Texas Study of Students at Risk: Efficacy of Grants Supporting Academic Success from Elementary Through High School

October 2004

Prepared for

Texas Education Agency

Texas Center for Educational Research

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EXECUTIVE SUMMARY

Texas Study of Students at Risk

The Texas Study of Students at Risk (TxSSAR) is a comprehensive evaluation examining the effectiveness of three state-level programs with the common goal of helping students at risk of failure to achieve academically. The study comprises investigations of the Optional Extended Year Program (OEYP), the Texas After School Initiative (TASI), and the Ninth Grade Success Initiative (NGSI), and case studies of districts that received NGSI grants. The evaluation covers a four-year period between the 1999-2000 and 2002-03 school years.

OPTIONAL EXTENDED YEAR PROGRAM

First established by the 73rd Texas Legislature in 1993, the Optional Extended Year Program (OEYP) is a state-funded program with the goal of meeting the needs of elementary and middle school students (kindergarten through grade 8) who are at risk of not being promoted to the next grade level. Non-competitive grants allow districts to provide an extended-year program for up to 30 instructional days for eligible students, with the ultimate goal of reducing retention rates.

PROGRAM ELEMENTS

Characteristics of districts. Between 1999-2000 and 2002-03, the total number of districts receiving OEYP funds was 695, 682, 672, and 684, respectively. The average award actually paid to districts was between $76,000 and $80,000. Paid awards ranged from $317 to over $5,000,000.

Characteristics of students. About 190,000 students participated in the OEYP each year. Participants are distributed across grades 1 through 8, with the largest proportion being third graders. Compared to the state, OEYP served a greater proportion of Hispanic students (about 64%), slightly more African American students (about 18%), and substantially less White students (about 17%). OEYP students were also more likely to be economically disadvantaged (about 79%) and limited English proficient (about 31%).

Program types. About two-thirds of OEYP students participated in an extended-year or intercession program only, whereas about one-fourth only participated in an extended-day program. Across four school years, the prevalence of extended-day and extended-week programs increased, while the emphasis on extended-year or intersession programs decreased.

Program activities. OEYP instructional activities focused most often on reading/language arts and mathematics. Districts mainly focused their professional development opportunities for teachers and staff on instructional strategies and strategies for teaching students at risk. Districts most frequently planned to involve parents through conferences, parent workshops, and various communication strategies. On average, the number of OEYP instructional days available for students declined across four years (from 20 to 15). Intercessions or extended-year programs had the largest number of instructional days (between 19 and 21 days each year).

EFFECT ON STUDENTS

To determine the effectiveness of the OEYP program, we examined OEYP students' attendance and retention rates and performance on state-level assessments.

Attendance. Students' average OEYP attendance rates for four school years (81% to 86%) are considerably lower than their attendance rates during the regular school year (about 96%). Students attended OEYP extended-year and intercession programs at a higher rate (from 86% to 90% of instructional days) than extended-day (54% to 80% of days) or extended-week (62% to 70% of days) programs.

Retention. Districts are using student retention in the early grades as a means to support academic performance. Across four years, about 23% of OEYP first graders, 16% of second graders, and 9% of third graders were retained. In contrast, retention rates for students in grades 4 through 8 were typically less than 5%. Compared to state averages, retention rates for OEYP students in grades 1 to 3 are far higher (about 17, 12, and 6 percentage points, respectively) but only slightly higher for students in grades 4 to 8 (about 2 percentage points). For all grade levels, student retention rates tended to increase across the four OEYP program years.

State-level assessments. Passing rates on state assessments (TAAS reading, math, writing, science, social studies, and all tests) were well below state averages for the four OEYP student cohorts studied. For cohort 1 (1999-2000) and cohort 2 (2000-01) students, TAAS passing rate gains (from the year before to the year after full OEYP participation) exceeded state gains. However, the TAAS to TAKS passing rate gains for cohort 3 students (2001-02) were mostly less than state gains. Thus, the achievement gap between OEYP students and state averages was narrowed for cohorts 1 and 2, but not for cohort 3.

ASSOCIATION BETWEEN PROGRAM ELEMENTS AND STUDENT OUTCOMES

To further explore the association between OEYP student and district characteristics and TAAS reading and mathematics TLI scores, researchers used hierarchical linear modeling (HLM). Separate analyses were conducted using participants in 1999-00 (cohort 1) and 2000-01 (cohort 2). Analyses were also conducted for retention.

Program type. Controlling for important student characteristics (i.e., academic and social background), extended-day participants had higher TAAS reading and mathematics scores than extended-year/intercession participants. Thus, students receiving assistance during the school year may do better academically than those who attend an intercession or summer school after failure.

Instructional days. There was no positive relationship between the instructional days students spend in OEYP (up to 30 instructional days) and TAAS scores. However, for otherwise similar students, *more* instructional days in OEYP decreased the chances of retention for extended-year/intercession participants. This may reflect the fact that successful completion of a fixed number of scheduled days of instruction for extended-year/intercession programs precludes retention. In contrast, for extended-day participants, *fewer* instructional days in OEYP decreased chances of retention. Findings on extended day suggest that students may receive assistance in extended-day programs on an as-needed basis, and students with less need may attend fewer days.

Attendance. A student's school attendance rate was an important predictor of academic performance. School attendance had a stronger influence on TAAS mathematics scores than on TAAS reading scores. In addition, for otherwise similar students, an increase in the school attendance rate decreased the chances of retention.

District. After controlling for student-level characteristics, OEYP students' academic achievement and chance of retention varied significantly by district. This suggests that some districts and schools are more successful in meeting the needs of students in at-risk situations.

Context. Evidence confirms the importance of the school context. Other student-level factors being equal and net of district social context and OEYP expenditures, OEYP students having higher achieving classmates performed better in TAAS reading and mathematics.

Per-pupil expenditure. There was no significant relationship between OEYP dollars spent per pupil and TAAS reading and mathematics scores. Moreover, higher OEYP per-pupil expenditures were associated with a slightly increased chance of student retention. Results suggest that *how* districts use available resources is critically important in improving outcomes for students at risk.

IMPLICATIONS FOR ADDRESSING STUDENTS' NEEDS

Enhancing the academic prospects of at-risk students hinges on overall improvement of learning opportunities in schools and classrooms. Findings reinforce the importance of improving the overall school environment as a means to enhance the learning opportunities of students at risk. Results for "value-added" modeling suggest that some districts and schools are more successful than others in supporting the academic performance of students at risk. Results for this study are consistent with other research citing the importance of the school context (Stringfield & Datnow, 2002; Bitting, Cordero, & Baptiste, 1992; Waxman, 1992).

Efforts directed at improving student attendance during the regular school year may have a greater effect on student achievement than remedial interventions. Results reinforce the importance of school attendance in the academic success of students in at-risk environments. School attendance was an important predictor of performance on state-level assessments, especially mathematics, and attendance was also associated with decreased chances of retention.

Low student attendance in extended-day, -week, and -year programs limits program effectiveness. Findings for four student cohorts suggest that student attendance in OEYP programs was sporadic (ranging from 54% to 90% of instructional days). Moreover, the number of available OEYP instructional days declined from 20 to 15 across four grant years. Thus, it is doubtful that the number of days available and attended is adequate to substantially impact either achievement or retention (e.g., Glass, 2002).

Little is known about the quality of programs funded by OEYP. A review of district proposals revealed that OEYP programs focus primarily on reading and mathematics and many districts use computer-assisted programs to deliver instruction (usually learning systems for basic skill acquisition). Beyond this, there is little available evidence on program quality.

Student retention rates increased across four years, especially for first, second, and third graders. OEYP was unsuccessful in achieving its primary goal—the reduction of student retention. Retention rates for students at risk increased across four years as districts increasingly retained students in first, second, and third grade. Retention also increased slightly for grades 4 to 8 students (about 1 percentage point). Increased retention of at-risk students is troubling in light other studies showing detrimental effects on students (e.g., Nagaoka & Roderick, 2004).

The cost-effectiveness of the OEYP is questionable. Associations between OEYP funding levels and both student achievement and retention suggest there was no significant relationship between OEYP dollars spent per pupil and academic achievement or reduced retention. Findings raise questions about the cost-effectiveness of the initiative statewide.

State-level initiatives aimed at improving instruction and learning for students at risk should be accompanied by evaluations to study program effectiveness. Conducting scientifically rigorous evaluations of statewide initiatives relies on designing and conducting studies at the onset of funding and program implementation. Funding for future initiatives supporting students at risk should be accompanied by resources for program evaluations.

TEXAS AFTER SCHOOL INITIATIVE

In 1999, the Texas Legislature created the Texas After-School Initiative. The program funds after-school programs targeting middle school students, ages 10 to 14, who are at risk of academic failure and/or at-risk of committing juvenile offenses. This study includes 60 districts and 194 campuses receiving both original and continuation TASI funding.

PROGRAM ELEMENTS

Characteristics of districts. TASI programs were more heavily concentrated in larger districts (more than 10,000 students). Smaller districts seldom had TASI programs.

Characteristics of students. During four program years, nearly 102,000 unique students participated in the program (based on an estimated count). TASI programs increased from about 13,000 students (spring 2000) to almost 32,000 (2002-03). Participants included a nearly equal proportion of sixth, seventh, and eighth graders. More than three-fourths of students were Hispanic (about 53%) and African American (22%), and about two-thirds were economically disadvantaged (59%). Approximately 8% of students had repeated one grade, and about 1% had multiple retentions.

Program characteristics. TASI programs addressed student needs by incorporating three components: an academic–based curriculum linked to state standards, a character/citizenship education component, and a plan for parental and/or mentor involvement. Programs typically offered about four instructional days per week, with nearly two program hours each day. The mean number of instructional days varied across years from about 49 to 58. Districts dedicated the greatest percentage of after-school time to the academic-based component (more than 40% of time for three-quarters of programs).

Academic component. Instructional technology was commonly used in the academic component. *Lightspan* was the most frequently used program and general use of technology in academic activities (such as word processing and Internet) was also prevalent. Tutoring was a commonly used strategy throughout the grant period.

Character education/citizenship component. Districts used a combination of commercial programs (*Voyager, ROPES, Character Counts, etc.),* external supports (guest speakers, field trips, community service, etc.), and other activities (athletics, fine arts, etc.) as part of the TASI character education/citizenship component.

Parent and mentor component. Traditional means of communicating with parents (meetings, mail, telephone) and involving parents (training, volunteering) were most commonly used in TASI programs. Mentors most often served as tutors or guest speakers.

EFFECT ON STUDENTS

Core-subject course passing rates. The majority of TASI students (84% to 89%) passed core content-area courses. Course passing rate were slightly lower for mathematics (84% to 86%). Students meeting state Compensatory Education requirements or having other risk factors had lower passing rates (up to 10 percentage points less than more advantaged peers).

Discipline referrals. Nearly one-fifth of TASI students (17% to 20%) had four or more office referrals. A small percentage of students were referred to alternative education programs (about 5%) or juvenile justice programs (less than 1%). Since disciplinary referrals remained relatively stable across program years, there appeared to be no association between TASI and the improvement of student discipline.

Attendance rates. In general, students' attendance rates did not improve over time. However, attendance rates for TASI students during the program year (about 96%) were consistently higher than rates for a comparison group of non-TASI students (about 95%). TASI students who are in grade for the first time have higher attendance rates than students repeating a grade level. Although attendance rates for students repeating a grade level declined over time, a slightly positive change was observed during the program implementation year for three cohorts.

State-level assessments. TASI students had lower TAAS passing rates for both reading and mathematics compared to non-TASI students, but the achievement gap between groups narrowed slightly for three student cohorts. Despite apparent progress, the achievement gap between TASI and non-TASI students increased in both reading and mathematics for students who completed the TAKS assessments (cohort 4). For the small number of students repeating their grade level, the passing rate gap on state-level assessments was narrowed between TASI and non-TASI student cohorts.

Retention. Retention rates for TASI students declined across cohorts (3% to 2.2%), and in cohort 3, TASI students had slightly lower retention rates than a comparison group of non-TASI students (2.2% compared to 2.5%). For the small number of students repeating their grade level, across-cohort trends showed that TASI students had slightly lower retention rates (3%, 2.9%, 2.2%) than non-TASI students over time (2.5%, 3%, 2.5%).

ASSOCIATION BETWEEN PROGRAM ELEMENTS AND OUTCOMES

Researchers used hierarchical linear modeling (HLM) to further explore the association between TASI student and district characteristics and academic achievement. Analyses involved participants in 2000-01 (cohort 2) and 2001-02 (cohort 3). Separate analyses were also conducted for retention.

