey Items	Reliability (α)
Principal-Reported School-Level Uses of Data	In general, to what extent do teachers and administrators at your school (including yourself) use data to do the following? 19a: Develop a school improvement plan. 19b: Set schoolwide goals for student achievement. 19i: Compare performance of different groups of students (i.e., race/ethnicity, gender, special education, etc.). 19k: Share information with parents.	0.70

Qualitative Methods

Site Visits and Other Interviews

One of the core research activities in the first year of the evaluation was the conduct of site visits at a sample of DSRD schools as well as interviews with a range of district administrators. The site visits were intended to serve a number of purposes—provide in-depth information on how district initiatives supported or hindered schools' reform efforts, identify factors that led to success or posed challenges, and identify patterns for further exploration and examination in coming years of the evaluation. The site visit data complemented the survey data in identifying and examining key themes, as well as generated findings on how implementation transpired on the ground. Site visits were conducted at four DSRD schools in each of the 2007–08 and 2008–09 school years, following a structured set of protocols for interviewing district staff, school staff, and support providers from each of the corresponding partners. Three of the schools from the first year were in the sample the second year. Teachers who participated in site visit interview received $30 gift certificates as a token of appreciation for their participation.

In this section, we describe (1) protocol development—both identification of respondents and development of the instruments, (2) school selection, (3) school contact, (4) school visit procedures, and (5) analytic methods.

Protocol Development

The semistructured protocols used for the site visits featured a common set of questions representing the overall theory of change, plus questions that reflect reform components specific to the elements underlying each model.

Identifying Respondents. Exhibit A-10 lists the types of respondents we interviewed where appropriate.

Exhibit A-10
Sample Respondent Types for Site Visits and Other Interviews

Level	Sample Respondent Types
District	Administrators for: • Curriculum and instruction • Professional development • Assessment • Accountability • High School redesign
School	• Principal/assistant principals • Teachers • Instructional coaches/professional developers • Students
External Intermediaries	As applicable: • Professional development partners/technical assistance providers • Curriculum partners • Community activists

Instrument Development. The common interview topics were keyed to the major components of the THSP theory of change and tailored for DSRD. Tailored questions were developed to address issues specific to reform models. Exhibit A-11 details sample interview and focus group topics by type of respondent.

School Selection

DSRD schools were selected purposefully, one school because it had begun reform implementation a year earlier than the other high schools in the district and might serve as a valuable source of learning about how district office redesign might support reforms. The other three schools were selected to represent a range in performance and student demographics.

Setting Up and Conducting the Visits

All site visitors were trained to ensure data collection consistency. Each visit took approximately 1.5 days on site and involved interviews with a subset of the following respondents: (1) school (e.g., principal and guidance counselor) and district (e.g., superintendent and/or assistant superintendent, administrators for secondary education, assessment and evaluation, and curriculum and instruction) leadership; (2) a sample of at least six teachers, two each from English language arts (ELA), mathematics, and science, and (3) respondents from relevant intermediaries (e.g., school-based instructional coaches or professional developers). The visitors also conducted focus groups with additional teachers in the core subjects in large schools, and with students. In the second year, site visitors conducted brief classroom observations in three classrooms in English, math, and science to get a feel for the learning environment and general school climate. In addition, researchers examined relevant documents such as grant applications, school improvement plans, strategic plans, professional development plans, and formative data reports to supplement the interview data. Each interviewee was

provided with information about the study, had confidentiality procedures explained to them, and was asked to sign a consent form. All interviews and focus groups were digitally recorded to back up the notes taken in real time. All interview and focus groups files were logged and kept in a secure, central repository at SRI.

Within- and Cross-Site Analyses

Analysis occurred both at the within-site level as well as at the cross-site level in order to best understand factors at individual schools as well as factors common across schools and programs participating in DSRD. After each school visit, visitors completed a structured debriefing form for each site. Debriefing forms were developed for each school reform model to include analyses specific to the model. The debriefing forms were organized around analytic categories reflecting key components of the DSRD reforms such as school and district context, school organization, normative climate, classroom attributes, and student experiences. Completing the debriefing forms represented within-site analysis, triangulating across all interviews, focus groups, and documents for that site. All completed debriefing forms were entered into Atlas.ti, a qualitative data software tool. The major topics for the debriefing guide constituted the descriptive codes for sorting qualitative data across cases.

Examining the data by key topics was the first step in cross-site analysis. Researchers determined emerging analytic themes, noting differences in these themes between DSRD, THSP sites, and non-THSP comparison schools.