Instructional days. After controlling for the effect of student characteristics (academic and social background), there was no positive relationship between the number of instructional days students spend in TASI (up to 189 days) and TAAS scores. Thus, the academic component was not optimally effective in improving student academic performance. In contrast, *more* instructional days in TASI were associated with a marginally decreased chance of retention for cohort 2 students (2001-02). In general, TASI appears to have had little or no impact on achievement but may have been somewhat effective in reducing student retention.

Attendance. A student's school attendance rate was a significant predictor of academic performance. Higher school attendance rates were associated with higher TAAS reading and mathematics scores. In addition, for otherwise similar students, an increase in a student's school attendance rate decreased the chances of retention.

Per-pupil expenditures. Consistent with findings for the OEYP, there was no significant relationship between TASI dollars per pupil and TAAS reading and mathematics scores. Likewise, there was no significant relationship between dollars per pupil and retention rates.

IMPLICATIONS FOR ADDRESSING STUDENTS' NEEDS

After-school programs, as they are currently designed, appear only marginally successful in improving the academic performance of the majority of student participants. For students in their grade for the first time (the majority of TASI participants), program participation had no discernable relationship to improved school attendance rates and only a modest correlation with increased TAAS scores. Despite some TAAS gains in reading and mathematics, the majority of TASI students lost ground compared to their non-TASI counterparts on the TAKS assessments, especially in mathematics.

After-school programs may provide the greatest benefit for students who have been retained in grade. There was a stronger relationship between TASI participation and both attendance and TAAS scores for students repeating a grade level. A slightly positive change was observed for student attendance during the TASI program year. Moreover, for a small number of students repeating their grade level, the passing rate gap on state assessments was narrowed between TASI and non-TASI students.

Reducing student retention through participation in an after-school program does not necessarily translate into improved academic achievement. Results show that retention rates were slightly reduced for TASI participants across all categories of students. However, simply preventing student retention did not ensure increased knowledge and skills as measured by state assessments.

The cost-effectiveness of after-school programs should be examined more comprehensively. The effectiveness of after-school programs, and especially cost-effectiveness, remains uncertain. Some trends have been revealed, but a more in-depth examination of specific programs is needed in order to understand what programs work, for whom, and under what circumstances.

NINTH GRADE SUCCESS INITIATIVE

From 1999 to 2002, the state appropriated a total of $170 million for the Ninth Grade Success Initiative (NGSI) to support school districts' efforts to help ninth graders stay in school and succeed academically. The goal was to increase graduation rates in Texas public schools by reducing the number of students who were retained in or dropped out of the ninth grade. Funds went toward expanding or enhancing existing programs, or creating new programs to increase academic performance and attendance rates and reduce dropout rates for ninth graders who had not earned—or were unlikely to earn—sufficient credit to advance to tenth grade or eighth graders who were promoted but considered academically at risk. This study involved 226 school districts receiving both original and continuation funding.

PROGRAM ELEMENTS

Characteristics of districts. NGSI district size distributions differ from the state overall, with more than half of grant recipients (58%) either *mid-size* to *very-large* districts (3,001 to more than 25,000 students).

Characteristics of students. During four program years, nearly 390,000 unique students participated in the NGSI (based on an estimated count). Participants increased from 32,535 students (spring 2000) to 106,325 (2002-03). Substantially fewer students participated during summer terms, but enrollments climbed steadily during the grant period (from 19,508 to 31,607).

The majority of NGSI students (80% or more during regular terms) were ninth-grade students at-risk of not earning sufficient credits to advance to tenth grade. About three-fourths of students were either Hispanic (56%) or African American (17% during regular terms and 20% during summer). The majority of students were in the ninth grade for the first time (80% or more). Percentages of newly promoted ninth graders served in NGSI declined across summer terms (from 33% to 9%).

Program characteristics. NGSI programs typically used several activities to serve at-risk ninth graders. Tutoring, instructional technology, individual instruction, group instruction, and counseling were reported most often. During the regular school year, students accrued course credit primarily through regular classroom instruction, but repeat ninth graders were more likely to accrue credit through computer–aided instruction (e.g., PLATO or NovaNET self-paced learning systems).

EFFECT ON STUDENTS

Core-content courses. Passing rates for core subject-area courses remained relatively stable across NGSI grant terms, with about 70% of students passing Algebra I during regular terms and about three-fourths or more of students passing Biology, Integrated Physics and Chemistry (IPC), World Geography, and English I. Course passing rates increased for summer terms (about 80% to 95% passing) but student enrollments decreased substantially. Students in ninth grade for the first time and newly promoted ninth-grade students had higher passing rates for core courses than students who did not earn sufficient credits for promotion.

Attendance. In general, NGSI students' attendance rates did not improve across grant terms. For both NGSI and a comparison group of non-NGSI students, first-time ninth graders had substantially higher attendance rates (about 92% to 96%) than repeat ninth graders (about 83% to 93%). NGSI first-time ninth graders had slightly lower attendance rates than their non-NGSI peers (about 0.5 to 2.0 percentage points). Attendance rates for repeat NGSI ninth graders, however, were typically near or surpassed non-NGSI comparison groups. Attendance rates for both first-time and repeat NGSI students declined across time.

State-level assessments. NGSI students had lower TAAS passing rates for both reading and math compared to non-NGSI students, but the achievement gap between groups narrowed (to 3.7 points in reading and 6.6 points in math). Despite encouraging results for TAAS, the achievement gap widened substantially for students in cohorts 3 and 4 who completed the TAKS (to about 18 percentage points for math). NGSI repeat ninth graders had similar passing rates on state assessments compared to non-NGSI students for both reading and mathematics. However, for both student groups, passing rates declined substantially for TAKS reading and math.

Retention rates. Although NGSI student retention rates remain high (21.8% in 2002-03), evidence for four program years reveals that NGSI retention rates have decreased more than rates for non-NGSI students (-7.7 points compared to -3.3). First-time ninth graders had greater declines in retention rates than non-NGSI students. Hispanic and African American students had the highest retention rates (25% in 2002-03), but both groups had the greatest reductions in retentions across program years (-7.7 and -9.4 points, respectively). Retention rate declines were similar for economically disadvantaged and advantaged students.

ASSOCIATION BETWEEN PROGRAM ELEMENTS AND OUTCOMES

Researchers used hierarchical linear modeling (HLM) to further explore the association between NGSI student and district characteristics and academic achievement. Analyses involved NGSI participants in 2000-01 (cohort 2) and 2001-02 (cohort 3). Separate analyses were also conducted for retention.

Instructional days. After controlling for the effect of student characteristics (academic and social background), there was no positive relationship between the number of days students participated in NGSI and achievement scores on TAAS/TAKS reading/ELA or mathematics assessments. In fact, a negative relationship existed between days and TAAS achievement. In contrast, *more* instructional days in NGSI were associated with a slightly decreased probability of retention for student in both cohorts.

Attendance. Ninth graders' school attendance was an important predictor of academic performance. For otherwise similar students, a student's school attendance rate was positively associated with both TAAS/TAKS reading/ELA and mathematics achievement. Moreover, for both student cohorts an increase in a student's school attendance rate was associated with a decreased chance of retention.

District. After controlling for student-level characteristics, NGSI students' academic achievement varied significantly by district. This suggests that some districts and schools were more successful in meeting the needs of ninth graders.

School context. For students in cohort 2, having higher achieving classmates was associated with a slightly reduced chance of retention. There was also a slightly positive association between the number of NGSI program days offered students and TAAS reading and math scores. Thus, districts that made a larger number of days available for the program had greater success in improving student achievement.

Per-pupil expenditure. Similar to findings for other initiatives, there was no significant relationship between NGSI dollars per pupil and student achievement. However, for NGSI, higher per-pupil expenditures were associated with reduced student retention.

IMPLICATIONS FOR MEETING STUDENTS' NEEDS

Few districts designed programs for newly promoted ninth graders who lacked minimum skills for successful course completion. The majority of students served by NGSI programs were in the ninth grade for the first time (80% or more each term). The percentages of newly promoted ninth graders served in NGSI declined across summer terms (from about 33% to 9%).

African American students were more likely to be enrolled in summer school programs, which typically helped students to recover credits for failed courses, rather than program interventions during regular school terms. The percentage of African American students in NGSI programs increased during summer terms—thus, interventions for those students focused more often on remediation of academic failure rather than proactive efforts to improve success.

Evidence from district NGSI reports shed little light on the identification of effective programs for students at risk. The instructional and learning focus of NGSI programs remains unclear because the majority of districts used multiple approaches. It is impossible to determine the effectiveness of a program when students apparently receive multiple interventions.

Students repeating ninth-grade coursework were more likely to accrue credit through self-paced computer-aided instruction. However, there is little evidence to support program effectiveness. Districts invested a substantial proportion of NGSI grant resources in self-paced instructional systems (e.g., PLATO or NovaNET) in labs for tutorials, credit recovery, or credit accrual for repeat ninth graders. Although most educators view self-paced programs positively, little empirical evidence is available on the effectiveness of programs in addressing the needs of students at risk.

Improved performance in core-subject area coursework is critical to the success of at-risk students. NGSI had no discernable effect on ninth graders' course passing rates for Algebra I, Biology, IPC, World Geography, or English I. About 70% or less of students passed Algebra I each year and about three-fourths of ninth graders passed other courses. Algebra I is a major obstacle for many students, with nearly 30% of first-time and 40% of repeat ninth graders failing algebra.

Poor school attendance jeopardizes the academic success of students at risk. Although improving student attendance was a key goal, results show that NGSI had no positive, sustained effect on ninth graders' school attendance. More importantly, attendance rates for both first-time and repeat ninth graders decline as they progress to higher grade levels. Findings are particularly important because school attendance emerges as a significant predictor of student academic achievement and reduced chances of retention.

Modest accomplishments for the NGSI suggest that the $170 million invested in the initiative did not achieve program goals for students at risk. Findings suggest that, as a whole, the NGSI program was somewhat effective in reducing ninth-grade retention rates but fell short of accomplishing other important goals such as improved attendance and increased academic achievement on state assessments. Moreover, analyses revealed no significant associations between per-pupil expenditures and the academic achievement of students. Per-pupil expenditures were associated with a slightly reduced probability of student retention, but the effect may not justify the cost.

CASE STUDIES OF NGSI GRANTS

Researchers conducted case studies of NGSI grants to gain a greater understanding of issues facing large numbers of at-risk students, many of whom, despite potentially receiving services as early as kindergarten, still reach ninth grade unprepared to succeed academically in high school. Case studies of 11 districts focused on NGSI programs and the broader high school contexts in which they operated.

PROGRAM ELEMENTS

Programs for Newly Promoted Ninth Graders

Few districts offered programs for newly promoted ninth graders who lacked minimum skills for successful course completion. Educators in districts that offered programs believed newly promoted ninth graders who participated in summer programs benefited from reduced class size, active learning, bonding with teachers, and high school orientation. Although educators viewed programs as worthwhile and effective, few students participated and most programs were discontinued.

Programs for First-Time and Repeat Ninth Graders

Districts invested the bulk of NGSI resources in services for ninth graders who were *at-risk of not earning* sufficient credit or had *not earned* sufficient credit to advance to grade 10.

Computer-assisted instruction. Most districts invested a substantial proportion of grant funds in technology for computer-assisted instruction. Instructional technology most frequently included comprehensive programs supporting self-paced credit recovery or skill remediation (e.g., PLATO, NovaNET). A few districts purchased programs for comprehensive coursework or supplemental instruction.

- ***Self-paced credit recovery labs.*** Staffing of self-paced credit recovery labs for at-risk students most often involved one certified teacher who managed coursework in several core-subject areas. One very large district took a more comprehensive approach by establishing Learning Labs with computer- and text-based assignments, instructional support, and social services. Almost all educators and students believed self-paced courseware benefited students by offering alternative means for credit recovery, but learning outcomes for comprehensive services were most promising. Concerns with self-paced learning programs include software quality, TEKS and TAKS alignment, student attendance, recruitment of effective teachers, and whether earned credits reflect content mastery.

- ***Computer-assisted algebra coursework.*** Two districts implemented comprehensive algebra coursework. Most educators viewed *I CAN Learn* (a lab-based computerized algebra curriculum) and *Cognitive Tutor* (a combination of computer- and text-based assignments) positively, believing they helped ensure curricular consistency and improved student algebra performance.

- ***Supplemental computer-assisted instruction***. Computer-assisted instruction in English and math labs appeared to improve learning for some students through clear directions, examples, and help with understanding the basics. Limited access to supplemental instruction and uneven program implementation, however, diminish the potential impact on student achievement.

Extended-day programs. A few districts funded extended-day programs with tutorials or credit recovery opportunities for ninth graders. Students who took advantage of extended-day tutorials apparently benefited, but student participation was a major obstacle. Most students at risk are unlikely to attend extended-day tutorials voluntarily. Examples of successful programs were rare, but better participation was associated with programs that were well organized and scheduled, obtained parent consent and support, used alternative instructional approaches (e.g., computer-assisted learning), and provided transportation.

Extended-year programs (summer school). Nearly all districts used NGSI funds to provide credit recovery opportunities for ninth graders through summer programs. Programs varied by duration, daily schedule, earnable credits, course delivery method, and core-subject availability. Summer programs reportedly allowed some students to recover credits, avoid retention, and remain with their peers in tenth grade. Districts face challenges in getting ninth graders to attend summer school, ensuring regular attendance, setting high expectations for student work and behavior, and helping students prepare for subsequent coursework.

Whole-school improvement. Districts seldom used NGSI grants to transform their high schools' approach to serving students at risk. However, a few undertook organizational restructuring, invested in course improvement, or provided teacher professional development.

- ***School-within-a-school.*** Two districts used schools-within-a school to create smaller and more supportive environments in high schools. Ninth-grade teams reportedly strengthened student and teacher support, improved parent communication, increased focus on student progress, and reduced retention. Some educators believe ninth graders are carrying forward organizational habits and responsible behaviors developed in the school-within-a-school.

- **Enhancement of *core-subject courses and professional development*.** Core-subject course enhancement occurred infrequently through NGSI grants. Educators in two districts used computer-assisted instruction to enhance Algebra I coursework for ninth graders. Similarly, professional development was used in only a few districts as a means to improve teaching and learning in core-subject area classrooms.

EFFECT ON STUDENTS

Research design and confounding factors make causal inferences about NGSI effects on the case-study districts impossible; however, data trends across the grant period reveal some increases in student attendance, decreases in retention rates, and improved algebra performance. Despite improvements, student attendance rates are generally less than 95% (*No Child Left Behind* test-participation standard), nearly one-fifth of ninth graders are not promoted, and fewer than half of ninth graders typically passed end-of-course algebra exams.

SCHOOL CONTEXT AND EDUCATIONAL ENVIRONMENT

Each grant program operates within the broader campus and school district as a whole—therefore, to better understand student performance, researchers examined not only the NGSI program but also the school context experienced by ninth graders at risk of failure.

Standards and expectations. In nearly all high schools visited, the Recommended High School Program is currently the default curriculum. Many districts have established more rigorous promotion standards to ensure that ninth graders are prepared for TAKS, and some high schools have toughened student promotion standards. Many high schools now require students to complete six credits rather than five to advance to tenth grade, and some require students to complete core-subject area courses as well.

Structure and organization. Although most high schools retain the traditional grades 9-12 structure, some have created smaller, more supportive units within the high school. Scheduling approaches vary widely, but high schools appear to be shifting from block schedules (90-minute periods) to traditional, single-period schedules (50-minute periods). A few high schools modified their schedules to give extended learning time to ninth graders considered at risk of academic failure, primarily in algebra and English. Two districts created ninth-grade schools with students housed in a separate building near an affiliated senior high school. This configuration reportedly benefits ninth graders by easing crowding (about 800-900 students per school), reducing discipline problems, and creating an environment that allows maximum attention to students' academic and emotional needs

Extra academic assistance. All high schools visited offer extra academic assistance to students considered at risk, but some take a more structured approach. Academic assistance frequently helps students prepare for the state assessment (TAKS), complete assignments, or make-up assignments or excessive absences. Although educators and student participants believe tutorials are helpful, most at-risk students do not attend unless they are required. Barriers to participation in tutorials include transportation issues, lack of motivation, scheduling difficulties, after-school conflicts, and perceived benefits.

Guidance and counseling. Guidance and counseling services for students in at-risk situations are limited in many high schools by counselor-to-student ratios that exceed recommended standards. Contacts between at-risk ninth graders' and counselors are limited primarily to the selection of courses or programs; older students are more likely to receive information about jobs and careers, or how to improve academic work. Ninth graders' interactions with counselors on high school plans occur most often in groups rather than individually.

Teachers and teaching. Ninth-grade teachers are fairly experienced, but a substantial proportion (about 40%) comes to teaching through non-traditional certification. Educators raise concerns about the assignment of new and inexperienced teachers to ninth-grade courses.

- ***Perceptions of effective Instruction.*** Beliefs about teaching practices vary widely among high school teachers, with some advocating learner-centered approaches and others favoring traditional methods. Students who are at risk say *good teachers* provide clear explanations, encourage active and meaningful learning, make class interesting, establish personal relationships, use small-group activities, and offer individual help. Both teachers and students advocate active and meaningful learning experiences, varied (or interesting) instructional approaches, and positive interpersonal relationships.

- ***Teachers' classroom practices.*** Teachers expressed opinions on effective instruction, as cited above, differ from observed practice. High school classrooms are organized most often for whole-class instruction. Students seldom work collaboratively with peers. Teachers spend the greatest proportion of class time providing whole-group instruction and monitoring students as they work independently on assignments. Teachers seldom ask mentally challenging questions or questions that help at-risk students see the relevance of subject matter to their lives. Since teachers have little access to technology in classrooms, it is seldom used to support instruction and learning.

Students and learning. Students considered at risk spend the greatest part of their time listening to teacher presentations or independently completing short-answer activities or worksheets. Most class discussions are teacher controlled question and answer exchanges. Overall, observed practices raise questions about teachers' understanding of students as learners, especially research-based conceptions (e.g., Bransford, Brown, & Cocking, 2002).

- ***Disengagement from high school and learning.*** Evidence from various sources points to at-risk students' disengagement. Poor attendance, lack of motivation, disruptive behavior, irresponsibility regarding homework and grades are all symptoms of larger problems. Findings throughout this study point to such issues as: boring and repetitive instruction that fails to engage students intellectually; limited use of technology in classrooms to support engaged learning; expectations to attend tutorials outside the school day; repeated course failure, which narrows educational choices and opportunities; and poor access to advisement to help students set goals and see how current investments in learning yield future benefits.

IMPLICATIONS FOR GRANT AWARDS AND MANAGEMENT

Recommendations concerning grant management typically related to the timing of grant awards and funding. Many grantees appreciated efforts in later terms to streamline the evaluation process. Findings to follow relate to grant development, implementation and monitoring, and sustainability.

Grant development. Grant applications should put greater emphasis on identifying problems, determining the root causes, and articulating how the project will alleviate those problems. NGSI grant development primarily involved campus and district administrators. Future grant applications should be informed by the thinking of various stakeholders, with greater input from faculty, staff, and even parents and students. Grant programs for students at risk should also be aligned with curricular and learning expectations in regular classrooms. The establishment of separate or dual curricula for at-risk students in several NGSI schools conflicts with research demonstrating the harmful effects of tracking low-performing students (Oakes, 1985; Wheelock, 1992). Guidelines for grants should also lead districts and campuses to adopt research-based practices—thus, applicants should have access to research-based information on effective instruction and school improvement. Most importantly, grants aimed at improving learning and academic performance of at-risk students should include substantial investments in professional development, especially for classroom teachers.

Grant Implementation and monitoring. Grants should require or strongly encourage the addition of dedicated program leaders. Schools with dedicated program management at both the district and campus level appeared to have the greatest success implementing and continuing their grants. Major program changes made during the grant should also require TEA approval. Grant awardees should also have access to external technical support, assistance, and formative evaluation. Technical assistance by external providers or agency staff broadens the pool of knowledge from which schools and districts can draw.

Grant sustainability. Staff and administrator turnover undermined consistent grant implementation and had a negative impact on the continuation of NGSI programs; thus, districts should have a contingency plan to address changes in grant leadership. More widespread support for grant development and implementation will help to alleviate the void left when key project leaders leave a school or district.

CHAPTER 1

INTRODUCTION AND METHODOLOGY

INTRODUCTION

This report presents findings from a comprehensive evaluation—conducted by the Texas Center for Educational Research for the Texas Education Agency—examining the effectiveness of three state-level programs with the common goal of helping students at risk of failure to achieve academically. The Texas Study of Students at Risk (TxSSAR) comprises investigations of the Optional Extended Year Program, the Texas After School Initiative, and the Ninth Grade Success Initiative. Through a comprehensive evaluation (covering a four-year period between the 1999-2000 and 2002-03 school years), researchers explored ways in which state initiatives supported the academic success of at-risk students throughout their school careers. A brief summary of each program is presented below.

Texas Study of Students at Risk

Optional Extended Year Program. First established by the 73rd Texas Legislature in 1993, the Optional Extended Year Program (OEYP) is a state-funded program aimed at meeting the needs of elementary and middle school students (grades K-8) who are at risk of not being promoted to the next grade level[1]. Funds allow districts to provide an extended-year program for up to 30 instructional days for eligible students, with the ultimate goal of reducing grade retention rates. Eligible students are those who are not likely to be promoted to the next grade level because they fail to meet district academic standards. During the four-year period evaluated, $191 million was provided to roughly 700 school districts.

Texas After School Initiative. The Texas After School Initiative (TASI) for Middle Schools is a state initiative primarily designed to serve middle-school students (ages 10-14) at risk of academic failure and/or at risk of committing juvenile offenses. TASI funded after-school programs to accomplish three goals: (1) increase academic performance for participating students; (2) reduce referrals to the juvenile justice system; and (3) increase involvement of parents and/or mentors. Altogether, $36 million was allocated for TASI programs in 60 school districts.

Ninth Grade Success Initiative. Under the Basic Skills Program for High School Students created by the 76th Texas Legislature in 1999 and renewed in 2001, the state allocated $170 million to support school districts' efforts to help ninth graders stay in school and succeed academically. The program, known as the Ninth Grade Success Initiative (NGSI), aimed to increase graduation rates in Texas public schools by reducing the number of students who either dropped out or were retained in ninth grade. Funded programs were to emphasize basic skills in core curricular areas and provide targeted students with opportunities to build credits toward graduation. Targeted students included eighth graders who were advancing to ninth grade but were considered at risk academically, and ninth graders who had not earned—or were unlikely to earn—sufficient credit to advance to tenth grade and who failed to meet minimum skill levels.

Funded programs were expected to achieve four major objectives: (1) decrease the ninth-grade retention rate; (2) reduce the number of ninth-grade dropouts; (3) increase ninth-grade attendance rates; and (4) support successful performance on the state's assessments—including the exit-level Texas Assessment of Academic Skills (TAAS) and its replacement, the Texas Assessment of Knowledge and Skills (TAKS).

[1] In 2003, the 78th Legislature increased the range of the OEYP to serve grades K-12. Results for the 2003-04 school year are beyond the scope of this evaluation.

Study Approach

This report provides detailed findings on the implementation and outcomes for all three programs, with information on services for at-risk students beginning in the primary grades (OEYP) and extending through middle school (TASI) and into high school (NGSI). A companion report—*Texas Study of Students at Risk: Case Studies of Initiatives Supporting Ninth Graders' Success*—provides detailed findings from intensive case studies for 11 of 226 districts that received NGSI funding between the 1999-2000 and 2002-03 school years. Conclusions and implications from NGSI case studies, which are included in this report, provide a greater understanding of issues facing large numbers of at-risk students, many of whom, despite potentially receiving services as early as kindergarten, still reach ninth grade unprepared to succeed academically in high school. Many of these students end up repeating ninth-grade coursework or dropping out of school.

Purpose of the Evaluation

The overarching evaluation purpose was to assess the effective use of NGSI, TASI, and OEYP funds to improve student learning for targeted students. Evaluators aimed to determine what activities districts implemented to support students at risk, how funds supported student success, how activities can be sustained, and what models for best practice exist in projects. The study was guided by a theory of change model that identified pre-existing contextual factors that might influence project implementation and outcomes, program elements for projects, assumptions relevant to each program element, and measurable intermediate and long-term outcomes expected from initiatives. (See Theory of Change Model in Appendix A.) The model provided a framework to answer six broad research questions:

- What are the characteristics of districts and students receiving grants,
- How did grant resources supplement existing educational programs,
- What is the effect of grant resources on targeted students,
- What program elements are associated with student outcomes,
- What best practices relative to grant projects exist, and
- What are the implications for addressing the needs of students at risk?

This comprehensive report presents available information relative to the research questions for each of the state initiatives. Researchers have collected information from grant recipients to gain a basic overview of project participants and activities. In addition to basic descriptive information on project activities, we conducted analyses to link available programmatic data to outcome measures in an attempt to understand how and why projects and activities succeed, for whom, and in what circumstances. The study employed both quantitative and qualitative methods to examine projects across four implementation years (1999-00, 2000-01, 2001-02, and 2002-03).