Exhibit A-11
Sample Core Topics for Site Visit Protocols

Sample Core Topics	District Administrators	Principals	Instructional Coaches/ Professional Developers	Teachers	Students	External Intermediaries
District and External Supports						
Nature of district reform leadership	x	x	x	x		x
District policy supports for and barriers to school-level reform	x	x	x	x		x
Role and effectiveness of the network	x	x	x	x		x
Role and effectiveness of external support providers	x	x	x	x		x
School Organization				x		
Nature of school leadership	x	x	x	x		x
Supports for leadership development	x	x	x	x		x
Nature of and structures for distributed leadership	x	x	x	x		x
Teachers' professional learning needs and professional development supports			x	x		x
Normative Climate						
High expectations, i.e., expectations for achievement and educational attainment		x	x	x	x	x
Personalization, nature of relationships between teachers and students		x		x	x	
Degree of respect, responsibility, and relational trust		x		x		
Professional learning community, nature of collaboration		x	x	x		

Exhibit A-11 (concluded)
Sample Core Topics for Site Visit Protocols

Classroom Attributes						
Curriculum and instruction: changes in rigor		x	x	x	x	x
Curriculum and instruction: attempts to improve relevance to students		x	x	x	x	x
Use of formative assessments and other data to inform instruction		x	x	x		
Student Experiences						
Student engagement in learning, monitoring progress				x	x	
Perceived changes in student engagement in academics		x		x	x	x
Changes in educational aspirations				x	x	
Access to and participation in AP, IB, AVID, college coursework		x		x	x	
Access to and participation in internships/work study		x		x	x	
Reform Progress						
Challenges in implementation, understanding of and implementation fidelity to the school model	x	x	x	x		x
Sustainability of reforms	x	x	x	x		x

Note: This exhibit is for illustrative purposes only. Each respondent was asked about topics applicable to his or her role.

Appendix B

Exhibit B-1
Baseline School Information (2006–07) for DSRD Funded Schools in 2007–08, Their Matched Comparison Schools, and All Non-DRSD Schools in Texas

Mean (SD)	DSRD	Comparison Schools	All Non-DSRD in TX
N of schools	11	66	932
N of Ninth grade students	560.18	635.83	342.67
	(140.10)	(189.52)	(310.11)
School size	1,769.27	1,919.33	1,148.08
	(593.55)	(547.62)	(964.01)
Small (% of schools)	0.00	0.00	0.27
Title I (% of schools)	0.45	0.45	0.48
Student-teacher ratio	15.24	15.69	13.39
	(1.96)	(1.46)	(3.01)
African-American students (%)	15.51	20.08	12.88
	(9.50)	(23.05)	(17.61)
Hispanic students (%)	52.75	46.89	37.36
	(22.57)	(27.41)	(29.92)
Economically disadvantaged students (%)	51.98	49.66	45.64
	(27.20)	(25.80)	(22.38)
Limited English proficiency students (%)	12.55	9.14	4.98
	(10.37)	(9.62)	(6.26)
Special education students (%)	14.87	11.15	12.82
	(4.11)	(3.09)	(4.52)
Mobile students (%)	26.25	23.42	18.78
	(11.36)	(8.33)	(7.15)
Teachers in first year of teaching (%)	9.94	8.19	7.86
	(5.19)	(5.94)	(6.64)
Average years experience of teachers	11.44	11.96	12.56
	(2.18)	(1.87)	(2.40)
Average teacher base salary ($)	44,151.36	47,766.67	44,433.29
	(938.48)	(2,852.86)	(4,189.56)

Exhibit B-1 (continued)
Baseline School Information (2006–07) for DSRD Funded Schools in 2007–08, Their Matched Comparison Schools, and All Non-DRSD Schools in Texas

Mean (SD)	DSRD	Comparison Schools	All Non-DSRD in TX
Achievement Indicators			
Accountability rating (% of schools)			
Academically Acceptable	0.73	0.73	0.82
Academically Unacceptable	0.27	0.27	0.07
Attendance rate (%)	89.51	92.74	94.52
	(4.39)	(1.93)	(1.74)
Ninth-graders passing TAKS reading (%)	77.09	81.52	87.85
	(12.61)	(11.76)	(9.19)
Ninth-graders passing TAKS math (%)	49.91	54.52	61.74
	(21.71)	(19.31)	(17.36)
Students taking SAT or ACT (%)	81.98	83.29	76.94
	(9.90)	(153.11)	(190.95)
SAT/ACT takers scoring better than 1110/24 (%)	29.75	20.38	20.46
	(23.31)	(16.83)	(13.70)
Students graduating with recommended diploma (%)	79.03	78.21	75.12
	(6.80)	(9.12)	(13.88)

Notes. Baseline statistics reflect demographic characteristics in the year prior to implementation. Means and standard deviations are presented for continuous variables. Values reported for dichotomous variables represent the percentages.
Data Sources: Academic Excellence Indicator System (AEIS), TAKS, and PEIMS data for 2005–06.

Appendix C. Results of Student Outcomes Analyses

Exhibit C-1
HLM Results for Ninth-Grade TAKS Math and Reading Achievement
(Nonrepeaters in 77 Schools)

	Math (*N* = 29,723)		Reading (*N* = 29,789)	
Fixed Effects	Coefficient	*SE*	Coefficient	*SE*
Model for school means				
Intercept	-66.66 *	20.03	850.19 *	17.06
DSRD	**16.71 ◊**	**9.40**	**4.10**	**7.77**
Accountability rating - Unacceptable	-18.77 ◊	10.30	-15.63 ◊	8.51
Mobile students (%)	0.24	0.55	-0.47	0.46
Special education students (%)	-0.91	1.10	0.83	0.91
Teachers in first year of teaching (%)	-0.11	0.78	0.96	0.65
Student-level model				
Eighth-grade TAKS reading score	0.04 *	0.01	0.25 *	0.01
Eighth-grade TAKS math score	0.69 *	0.01	0.10 *	0.01
Eighth-grade TAKS science score	0.22 *	0.01	0.11 *	0.01
Eighth-grade TAKS social study score	0.10 *	0.01	0.17 *	0.01
Female	7.76 *	1.52	34.91 *	1.32
African-American	-14.97 *	2.82	-0.28	2.45
Hispanic	-5.92 *	2.19	-2.08	1.90
Asian	45.51 *	4.36	2.61	3.80
Limited English proficiency	12.06 *	3.34	-46.82 *	2.89
Immigrant	27.17 *	10.81	-6.84	9.38
At-risk status	-40.10 *	2.00	-24.85 *	1.74
Economically disadvantaged status	-13.57 *	1.96	-9.56 *	1.70
Random Effects	Variance Component	*SE*	Variance Component	*SE*
School mean	648.31	117.23	439.20	80.16
Student effect	15876.47	130.43	12024.13	98.67

*$p < .05$, ◊$p < .10$.

Exhibit C-2
HLM Results for Ninth-Grade TAKS Math and Reading Achievement
(Repeaters in 75 Schools)

	Math (*N* = 3,324)		Reading (*N* = 3,480)	
Fixed Effects	Coefficient	*SE*	Coefficient	*SE*
Model for school means				
Intercept	1,986.25 *	6.30	2152.70 *	4.90
DSRD	**4.15**	**14.69**	**-11.83**	**11.71**
Accountability rating - Unacceptable	-3.34	14.62	-11.48	11.50
Mobile students (%)	-0.17	0.83	-0.47	0.66
Special education students (%)	-2.89 ◊	1.65	-1.31	1.29
Teachers in first year of teaching (%)	0.40	1.14	0.29	0.89
Student-level model				
Ninth-grade TAKS reading score	0.07 *	0.01	0.16 *	0.01
Ninth-grade TAKS math score	0.18 *	0.01	0.06 *	0.01
Female	-13.81 *	5.35	29.47 *	4.83
African-American	-86.76 *	11.38	-78.08 *	10.12
Hispanic	-40.45 *	9.75	-36.85 *	8.62
Asian	-4.15	30.55	-32.93	26.91
Limited English proficiency	-65.04 *	8.43	-115.97 *	7.56
Immigrant	159.55 *	22.82	61.58 *	21.49
Economically disadvantaged status	-2.52	7.14	-17.04 *	6.45
Random Effects	Variance Component	*SE*	Variance Component	*SE*
School mean	808.80	232.02	389.26	153.54
Student effect	22,729.61	563.84	19644.50	476.65

*$p < .05$. ◊$p < .10$.

Exhibit C-3
HLM Results for Passing Algebra I in Ninth Grade
(31,438 Nonrepeaters in 77 Schools)

Fixed Effects	Coefficient	*SE*
Model for school means		
Intercept	2.73 *	0.09
DSRD	**-0.07**	**0.23**
Accountability rating - Unacceptable	-0.30	0.25
Mobile students (%)	0.04 *	0.01
Special education students (%)	-0.01	0.03
Teachers in first year of teaching (%)	0.04 ◊	0.02
Passing Algebra I before ninth grade (%)	0.02 ◊	0.01
Student-level model		
Eighth-grade TAKS reading score	0.00 *	0.00
Eighth-grade TAKS math score	0.01 *	0.00
Eighth-grade TAKS science score	0.00 *	0.00
Eighth-grade TAKS social study score	0.00 *	0.00
Female	0.49 *	0.04
African-American	0.27 *	0.07
Hispanic	-0.04	0.06
Asian	0.24	0.17
Limited English proficiency	0.53 *	0.07
Immigrant	0.18	0.25
At-risk status	-0.65 *	0.06
Economically disadvantaged status	-0.48 *	0.05

Random effects	Variance Component	*SE*
School mean	0.39	0.07

*$p < .05$. ◊$p < .10$.