Organization of the Report

Report findings are organized for each initiative around the primary research questions related to the effective use of grant resources and the assessment of progress toward project goals. Specifically, results are presented for the OEYP, TASI, NGSI, and NGSI case studies:

- *Chapter 1—Introduction and Methodology* provides an overview of the evaluation purpose and approach. In particular, general information is provided on data sources and data collection procedures. More specific methodological procedures are detailed in individual program chapters.
- *Chapter 2—Optional Extended Year Program (OEYP)* provides an introduction to the OEYP, a brief review of research on extended-year programs, descriptive information relative to OEYP grantees and their students and the OEYP program, findings on student outcomes, and main conclusions and implications regarding the OEYP.

- *Chapter 3—Texas After School Initiative (TASI)* includes an introduction to the TASI, a brief review of research on after-school programs, descriptive information relative to TASI grantees and their students and TASI program activities, findings on student outcomes, and main conclusions and implications regarding the TASI.
- *Chapter 4—Ninth Grade Success Initiative (NGSI)* presents an introduction to the NGSI, a brief review of research on the ninth-grade problem, descriptive information relative to NGSI grantees and their students and NGSI program activities, findings on student outcomes, and main conclusions and implications regarding the NGSI.
- *Chapter 5—Conclusions and Implications from Case Studies of Initiatives Supporting Ninth Graders' Success* offers findings organized around four areas: the NGSI program and existing best practices, evidence on the effect of grant resources on students, support for students at risk within the school context and educational environment, and recommendations for grant awards and management.

METHODOLOGY

Data Sources

OEYP program reports from PEIMS. Beginning in 1999-2000, districts receiving OEYP funds were required to submit student-level information regarding their extended-year programs to the Public Education Information Management System (PEIMS). For each student in the OEYP, the district submits data regarding: (a) student grade level; (b) the type of extended-year program (extended day, extended week, etc.); (c) the number of instructional days of the program; (d) the number of days absent and present; and (e) the promotion status of the student. For this report, OEYP records from PEIMS have been merged with TEA-provided demographic data and Texas Assessment of Academic Skills (TAAS) and Texas Assessment of Knowledge and Skills (TAKS) scores. In addition, researchers reviewed a sample of district OEYP grant proposals.

TASI and NGSI program and activity reports. TASI and NGSI grant recipients were required to submit program and activity reports to the TEA after each semester in which they served targeted students. Across four program years (1999-00 through 2002-03), districts were asked to submit two reports after each semester in which they served students. For TASI, the program report requested district-level information, such as general program information; activities supporting the academics-based, character/citizenship, and parent/mentor involvement components of TASI; staff participation and volunteer involvement; professional development; information dissemination; and district opinions regarding the most successful components. NGSI program reports requested district-level information, such as general program information, activities supporting credit recovery and basic skills, dissemination activities, staff participation and involvement, professional development, and district opinions regarding the most successful components. Procedures used to collect data on program reports were altered during spring 2003, and many data elements available in earlier terms were not collected during this term.

In addition to the program reports, districts also submitted an activity report each semester with student-level data. Activity reports for TASI provided information for each program participant in seven areas: student demographics, student eligibility, retention, program attendance, additional activities, discipline referrals, and student performance. NGSI activity reports provided information in six areas for each participant: student demographic information, student eligibility, school attendance, retention and promotion, activities engaged in, and student performance. As with the program report, all information was self-reported. During the course of the program terms, activity report format changes also resulted in some data discontinuity.

Student demographic and performance data. Researchers also gathered student-level data from the Texas Public Education Information Management System (PEIMS) and the Texas Academic Excellence Indicator System (AEIS). Student-level data supplied by participating school districts' activity reports were matched to PEIMS and AEIS data to create a set of master databases. Elements in the databases included student demographic information, such as ethnicity, gender, limited English proficiency (LEP) status, and grade level; Texas Assessment of Academic Skills (TAAS) and Texas Assessment of Knowledge and Skills (TAKS) scores, and attendance and promotion rates.

Case studies of NGSI grants. Researchers also conducted case studies of a purposeful sample of NGSI grants to gain a greater understanding of issues facing students at risk. Although the original intent was to examine existing interrelationships among the three state-level funding streams for students at risk, it became evident early on that, in almost all cases, grants operated independently. Thus, case studies focused on NGSI projects and the broader high school contexts in which they operated. We conducted intensive studies of 11 of 226 districts that received NGSI funding between 1999-00 and 2002-03. In addition to NGSI funds, districts also benefited from OEYP or TASI funding, or both. Teams of two to three researchers visited each site between October 2003 and February 2004. Site visits included structured interviews, focus groups, surveys, and classroom observations designed to collect information about the study's primary research questions. Students participating in focus groups also completed a brief questionnaire assessing their views on the school environment and plans for the future. A conceptual framework, formulated through a review of program objectives and recent research literature on recommended improvements in the nation's high schools (e.g., American Youth Policy Forum, 2000; High Schools that Work—Frome, 2001; NASSP, 1996/2003) provided the framework for the study.

CHAPTER 2

OPTIONAL EXTENDED YEAR PROGRAM (OEYP)

INTRODUCTION

First established by the 73rd Texas Legislature in 1993, the Optional Extended Year Program (OEYP) is a state-funded program with the goal of meeting the needs of elementary and middle school students who are at-risk of not being promoted to the next grade level. Funds allow districts to provide an extended-year program for up to 30 instructional days for eligible students, with the ultimate goal of reducing retention rates. Eligible students are those who are likely not to be promoted to the next grade level because they do not meet district academic standards. Originally established to serve first-grade students, legislators expanded the program in 1995 to include grades kindergarten through eight. School districts in which at least 35% of students in kindergarten through grade eight are from economically disadvantaged families are eligible for non-competitive grants to serve students in the OEYP. Districts' level of funding is based on the amount necessary to offer extended-year services to not more than 10% of the at-risk student population in kindergarten through grade eight.

State biennial funding for the program began with a $10 million appropriation by the 73rd legislature in 1993 (Figure 2.1). Subsequently, legislators increased two-year funding to $100 million in 1995, $113 million in 1997, and to $121 million in 1999. The 77th legislature appropriated $116 million in 2001. In 2003, the 78th legislature reduced biennial funding to $33 million and expanded the program to include grades K-12.

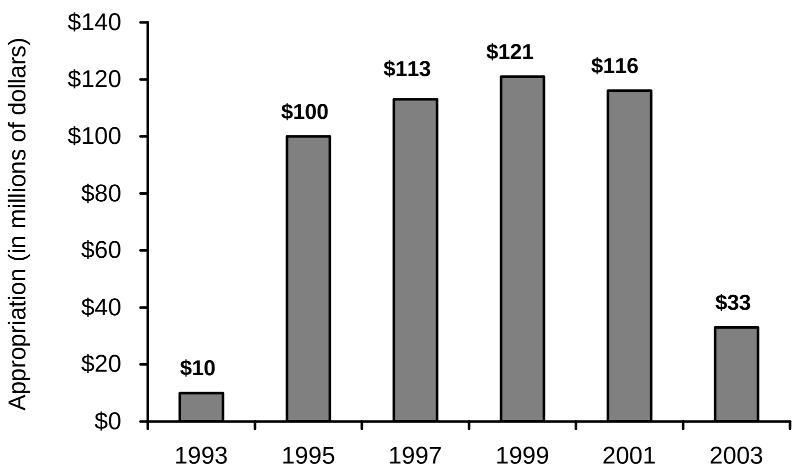

Figure 2.1. State biennial funding for the OEYP, 1993-2003

Organization of the Chapter

Sections to follow include a brief literature review on extended-year programs and an overview of this study's methodology. Additionally, OEYP program findings are presented for the following topics: (a) OEYP grantees and their students; (b) the OEYP program; (c) student outcomes for attendance, retention, and state-level assessments; (d) association of student- and district-level factors with academic achievement; (e) association of student- and district-level factors with retention; and (f) conclusions and implications.

RESEARCH ON EXTENDED-YEAR PROGRAMS

Many states have policies that require extended-year programs or allow them to be provided as district options, with extended-year programs lengthening the traditional school year (Alper & Noie, 1987). Because of their pervasiveness, there is considerable variability in eligibility criteria (e.g., individualized education program objectives, economically disadvantaged students, failing students), delivery options (days and hours of operation), student-teacher ratios, and faculty training requirements for extended-year services (Pinkerton, 1990).

Several studies that have examined the effectiveness of extended-year programs have reported varied results. Heyns's analysis of summer programs for at-risk students in Atlanta schools revealed gains in academic achievement, but at rates considerably slower than during the regular school year. The Extended School Year Program of the Detroit (Michigan) public schools found increased test scores for grade 4, and the majority of parents wanted the program to continue (Green, 1998). However, survey data indicated a decrease in teacher support for the program, and students said that they were not happy with the program. Yet about three-fourths of students and parents believed that the program increased students' skills (Green, 1998). Results were mixed from an Austin, Texas study. While retention rates for extended-year students increased, student participation in the program also increased. Achievement results were positive with middle school students, but not with elementary school students (Washington, 2000).

Other studies have found benefits from extended-year programs. The reading and mathematics performance of New York City schools with and without extended time was compared. Students in extended-time schools improved at a greater rate on reading and mathematics assessments than did students in non-extended-time schools. (New York City Board of Education, 2000). In addition, extended-year programs may have a positive influence on kindergarteners. Frazier and Morrison (1998) found that extended-year attendees outperformed traditional-year students in mathematics, reading, and general knowledge and had higher perceived cognitive competence. A synthesis of extended-year programs listed outcomes realized by school districts (Sheane et al., 1994). These included decreased dropout rates, improved student achievement test scores, expanded extracurricular activities, reduced discipline problems, increased teacher/student employment opportunities, improved parent satisfaction, increased re-entry opportunities for at-risk students, and reduced taxpayer burdens. A paper by Worthen and Zsiray (1994) concluded that students in year-round and extended-year programs will maintain or improve their academic achievement, exhibit better attitudes toward school, improve their overall attendance, and drop out of school less often.

Two studies asserted that successful extended-year programs require specific conditions. A meta-analysis of evaluations of summer programs found that student scores increased by an average of two-tenths of a standard deviation (Cooper, 2001). However, Cooper (2001) stated that summer programs are most effective if specific skills are taught that match what is tested. He also maintained that (a) middle-class students learn more than disadvantaged students, (b) mandatory summer school is more effective than voluntary summer school, and (c) factors like parent and community involvement as well as class size can influence the effectiveness of a summer program. A Southern Regional Education Board report (Denton, 2002) recommended effective summer school programs for failing students. The report stated that 76% of over 75,000 failing students in North Carolina were promoted after attending summer school. None of over 165,000 failing students who did not attend summer school was promoted. Denton (2002) also pointed out that certain factors are needed to facilitate an effective summer program. These include (a) high-quality teachers, (b) adequate funding, (c) a focus on reading and mathematics, (d) a climate of innovation and creativity, and (e) a plan to evaluate program results.

Glass (2002) has extensively studied allocation and duration of schooling. He found that small increases (10-15%) in time for schooling resulted in no significant achievement gains. Alternative ways of offering the 180 days of schooling (e.g., year-round) also showed no increased benefits for student learning over the traditional 9-month calendar (Glass, 2002). Regarding summer school programs, Glass (2002) stated that “there is no reason *not* to expect – but little research to support – that three months of summer school would result in the same rate of academic progress as any three months of the traditional academic calendar.” He cogently concluded, “The productivity of the schools is not a matter of the time allocated to them as much as it is a matter of how they use the time they already have.”

These research efforts indicate that there is much variability in the structure and success of extended-year programs. However, given the correct set of facilitating conditions, extended-year programs may be able to boost student achievement, improve attitudes toward school, and result in more students staying in school.

METHODOLOGY

The purpose of this evaluation is to assess the effective use of OEYP funds to improve student learning for targeted students. Beginning in 1999-2000, districts receiving OEYP funds were required to submit student-level information regarding their extended-year programs to the Public Education Information Management System (PEIMS). For each student in the OEYP, the district submits data regarding: (a) student grade level; (b) the type of extended-year program (extended day, extended week, etc.); (c) the number of instructional days of the program; (d) the number of days absent and present; and (e) the promotion status of the student. For this report, OEYP records from PEIMS have been merged with TEA-provided demographic data and Texas Assessment of Academic Skills (TAAS) and Texas Assessment of Knowledge and Skills (TAKS) scores. While the analysis primarily used quantitative methods, selected document reviews were also utilized.

Data sources included the following:

- OEYP data such as students served and retention and promotion status (from end-of-year district-submitted program evaluation reports, PEIMS);
- Individual student data including TAAS and TAKS scores provided by TEA;
- AEIS data files for supplementation and comparisons; and
- OEYP district grant proposals.

OEYP data were summarized to show the characteristics of participating districts and students, the types of OEYP programs, and student participation across years. Student outcomes like retention rates and achievement on state-level assessments were tabulated and analyzed. For better understanding, program outcomes were broken down by relevant categorical variables, and student- and district-level factors associated with achievement and retention were explored.

OEYP GRANTEES AND THEIR STUDENTS

This section presents findings on the characteristics of districts receiving OEYP grants and the amount of awards paid to districts as well as the characteristics of students participating in the OEYP.

Location of Districts Receiving Grants

➢ **OEYP grantees were distributed across all of the ESC regions.**

Table 2.1 shows that the largest percentage of grantees was from Education Service Center (ESC) 7, the Kilgore region of East Texas. Other ESC regions with larger percentages of grantees included 6 (Huntsville), 12 (Waco), 17 (Lubbock), and 20 (San Antonio). ESC regions with smaller percentages of grantees included 5 (Beaumont) and 19 (El Paso). Note that the distribution of grantees parallels the distribution of districts across ESC regions throughout Texas.

Table 2.1. Percentage of OEYP Grantees by ESC Region

ESC Region	ESC Location	Percent of All Districts	Cohort 1 1999-00	Cohort 2 2000-01	Cohort 3 2001-02	Cohort 4 2002-03
1	Edinburg	4.1	5.2	5.3	5.4	5.0
2	Corpus Christi	3.9	5.0	4.8	5.2	5.3
3	Victoria	3.3	4.2	4.1	3.7	3.9
4	Houston	8.3	5.3	5.1	5.2	5.1
5	Beaumont	2.9	1.9	2.2	2.2	2.6
6	Huntsville	4.9	6.0	6.2	6.4	6.7
7	Kilgore	8.4	10.5	10.1	10.7	10.8
8	Mt. Pleasant	3.9	4.2	4.1	4.2	4.1
9	Wichita Falls	3.3	3.7	4.1	4.0	3.5
10	Richardson	9.2	6.0	5.7	5.4	5.6
11	Ft. Worth	7.2	3.9	4.8	4.5	4.4
12	Waco	7.0	6.6	7.3	7.6	7.0
13	Austin	5.8	4.9	4.7	4.6	4.5
14	Abilene	3.6	4.6	4.4	4.5	4.7
15	San Angelo	3.6	3.9	3.7	3.1	3.9
16	Amarillo	5.3	6.2	5.9	5.4	5.1
17	Lubbock	5.1	6.5	6.3	6.5	6.4
18	Midland	2.9	3.5	3.5	3.6	3.5
19	El Paso	1.3	1.6	1.6	1.8	1.8
20	San Antonio	6.0	6.3	6.0	6.1	6.0

Source: TEA AEIS databases from 1999-00 through 2002-03.
Note. The total number of district grantees for cohorts 1 through 4 were 695, 682, 672, and 684, respectively.

Characteristics of Districts Receiving Grants

- **Nearly half of OEYP districts are *very small* (fewer than 1,000 students). However, compared to the state, fewer districts are *very small* and more are *small* (1,000 to 3,000 students) and *mid-sized* (3,001 to 10,000 students).**

In addition to the nearly half of OEYP districts being categorized as *very small* (Table 2.2), another 25% to 30% fall in the *small* category (enrollments from 1,000 to 3,000). Less than 10% of OEYP districts are *large* (enrollments from 10,001 to 25,000) or *very large* (enrollments more than 25,000). The size category breakdown of OEYP districts roughly parallels that of the state. However, compared to the state, fewer OEYP districts are *very small*, but more are *small* and *mid-size*.

Table 2.2. Percentage of OEYP Grantees by District Size

District Size: Student Enrollment	Percent of All Districts	Cohort 1 1999-00	Cohort 2 2000-01	Cohort 3 2001-02	Cohort 4 2002-03
Very small: Fewer than 1,000	59.6	49.5	47.9	47.2	47.5
Small: 1,000 to 3,000	20.4	27.1	27.6	27.7	26.2
Mid-size: 3,001 to 10,000	12.9	15.1	16.0	16.4	17.3
Large: 10,001 to 25,000	3.8	4.7	4.8	5.1	4.8
Very large: More than 25,000	3.2	3.6	3.7	3.7	4.2

Source: TEA AEIS databases from 1999-00 through 2002-03.
Note. The total number of district grantees for cohorts 1 through 4 were 695, 682, 672, and 684, respectively.

Awards Paid to Districts

- **The average award actually paid to districts was between $76,000 and $80,000. Paid awards ranged from $317 to over $5,000,000 (Table 2.3).**

Table 2.3. Summary Statistics of Awards Paid to Districts by Cohort

Summary Statistic	Cohort 1 1999-00	Cohort 2 2000-01	Cohort 3 2001-02	Cohort 4 2002-03
Mean	$76,197	$79,449	$78,015	$77,458
Median	$13,978	$14,790	$13,735	$13,775
Standard deviation	$273,937	$283,466	$284,097	$275,395
Minimum	$1,845	$1,825	$681	$317
Maximum	$4,177,592	$5,065,576	$4,338,695	$4,136,236

Source: TEA OEYP financial data from 1999-00 through 2002-03.
Note. The total number of awards paid for cohorts 1 through 4 was 696, 672, 661, and 626, respectively. In cohorts 2 through 4, there were 14, 11, and 57 awarded districts, respectively, that were paid $0.

- **Approximately 40% of districts received less than $10,000 for their OEYP program.**

The districts that received less than $10,000 (39% to 42%) correspond with nearly half of OEYP districts having enrollments of less than 1,000 and a minimum allocation per district of $5,500. About 80% of districts were paid less than $50,000, and approximately 10% were paid between $100,000 and $999,999. Only about 1% of districts received $1,000,000 or more (Table 2.4).

Table 2.4. Percentage and Number of Award Payments by Size of Award and Cohort

Size of Award	Cohort 1 1999-00	Cohort 2 2000-01	Cohort 3 2001-02	Cohort 4 2002-03
Less than $10,000	39.4% (274)	40.0% (269)	41.9% (277)	41.5% (260)
Greater than or equal to $10,000 but less than $50,000	38.6% (269)	37.9% (255)	36.8% (243)	36.6% (229)
Greater than or equal to $50,000 but less than $100,000	9.6% (67)	9.5% (64)	9.2% (61)	9.4% (59)
Greater than or equal to $100,000 but less than $1,000,000	11.2% (78)	11.2% (75)	10.7% (71)	11.2% (70)
$1,000,000 or more	1.1% (8)	1.3% (9)	1.4% (9)	1.3% (8)

Source: TEA OEYP financial data from 1999-00 through 2002-03.
Note. Number of districts shown in parentheses.

Characteristics of Students Participating in OEYP

- **About 190,000 students from nearly 700 school districts participated in the OEYP each year.**

In 1999-00, 191,335 students from 695 Texas school districts (58.7% of the 1,183 school districts in the state of Texas) participated in OEYP (Table 2.5). In 2000-01, 187,550 students from 682 districts (56.9% of the districts) participated, in 2001-02, 187,974 students from 672 districts (55.1% of the districts) participated, and in 2002-03, 217,471 students from 684 districts (55.9% of the districts) participated. Participants represented more than half of Texas' approximately 1,200 school districts.

Table 2.5. OEYP Student Cohorts

Cohort	Participation Year	Number of Districts	Number of Students	Percent of Districts
1, 1999-00	1999-2000	695	191,335	58.7
2, 2000-01	2000-01	682	187,550	56.9
3, 2001-02	2001-02	672	187,974	55.1
4, 2002-03	2002-03	684	217,471	55.9

Source: TEA AEIS databases from 1999-00 through 2002-03.

- **OEYP participants are distributed across grades 1 through 8, with the largest proportion being third graders.**

In all four cohorts, students were distributed across grades 1 through 8, although grade 3 had the highest percentage of participants (Table 2.6). Between 1999-2000 and 2002-03, decreasing percentages of students from grades 1 and 2 participated in OEYP.

Table 2.6. Grade Level Classifications for OEYP Student Cohorts

	Cohort 1 1999-2000		Cohort 2 2000-01		Cohort 3 2001-02		Cohort 4 2002-03	
Grade Level	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**
1	25,504	13.3	18,564	9.9	17,060	9.1	17,954	8.3
2	22,865	12.0	20,786	11.1	17,965	9.6	19,297	8.9
3	27,353	14.3	28,886	15.4	31,918	17.0	33,657	15.5
4	24,230	12.7	25,208	13.4	27,590	14.7	32,582	15.0
5	18,771	9.8	19,643	10.5	21,415	11.4	28,982	13.3
6	21,915	11.5	22,429	12.0	22,179	11.8	25,725	11.8
7	21,787	11.4	21,968	11.7	21,319	11.3	25,354	11.7
8	20,497	10.7	22,063	11.8	21,597	11.5	25,236	11.6
Subtotal	182,922	95.6	179,547	95.7	181,043	96.3	208,787	96.0
Grade missing	8,413	4.4	8,003	4.3	6,931	3.7	8,684	4.0
Total	191,335	100.0	187,550	100.0	187,974	100.0	217,471	100.1
No. of districts	695	58.7	682	56.9	672	55.1	684	55.9

Source: Student cohort numbers and percentages were calculated from PEIMS individual student data.
Note. The number of school districts in Texas for years 1999-00 through 2002-03 was 1,183, 1,199, 1,220, and 1,224 respectively.

- **Compared to the state, OEYP served a greater proportion of Hispanic students, slightly more African-American students, and substantially less White students. OEYP students were also more likely to be economically disadvantaged and limited English proficient**.

Tables 2.7a through 2.7d display OEYP demographic information. Compared to the state population of students, the OEYP cohorts had higher percentages of Hispanic students (approximately 64% compared with approximately 40%), slightly more African-American students (approximately 18% compared with 15%), and lower percentages of White students (approximately 17% compared with approximately 42%). OEYP students were also more likely to be economically disadvantaged (approximately 79% compared with approximately 56% across Texas) and limited English proficient (approximately 31% compared with approximately 15% across Texas).

Table 2.7a. Student Demographic Information for OEYP Cohort 1

Student Group	Cohort 1 (1999-00) N Students	Cohort 1 (1999-00) Percent	State Average Percent	Difference
African American	33,637	17.9	14.7	3.2
Hispanic	119,952	63.8	39.4	24.4
White	32,284	17.2	43.7	-26.5
Other	2,161	1.1	2.2	-1.1
Economically disadvantaged	143,379	79.2	55.3	23.9
Special education	22,593	12.5	13.1	-0.6
Limited-English proficient	57,682	31.9	15.0	16.9
ESL	22,826	12.1	13.6	-1.5

Source: Student cohort numbers and percentages were calculated from PEIMS individual student data. State percentages were calculated from the 1999-00 AEIS data files, using only elementary and middle schools.

Table 2.7b. Student Demographic Information For OEYP Cohort 2

Student Group	Cohort 2 (2000-01) N Students	Cohort 2 (2000-01) Percent	State Average Percent	Difference
African American	31,727	17.1	14.6	2.5
Hispanic	120,334	64.8	40.4	24.4
White	31,619	17.0	42.7	-25.7
Other	2,061	1.1	2.3	-1.2
Economically disadvantaged	140,958	79.0	55.4	23.6
Special education	20,979	11.8	13.1	-1.3
Limited-English proficient	55,042	30.8	15.1	15.7
ESL	21,904	11.8	13.7	-1.9

Source: Student cohort numbers and percentages were calculated from PEIMS individual student data. State percentages were calculated from the 2000-01 AEIS data files, using only elementary and middle schools.

Table 2.7c. Student Demographic Information For OEYP Cohort 3

Student Group	Cohort 3 (2001-02) N Students	Cohort 3 (2001-02) Percent	State Average Percent	Difference
African American	33,765	18.0	14.5	3.5
Hispanic	118,816	63.5	41.4	22.1
White	32,502	17.4	41.6	-24.2
Other	2,125	1.1	2.5	-1.4
Economically disadvantaged	143,568	79.2	56.3	22.9
Special education	18,720	10.3	12.5	-2.2
Limited-English proficient	54,211	29.9	15.7	14.2
ESL	21,287	11.4	14.3	-2.9

Source: Student cohort numbers and percentages were calculated from PEIMS individual student data. State percentages were calculated from the 2001-02 AEIS data files, using only elementary and middle schools.

Table 2.7d. Student Demographic Information for OEYP Cohort 4

Student Group	Cohort 4 (2002-03) N Students	Cohort 4 (2002-03) Percent	State Average Percent	Difference
African American	40,639	18.7	14.5	4.2
Hispanic	139,204	64.2	42.3	21.9
White	34,370	15.8	40.6	-24.8
Other	2,641	1.2	2.6	-1.4
Economically disadvantaged	168,833	80.2	57.8	22.4
Special education	19,299	9.2	12.4	-3.2
Limited-English proficient	62,038	29.5	16.1	13.4
ESL	25,436	11.7	14.8	-3.1

Source: Student cohort numbers and percentages were calculated from PEIMS individual student data. State percentages were calculated from the 2002-03 AEIS data files, using only elementary and middle schools.