Exhibit C-4
HLM Results for Passing Algebra I in Ninth Grade
(5,766 Repeaters in 76 Schools)

Fixed Effects	Coefficient	*SE*
Model for school means		
Intercept	0.92 *	0.10
DSRD	**-0.31**	**0.22**
Accountability rating - Unacceptable	0.28	0.23
Mobile students (%)	0.01	0.01
Special education students (%)	0.03	0.03
Teachers in first year of teaching (%)	0.02	0.02
Passing Algebra I before ninth grade (%)	0.01	0.01
Student-level model		
Ninth-grade TAKS reading score	0.00 *	0.00
Ninth-grade TAKS math score	0.00 *	0.00
Female	0.17 *	0.06
African-American	0.03	0.13
Hispanic	0.01	0.11
Asian	1.00 *	0.40
Limited English proficiency	-0.08	0.10
Immigrant	1.27 *	0.19
Economically disadvantaged status	-0.11	0.08

Random effects	Variance Component	*SE*
School mean	0.27	0.06

*$p < .05$, ◊$p < .10$.

Exhibit C-5
HLM Results for Percentage of Days Absent in Ninth Grade
(31,426 Nonrepeaters in 77 Schools)

Fixed Effects	Coefficient	*SE*
Model for school means		
Intercept	-3.00 *	0.02
DSRD	**0.07**	**0.06**
Accountability rating - Unacceptable	0.07	0.06
Mobile students (%)	0.00	0.00
Special education students (%)	-0.01	0.01
Teachers in first year of teaching (%)	-0.01	0.00
Previous absence rate	-0.07 *	0.02
Student-level model		
Eighth-grade TAKS reading score	0.00 *	0.00
Eighth-grade TAKS math score	0.00 *	0.00
Eighth-grade TAKS science score	0.00 *	0.00
Eighth-grade TAKS social study score	0.00 *	0.00
Female	-0.01	0.02
African-American	-0.29 *	0.04
Hispanic	-0.19 *	0.03
Asian	-0.54 *	0.04
Limited English proficiency	-0.29 *	0.04
Immigrant	-0.18 ◊	0.11
At-risk status	0.17 *	0.03
Economically disadvantaged status	0.25 *	0.02

*$p < .05$, ◊$p < .10$.

Exhibit C-6
HLM Results for Percentage of Days Absent in Ninth Grade
(5,728 Repeaters in 76 Schools)

Fixed Effects	Coefficient	*SE*
Model for school means		
Intercept	-1.72 *	0.05
DSRD	**0.36 ***	**0.08**
Accountability rating - Unacceptable	-0.18	0.14
Mobile students (%)	0.00	0.01
Special education students (%)	0.00	0.01
Teachers in first year of teaching (%)	-0.01	0.00
Previous absence rate	-0.05 *	0.02
Student-level model		
Ninth-grade TAKS reading score	0.00 *	0.00
Ninth-grade TAKS math score	0.00 *	0.00
Female	0.15 *	0.03
African-American	-0.20 *	0.08
Hispanic	-0.10 ◊	0.06
Asian	-0.46 *	0.17
Limited English proficiency	-0.24 *	0.05
Immigrant	-0.93 *	0.13
Economically disadvantaged status	0.08 ◊	0.04

*$p < .05$, ◊$p < .10$.

Exhibit C-7
HLM Results for "Four by Four" on Track in Ninth Grade
(Combine Repeaters and Nonrepeaters: 37,274 students in 77 schools)

Fixed Effects	Coefficient	*SE*
Model for school means		
Intercept	0.10	0.17
DSRD	**0.42**	**0.43**
Accountability rating - Unacceptable	-1.02 *	0.47
Mobile students (%)	0.05 ◊	0.03
Special education students (%)	-0.08	0.05
Teachers in first year of teaching (%)	0.05	0.04
Student-level model		
Repeater	-1.03 *	0.05
Ninth-grade TAKS reading score	0.00 *	0.00
Ninth-grade TAKS math score	0.00 *	0.00
Female	0.33 *	0.03
African-American	0.00	0.05
Hispanic	-0.24 *	0.04
Asian	0.38 *	0.10
Limited English proficiency	0.05	0.05
Immigrant	0.91 *	0.18
At-risk status	-0.84 *	0.03
Economically disadvantaged status	-0.47 *	0.03
Random effects	Variance Component	*SE*
School mean	1.43	0.26

*$p < .05$, ◊$p < .10$.