OEYP PROGRAM

Information to follow describes the types of programs districts implemented with OEYP resources. Data come from reports submitted by all OEYP-funded districts through PEIMS and grant proposals for districts receiving funding during 2002-03 (cohort 4).

OEYP Program Types

- **About two-thirds of OEYP students participated in an extended-year or intercession program only, whereas about one-fourth only participated in an extended-day program.**

Across cohorts, 85% to 90% of OEYP students were served by either an extended-day program *or* an extended-year or intercession program (Table 2.8). About 57% to 71% of OEYP students participated in just an extended-year or intercession program, whereas another 19% to 28% participated in only an extended-day program. Extended-week programs served 6% or less OEYP students, and participation rates for combination program types were less than 10%.

Table 2.8. OEYP Program Type (Percent) by Year

Program Type	Cohort 1 1999-00	Cohort 2 2000-01	Cohort 3 2001-02	Cohort 4 2002-03
Extended day only	19.1	22.8	27.6	28.2
Extended week only	2.9	4.1	5.2	6.0
Extended year or intercession only	70.5	64.6	58.7	57.3
Ext. day, week, & year or intercession	0.8	0.7	0.8	0.4
Extended day & extended week	2.0	1.2	1.4	2.5
Ext. day & ext. year or intercession	3.6	5.8	5.2	4.8
Ext. week & ext. year or intercession	1.1	0.8	1.1	0.9
Total	**100.0**	**100.0**	**100.0**	**100.1**

Source: Program percentages were calculated from individual student data (PEIMS).

➢ **Across four school years, the proportion of districts only implementing extended-day and extended-week programs increased, while the prevalence of extended year or intersession only programs decreased.**

In 1999-00, about one-fifth (19%) of districts implemented extended-day programs only. By 2002-03, more than one-fourth of districts (28%) provided an extended-day program. In contrast, 7 out of 10 districts (71%) implemented an extended-year or intersession program only in 1999-00, but the proportion of districts relying on such programs declined to somewhat more than half (57%) by the 2002-03 school year.

Grade Levels and Content Areas Targeted

Researchers analyzed grant proposals for cohort 4 (2002-03) in detail to determine the grade levels and content areas targeted by districts receiving grants. It was assumed that cohort 4 grant proposals were similar to grant proposals from previous years. Proposed instructional as well as parent involvement activities and professional development opportunities were tabulated from a sample of applications. Specifically, 19 grant applications (3%) were randomly selected from the population of 684 applications. The sample was stratified by district size with nine applications taken from very small districts (fewer than 1,000 students), five from small districts (1,000 to 3,000) districts, three from mid-size districts (3,001 to 10,000), one from large districts (10,001 to 25,000) districts, and one from very large districts (more than 25,000).

➢ **At least one third of the districts served students in grades 1 and 2, whereas nearly half targeted each of grades 3 through 8.**

As Table 2.9 shows, a greater proportion of districts focus OEYP resources on students in upper grade levels. About one third of districts (33% to 35%) targeted students in grades 1 and 2. On the other hand, nearly half (43% to 46% focused on students in the upper grades (3 through 8).

➢ **In district grant applications, mathematics and reading were the most frequently targeted content areas for both elementary and middle school grades.**

Table 2.10 shows that OEYP programs most often targeted mathematics (86%), reading (78%), and English/language arts (56%). Districts also targeted science (39%), social studies (37%), and writing (16%) to a lesser extent. Additional analyses revealed that the distribution of content areas was similar for elementary grades (1 through 5) and middle grades (6 through 8).

Table 2.9 Number and Percent of 2002-03 OEYP Districts Targeting Each Grade Level

Grade Level	Number[a]	Percentage
1	228	33.3
2	245	35.8
3	297	43.4
4	311	45.5
5	316	46.2
6	314	45.9
7	302	44.2
8	299	43.7

Source: TEA Standard Application System OEYP applications for 2002-03.
[a]Total number of cohort 4 districts was 684.

Table 2.10. OEYP Districts Targeting Each Content Area, 2002-03

Content Area	Number[a]	Percentage
Mathematics	585	85.5
Reading	534	78.1
English/Language Arts	380	55.6
Science	267	39.0
Social Studies	255	37.3
Writing	110	16.1

Source: TEA Standard Application System OEYP applications for 2002-03.
[a] Total number of cohort 4 districts was 684.

Proposed Instructional Activities

- **OEYP instructional activities focused most often on reading/language arts (e.g., reading strategies, computer-assisted instruction, TEKS) and mathematics (e.g., computer-assisted instruction, TEKS).**

Districts most frequently proposed OEYP-funded instructional activities for reading/language arts classes than for classes in other content areas (Table 2.11). A variety of reading strategies (e.g., choral reading, concept word maps, guided reading, word walls, thinking maps, word wizard, touch phonics, and phonic awareness) were proposed along with special programs like the New Century integrated instructional system, Reading Recovery, and Saxon Phonics. Computer-assisted instructional programs were frequently put forward for both reading and mathematics instruction. These included Accelerated Reader, the A+nyWhere Learning System, PLATO software, and SuccessMaker. Across all content areas, a common instructional theme was instruction in TEKS-deficient skill areas.

- **Districts mainly focused professional development opportunities on instructional strategies and strategies for teaching students at risk.**

Districts proposed a wide variety of professional development opportunities. About two-thirds proposed training in instructional strategies like integrating technology into instruction, questioning strategies, learning styles, cooperative learning, graphic organizers, and training on interdisciplinary instruction. Effective strategies for teaching students at risk was another popular area for training. Topics in this area included understanding cultural diversity and interventions to reduce failures.

Note that while all of the districts planned professional development, approximately one-third (6 of 19 sampled proposals or 32%) of the districts did not plan on using OEYP funds (Table 2.12). (Across all OEYP-funded districts, 55% proposed professional development funded by OEYP.)

- **Districts most frequently planned to involve parents through conferences, parent workshops, and various communication strategies.**

Numerous and varied parent involvement activities were planned, with parent conferences, parent workshops, general communication strategies, informational meetings, needs assessments (i.e., parent surveys), and home visits most frequently mentioned (Table 2.13). Other planned parent involvement activities included (a) letters and information packets explaining program opportunities, (b) telephone calls seeking input and providing progress reports, (c) developing compacts with parents, and (d) volunteer opportunities.

Table 2.11. Proposed Instructional Activities of OEYP Classes by Subject Area

Activity	Frequency
Reading/Language Arts	
Reading strategies	14
Computer-assisted instruction	9
Instruction in TEKS skill areas	7
Special programs	6
Writer's Workshop, writing process, creative writing, connecting reading/writing	5
Organizational approach (One-on-one, individualized, peer tutoring, small group)	3
Diagnostic/prescriptive instruction	2
Creation of writing samples using books, pictures, personal experience, etc.	2
Mathematics	
Computer assisted instruction	8
Instruction in TEKS skill areas	7
Manipulatives	3
Organizational approach (One-on-one, peer tutoring, group instruction)	3
Critical thinking/problem solving	2
Science	
Instruction in TEKS skill areas	5
Other (measurement, graphs, inferences, discovery, manipulatives, environment)	5
Social Studies	
Instruction in TEKS skill areas	5
Map skills, reference skills, use of timelines	3
Appreciation and study of cultures	2

Source: TEA Standard Application System OEYP applications for 2002-03.

Table 2.12. OEYP Funded Professional Development Opportunities

Professional Development Activity	Frequency
Instructional strategies	12
Effective strategies for students at-risk	9
Training on special programs	3
Using assessments	2
Other (parent involvement, Reading Academy, Training on TEKS)	3

Source: TEA Standard Application System OEYP applications for 2002-03.

Table 2.13. OEYP Parent Involvement Activities

Parent Involvement Activity	Frequency
Conferences with parents at various times throughout the OEYP program	17
Parent workshops	14
Communication strategies	13
General information meeting with parents	7
Survey of parents to determine needs	6
Home visits with parents as needed	5
Progress reports	5
Developing parent compacts	3
Celebration at the end of the extended-year program; student recognition	2
Volunteering	2

Source: TEA Standard Application System OEYP applications for 2002-03.

STUDENT OUTCOMES

This section presents findings on the effect of grant resources on targeted students. To the extent possible, researchers also examine associations between OEYP program elements and student outcomes. We first present results for student participation and attendance and grade-level retention trends. Next, student performance on state-level assessments is compared by student cohort, participation in OEYP across school years, OEYP program type, and OEYP instructional days. Finally, the relationships between OEYP student-level and district-level variables and student academic achievement and grade-level retention are explored using complex statistical models.

Participation and Attendance

- **On average, the number of OEYP instructional days available declined across years, with 20 days in 1999-00, 17 in 2000-01, and 15 in both 2001-02 and 2002-03. Intercessions or extended-year programs had the largest number of instructional days.**
- **Students' OEYP attendance rates (81% to 86%) are considerably lower (Figure 2.2) than their attendance rates during regular school terms (about 96%).**

On average, 20 OEYP instructional days were available to Cohort 1 students, 17 to Cohort 2 students, and 15 to Cohort 3 and cohort 4 students (Table 2.14). OEYP treatments involving intercessions or extended years resulted in the largest number of instructional days. Average rates of attendance for cohorts 1 through 4 were 81%, 85%, 86%, and 86%, respectively. Of the two most typical program types (extended-day only and extended-year or intercession only), participation rates were higher for students in extended year or intercession (from 8 to 33 percentage points higher).

Table 2.14. Mean OEYP Instructional Days, Days Absent, and Days Present by Program Type and Cohort

	Cohort 1 (1999-00)			Cohort 2 (2000-01)			Cohort 3 (2001-02)			Cohort 4 (2002-03)		
Program Type	**Instr. Days**	**Days Present**	**Percent Days Present**	**Instr. Days**	**Days Present**	**Percent Days Present**	**Instr. Days**	**Days Present**	**Percent Days Present**	**Instr. Days**	**Days Present**	**Percent Days Present**
Extended day only	13.0	7.0	53.8	8.5	6.8	80.0	7.8	5.9	75.6	7.4	5.6	79.7
Extended week only	8.2	5.1	62.2	7.3	5.1	69.9	7.0	4.4	62.9	7.4	4.9	68.8
Extended year or intercession only	21.3	18.4	86.4	19.8	17.4	87.9	19.2	17.2	89.6	19.7	17.7	89.9
Ext. day, week, & year or intercession	28.3	20.9	73.9	19.0	13.6	71.6	21.1	18.2	86.3	18.7	16.4	87.0
Extended day & extended week	17.9	10.3	57.5	13.8	7.8	57.4	11.7	8.5	72.6	9.0	6.6	78.5
Ext. day & ext. year or intercession	23.0	18.0	78.3	20.9	14.8	70.8	17.3	14.3	82.7	21.3	18.1	85.2
Ext. week & ext. year or intercession	25.6	19.4	75.8	25.5	21.5	84.3	25.3	21.4	84.6	26.0	22.0	84.2
Total	**19.5**	**15.7**	**80.5**	**16.7**	**14.2**	**85.0**	**15.3**	**13.2**	**86.3**	**15.4**	**13.3**	**86.4**

Source: Mean days were calculated from individual student data.

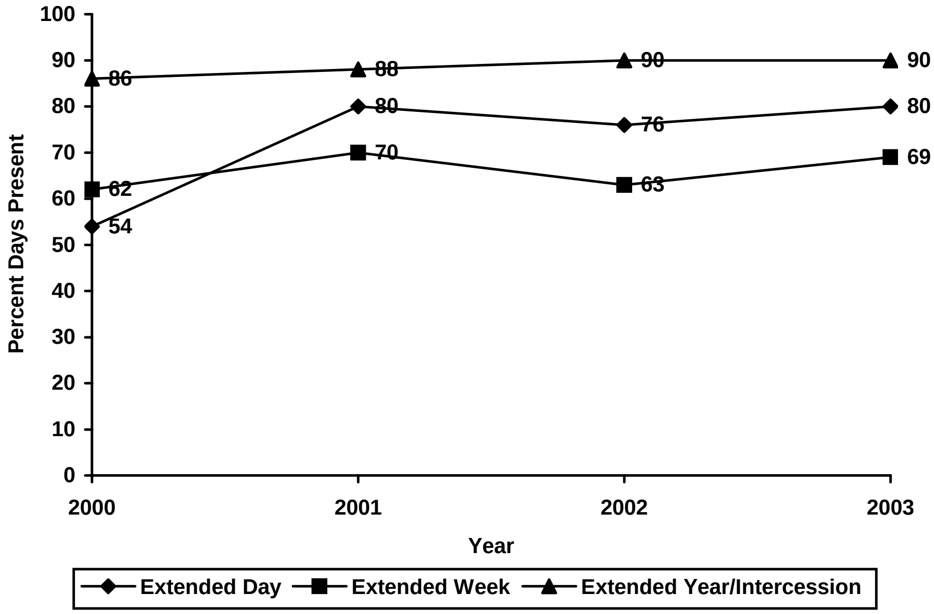

Figure 2.2. **Attendance rates for extended-day, extended week, and extended year/intercession programs, 2000-2003**

- **OEYP students' attendance rates during the regular school year are comparable to state averages, remain relatively stable across years, and exceed OEYP attendance.**

Table 2.15 shows average school attendance rates of OEYP students along with comparable state figures. OEYP students' attendance rates during the regular school year were similar to state rates for 1998-99 through 2001-02.

Table 2.15. Average Attendance Rates (Percent) for OEYP Student Cohorts by Year

Year	Cohort 1 1999-00	Cohort 2 2000-01	Cohort 3 2001-02	Cohort 4 2002-03	State
1998-99	95.7	95.7	95.7	No data	95.4
1999-00	95.7	95.8	95.9	95.9	95.6
2000-01	95.2	95.5	95.8	95.9	95.5
2001-02	94.7	95.2	95.6	95.9	95.6
2002-03	94.0	94.4	95.1	95.7	No data

Source: Student cohort attendance rates were calculated from individual student data. State attendance rates were extracted from AEIS Profile reports.
Note. A shaded cell denotes the OEYP participation year.

Retention

- **Compared to state averages, retention rates of OEYP students are far higher for grades 1 through 3 (about 17, 12, and 6 percentage points, respectively) but only slightly higher for students in grades 4 through 8 (about 2 percentage points).**

Table 2.16 reports retention rates for each OEYP cohort along with state averages. As one might expect, OEYP retention rates within each grade of each cohort were much higher than state retention rates for that school year. Findings suggest that districts are more likely to use retention in the early grades (Figure 2.3) as a means to support student academic performance.

Table 2.16. Percent Retained Students by Grade and Cohort

Grade Level	Cohort 1 (1999-00)		Cohort 2 (2000-01)		Cohort 3 (2001-02)		Cohort 4 (2002-03)	
	OEYP	State	OEYP	State	OEYP	State	OEYP	State[a]
1	18.3	5.9	21.1	5.8	25.5	5.8	25.1	--
2	12.0	3.0	16.4	3.1	17.1	3.5	16.9	--
3	7.1	2.3	9.1	2.2	8.8	2.5	11.0	--
4	4.3	1.2	4.9	1.3	4.5	1.4	5.0	--
5	2.8	0.7	2.5	0.8	2.7	0.8	3.2	--
6	4.2	1.5	3.9	1.6	3.6	1.5	4.6	--
7	4.9	2.9	4.9	2.8	4.6	2.5	5.7	--
8	3.3	2.0	3.2	1.9	2.9	1.9	3.7	--

Sources: Student percentages for cohorts 1, 2, and 3 were calculated from individual student data by comparing current grade with subsequent grade. Student percentages for cohort 4 were calculated from individual PEIMS OEYP promotion retention indicator codes. State non-special education percentages were extracted from AEIS Profile reports.

[a]State-level data were unavailable for 2002-03.

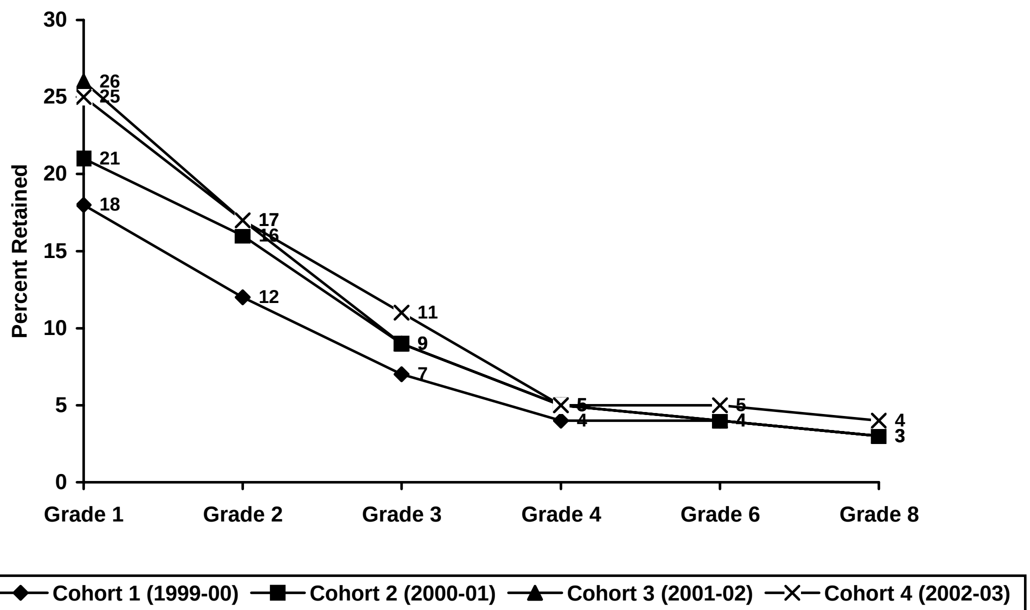

Figure 2.3. Student retention by selected grade and cohort

State-Level Assessments

- **Passing rates for all OEYP student cohorts are well below state averages. For cohorts 1 and 2, TAAS passing rate gains (for the year before to the year after full OEYP participation) exceed state gains, but TAAS-to-TAKS passing rate gains for cohort 3 are mostly less than state gains. Thus, the achievement gap was narrowed for cohorts 1 and 2, but not for cohort 3.**

TAAS passing rates of cohort 1 students (1999-00) were considerably below state passing rates in all subject areas and across all years (Table 2.17a). OEYP deficits ranged from 17 to 30 percentage points in reading, from 13 to 28 percentage points in mathematics, from 19 to 25 percentage points in writing, from 15 to 27 percentage points in science, from 25 to 49 percentage points in social studies, and from 25 to 42 percentage points in all tests taken. OEYP passing rate gains from 1999 (the year prior to OEYP participation) to 2002 were larger than state gains. However, initial OEYP passing rates were much lower than state averages.

Passing rates for cohorts 2 (2000-01) and 3 (2001-02) were also considerably below state passing rates in all subject areas and across all years (Tables 2.17b and 2.17c). Cohort 2 passing rate gains from 2000 (the year prior to OEYP participation) to 2002 were larger than state gains in all content areas except writing. Cohort 3 passing rate gains from 2001 (the year prior to OEYP participation) to 2003 involved comparing TAAS (2001) passing rates with TAKS (2003) passing rates. Noting the different tests, cohort 3 passing rate gains were smaller (larger negative gains) than state gains in reading, mathematics, writing, and all tests taken, and larger in science (smaller negative gain) and social studies.

Table 2.17a. TAAS Passing Rates of Cohort 1 Students by Content Area and Year

	1998-99		OEYP 1999-00		2000-01		2001-02		1999-2002 Change	
Content Area	**OEYP**	**State**	**OEYP**	**State**	**OEYP**	**State**	**OEYP**	**State**	**OEYP**	**State**
Reading	59.3	86.5	57.5	87.4	67.5	88.9	74.8	91.3	15.5	4.8
Mathematics	60.5	85.7	59.8	87.4	73.3	90.2	79.9	92.7	19.4	7.0
Writing	68.4	88.2	63.3	88.2	69.1	87.9	69.2	88.7	0.8	0.5
Science	50.0	87.1	64.2	88.2	75.1	91.8	77.7	93.0	27.7	5.9
Social Studies	21.1	70.1	34.6	71.8	44.3	77.0	58.5	83.7	37.4	13.6
All Tests Taken	**45.0**	**78.3**	**37.9**	**79.9**	**51.6**	**82.1**	**60.5**	**85.3**	**15.5**	**7.0**

Source: TAAS passing rates were calculated from individual student data. State TAAS passing rates were extracted from AEIS Snapshot and Profile reports.
Note. Shaded cells denote the OEYP participation year.

Table 2.17b. TAAS Passing Rates of Cohort 2 Students by Content Area and Year

	1998-99		1999-00		OEYP 2000-01		2001-02		2000-2002 Change	
Content Area	**OEYP**	**State**	**OEYP**	**State**	**OEYP**	**State**	**OEYP**	**State**	**OEYP**	**State**
Reading	62.0	86.5	59.8	87.4	60.8	88.9	72.1	91.3	12.3	3.9
Mathematics	63.1	85.7	61.5	87.4	66.4	90.2	78.3	92.7	16.8	5.3
Writing	69.3	88.2	69.6	88.2	65.0	87.9	67.6	88.7	-2.0	0.5
Science	77.8	87.1	51.3	88.2	72.7	91.8	77.2	93.0	25.9	4.8
Social Studies	48.3	70.1	22.0	71.8	42.2	77.0	57.4	83.7	35.4	11.9
All Tests Taken	**48.4**	**78.3**	**46.1**	**79.9**	**43.2**	**82.1**	**57.7**	**85.3**	**11.6**	**5.4**

Source: TAAS passing rates were calculated from individual student data. State TAAS passing rates were extracted from AEIS Snapshot and Profile reports.
Note. Shaded cells denote the OEYP participation year.

Table 2.17c. TAAS and TAKS Passing Rates of Cohort 3 Students by Content Area and Year

Content Area	1999-00		2000-01		OEYP 2001-02		2002-03 (TAKS)		2001-2003 Change	
	OEYP	State	OEYP	State	OEYP	State	OEYP	State	OEYP	State
Reading	64.4	87.4	64.6	88.9	66.9	91.3	50.7	85.6	-13.9	-3.3
Mathematics	63.6	87.4	69.0	90.2	73.0	92.7	42.2	77.8	-26.8	-12.4
Writing	71.0	88.2	71.6	87.9	64.6	88.7	55.9	86.3	-15.7	-1.6
Science	65.5	88.2	54.0	91.8	76.3	93.0	37.1	70.7	-16.9	-21.1
Social Studies	44.4	71.8	25.3	77.0	55.7	83.7	74.1	90.1	48.8	13.1
All Tests Taken	**50.3**	**79.9**	**52.4**	**82.1**	**50.7**	**85.3**	**27.5**	**67.4**	**-24.9**	**-14.7**

Source: TAAS and TAKS passing rates were calculated from individual student data. State TAAS and TAKS passing rates were extracted from AEIS Snapshot and Profile reports.
Notes. Shaded cells denote the OEYP participation year. TAKS data are for 2002-03, and TAAS data are for prior years.

Passing rates for cohort 4 (2002-03) were also well below state passing rates in almost all subject areas and across all years (Table 2.17d). Note that these data include TAKS passing rates for 2002-03. Cohort 4 TAAS passing rates were generally lower than cohort 3 TAAS passing rates, yet cohort 4 2003 TAKS passing rates were higher than cohort 3 2003 TAKS passing rates. Passing rate gains are not reported for cohort 4 because data from the year following full OEYP participation, 2003-04, were not available.

Table 2.17d. TAAS and TAKS Passing Rates of Cohort 4 Students by Content Area and Year

Content Area	1999-00		2000-01		2001-02		OEYP 2002-03 (TAKS)	
	OEYP	State	OEYP	State	OEYP	State	OEYP	State
Reading	51.5	87.4	56.4	88.9	61.4	91.3	57.0	85.6
Mathematics	49.1	87.4	65.3	90.2	71.7	92.7	52.5	77.8
Writing	62.7	88.2	68.0	87.9	63.6	88.7	64.4	86.3
Science	100.0	88.2	50.0	91.8	55.9	93.0	43.0	70.7
Social Studies	50.0	71.8	100.0	77.0	36.6	83.7	79.9	90.1
All Tests Taken	**31.8**	**79.9**	**44.1**	**82.1**	**50.8**	**85.3**	**36.4**	**67.4**

Sources: TAAS and TAKS passing rates were calculated from individual student data. State TAAS and TAKS passing rates were extracted from AEIS Snapshot and Profile reports.
Notes. Shaded cells denote the OEYP participation year. TAKS data are for 2002-03, and TAAS data are for prior years.

Participation Across Years and Achievement

- **About 60% of OEYP students served in 1999-00 only participated that year, while about 40% participated at least one additional year.**

Of the 191,335 OEYP participants in cohort 1, 60% only participated in 1999-00, 15% participated in both 1999-00 and 2000-01, and 7% participated in both 1999-00 and 2001-02. Only 6% of the cohort 1 students participated in 1999-00 and the two subsequent years, 2000-01 and 2001-02, and only 3% participated in 1999-00 and the three subsequent years, 2000-01, 2001-02, and 2002-03.

Table 2.18. Cohort 1 Student Participation in OEYP Across Years

Years	Number	Percent
1999-00 only	114,615	59.9
1999-00 and 2000-01	28,161	14.7
1999-00 and 2001-02	12,734	6.7
1999-00, 2000-01, and 2001-02	10,603	5.5
1999-00 and 2002-03	9,702	5.1
1999-00, 2001-02, and 2002-03	5,005	2.6
1999-00, 2000-01, and 2002-03	4,927	2.6
1999-00, 2000-01, 2001-02, and 2002-03	5,588	2.9
Total	**191,335**	**100.0**

Source: Numbers and percentages were calculated from PEIMS individual student data. Includes 8,413 Cohort 1 students without valid grade designations.

- **As expected, lower performing students participated in OEYP for multiple years. With some exceptions, Cohort 1 students (1999-00) who participated in OEYP for more years had lower TAAS passing rates than their counterparts who attended fewer years.**

Table 2.19 shows that the highest performing cohort 1 students participated in OEYP only one year, while the lowest performing participated three or four years.

Table 2.19. Cohort 1 TAAS Passing Rates and Retention Rate for 2002 by Student Participation in OEYP

Years	TAAS Reading	TAAS Math	TAAS Writing	TAAS Science	TAAS Social Studies	TAAS All Tests	2002 Retention Rate
1999-00 only	82.9	85.3	75.3	83.0	65.1	68.9	8.4
1999-00 and 2000-01	74.1	80.5	64.5	74.6	54.8	59.9	13.3
1999-00 and 2001-02	64.2	70.3	54.9	72.3	50.2	44.1	5.7
1999-00, 2000-01, and 2001-02	60.7	70.1	51.4	65.7	44.2	42.6	5.5
1999-00 and 2002-03	70.8	78.5	70.3	60.0	35.6	62.0	3.1
1999-00, 2001-02, and 2002-03	55.1	64.3	62.4	35.7	25.0	41.2	4.0
1999-00, 2000-01, and 2002-03	65.2	76.0	62.9	65.3	39.6	56.0	4.6
1999-00 through 2002-03	52.0	64.6	60.3	43.8	52.9	39.8	4.3
All Years	**74.8**	**79.9**	**69.2**	**77.7**	**58.5**	**60.5**	**8.2**

Program Type and Achievement

- **Students who only participated in extended-day or extended-week programs had higher TAAS and TAKS scores and lower retention rates than students enrolled in extended-year or intercession programs.**

Tables 2.20a through 2.20c report 2002 TAAS passing rates and 2002 retention rates for cohorts 1, 2, and 3. Across all cohorts, students who participated in extended-day or extended-week programs had the highest TAAS scores and the lowest retention rates. Students who participated in extended-year/intercession programs had the lowest TAAS scores and the highest retention rates.

Table 2.20d reports 2003 TAKS passing rates and 2003 retention rates for cohort 4. As with the other cohorts, extended-day or extended-week participants had the highest TAKS scores and the lowest retention rates. Extended-year/intercession participants had the lowest TAKS scores and the highest retention rates. Even so, we cannot infer from these data that participation in after-school programs causes improved student achievement or reduced retention. It is plausible that students who only participate in after-school programs may differ from those who are enrolled in extended-year programs or intercessions. It is possible that lower achievers may attend summer school or receive remedial assistance during intercessions.

Table 2.20a. Cohort 1 TAAS Passing Rates and Retention Rate for 2002 by OEYP Program Type

Program Type (1999-00)	TAAS Reading	TAAS Math	TAAS Writing	TAAS Science	TAAS Social Studies	TAAS All Tests	2002 Retention Rate
Extended day only	80.2	85.5	74.8	81.9	61.4	68.6	5.5
Extended week only	76.1	83.6	72.8	79.5	64.0	66.5	3.5
Extended year or intercession only	72.8	77.5	67.5	76.7	57.6	57.3	9.1
All Programs	**74.8**	**79.9**	**69.2**	**77.7**	**58.5**	**60.5**	**8.1**

Table 2.20b. Cohort 2 TAAS Passing Rates and Retention Rate for 2002 by OEYP Program Type

Program Type (2000-01)	TAAS Reading	TAAS Math	TAAS Writing	TAAS Science	TAAS Social Studies	TAAS All Tests	2002 Retention Rate
Extended day only	78.0	85.1	77.0	82.3	64.5	68.1	4.7
Extended week only	77.7	85.5	78.2	79.7	66.8	68.8	4.2
Extended year or intercession only	69.1	74.3	62.8	76.1	55.7	52.0	11.1
All Programs	**72.1**	**78.3**	**67.6**	**77.2**	**57.4**	**57.7**	**9.1**

Table 2.20c. Cohort 3 TAAS Passing Rates and Retention Rate for 2002 by OEYP Program Type

Program Type (2001-02)	TAAS Reading	TAAS Math	TAAS Writing	TAAS Science	TAAS Social Studies	TAAS All Tests	2002 Retention Rate
Extended day only	80.9	85.7	78.4	84.4	65.7	70.4	3.9
Extended week only	79.8	85.2	78.7	82.5	72.3	67.4	3.4
Extended year or intercession only	58.0	64.6	55.1	74.2	52.4	38.0	9.5
All Programs	**66.9**	**73.0**	**64.6**	**76.3**	**55.7**	**50.7**	**7.6**

Table 2.20d. Cohort 4 TAKS Passing Rates and Retention Rate for 2003 by OEYP Program Type

Program Type (2002-03)	TAKS Reading/ ELA	TAKS Math	TAKS Writing	TAKS Science	TAKS Social Studies	TAKS All Tests	2003 Retention Rate
Extended day only	68.7	72.8	76.0	53.8	86.1	56.9	4.1
Extended week only	66.9	69.8	75.5	48.8	84.7	54.2	3.8
Extended year or intercession only	51.4	38.9	56.3	33.6	78.7	22.8	10.9
All Programs	**57.0**	**52.5**	**64.4**	**43.0**	**79.9**	**36.4**	**8.5**

Instructional Days and Achievement

- **Students with the least academic need appear to participate in OEYP for a smaller number of instructional days. In the year following full OEYP participation, higher TAAS and TAKS passing rates are associated with lower percentages of OEYP prescribed instructional days attended.**

Table 2.21a presents cohort 1 TAAS passing rates and retention rates for 2001 stratified by percentage of OEYP days attended. Table 2.21b presents similar 2002 data for cohort 2. Table 2.21c shows cohort 3 data which includes 2003 TAKS passing rates and 2003 retention rates. There is a tendency for higher TAAS and TAKS passing rates in the lower attendance categories. This may indicate that students who need less supplementary instruction attend less often. Interestingly, cohort 3 data show higher retention rates are also associated with lower percentages of OEYP prescribed instructional days attended.

Table 21a. Cohort 1 TAAS Passing and Retention Rates by Percent OEYP Instructional Days Present

Cohort 1 (1999-00) Outcome for 2001	0 to 49% of Days	50% to 74% of Days	75% to 89% of Days	90% to 100% of Days
TAAS Reading	71.5	70.3	67.3	66.1
TAAS Math	76.7	76.5	73.3	72.0
TAAS Writing	72.5	71.1	69.2	67.8
TAAS Science	76.6	76.8	73.9	74.8
TAAS Social Studies	46.3	45.6	40.7	44.5
TAAS All Tests Taken	56.4	55.0	51.9	49.8
Retention Rate	8.6	9.0	9.8	9.0

Table 2.21b. Cohort 2 TAAS Passing Rates and Retention Rates by Percent OEYP Instructional Days Present

Cohort 2 (2000-01) Outcome for 2002	0 to 49% of Days	50% to 74% of Days	75% to 89% of Days	90% to 100% of Days
TAAS Reading	75.8	74.2	71.3	71.4
TAAS Math	82.6	80.2	78.0	77.4
TAAS Writing	71.6	72.2	66.7	66.6
TAAS Science	77.7	77.7	76.4	77.2
TAAS Social Studies	56.7	59.1	56.0	57.6
TAAS All Tests Taken	63.1	61.1	57.8	56.4
Retention Rate	7.7	8.8	9.5	9.2

Table 2.21c. Cohort 3 TAKS Passing and Retention Rates by Percent OEYP Instructional Days Present

Cohort 3 (2001-02) Outcome for 2003	0 to 49% of Days	50% to 74% of Days	75% to 89% of Days	90% to 100% of Days
TAKS Reading/ELA	59.2	54.3	50.7	48.8
TAKS Math	47.8	46.6	42.9	40.5
TAKS Writing	63.5	60.9	56.8	53.7
TAKS Science	43.3	39.7	40.5	34.5
TAKS Social Studies	79.2	76.5	69.9	74.0
TAKS All Tests Taken	34.4	30.5	28.3	25.6
Retention Rate	10.6	8.4	8.2	6.8

Association of Student-and District-Level Factors with Academic Achievement

The relationships between OEYP student and district characteristics and TAAS reading and mathematics TLI scores were explored using hierarchical linear modeling (HLM). HLM was the preferred analytical method because, in most cases, students within school districts are similar to each other because of selection processes and common backgrounds. Consequently, measures within school districts are not independent. Rather, the correlation between measures of students from the same district will tend to be higher than the correlation between measures of students from different districts. Not only does hierarchical linear modeling make no assumption about independence, it estimates the degree of dependence of measures and uses this estimate in the calculation of the precision with which treatment effects are estimated.

Separate HLM analyses were conducted using OEYP participants in 1999-00 (cohort 1) and 2000-01 (cohort 2). Each group included over 40,000 OEYP students from over 400 school districts. These students participated in extended-day or extended-year/intercession programs in their respective OEYP year, constituted at least 10 students in the school district, and had TAAS scores from the year prior to OEYP participation (1999 for cohort 1 and 2000 for cohort 2) and the year after OEYP participation (2001 for cohort 1 and 2002 for cohort 2). These students were used to investigate the effect of OEYP student and district characteristics on TAAS reading and mathematics TLI scores.

The specific student- and district-level variables along with their descriptive statistics are reported in Table 2.22 for TAAS reading and mathematics. The student-level variables included gender (1 if male, 0 if female), economic status (1 if disadvantaged, 0 if not), prior retention (1 if retained prior to OEYP, 0 if not), school attendance (average rate for OEYP participation year), TAAS reading and mathematics TLI pretest scores (1999 for cohort 1 and 2000 for cohort 2), days taught in OEYP, OEYP program type (1 if extended day, 0 if extended year/intercession), minority status (1 minority, 0 if white), and grade group in the OEYP participation year (1 if grades 6 through 8, 0 if grades 3 through 5).

District-level variables included the district OEYP mean TAAS pretest score (achievement contextual effect), the district proportion of disadvantaged OEYP students (economically disadvantaged contextual effect), and the district OEYP per pupil expenditure for that year.

Table 2.22. Descriptive Statistics for TAAS Reading and Mathematics Data

	TAAS Reading					TAAS Mathematics				
Variable Name	**N**	**Mean**	**SD**	**Minimum**	**Maximum**	**N**	**Mean**	**SD**	**Minimum**	**Maximum**
Cohort 1 (1999-00) Student-Level Descriptive Statistics										
Grade group in 1999-00	45,878	0.55	0.50	0.00	1.00	46,845	0.54	0.50	0.00	1.00
Gender	45,878	0.56	0.50	0.00	1.00	46,845	0.57	0.50	0.00	1.00
Minority	45,878	0.80	0.40	0.00	1.00	46,845	0.80	0.40	0.00	1.00
Economically disadvantaged	45,878	0.75	0.43	0.00	1.00	46,845	0.75	0.43	0.00	1.00
Prior retention	45,878	0.12	0.32	0.00	1.00	46,845	0.12	0.32	0.00	1.00
TAAS reading 1999	45,878	72.58	15.46	1.00	100.00	46,845	71.45	13.21	0.00	93.00
TAAS reading 2001	45,878	76.23	14.25	8.00	101.00	46,845	76.17	10.35	8.00	93.00
Days taught in OEYP	45,878	15.38	8.32	0.10	30.00	46,845	15.34	8.32	0.10	30.00
School attendance	45,878	95.70	4.46	45.02	100.00	46,845	95.73	4.43	44.82	100.00
OEYP type	45,878	0.28	0.45	0.00	1.00	46,845	0.28	0.45	0.00	1.00
Cohort 1 (1999-00) District-Level Descriptive Statistics										
Economically disadvantaged	435	0.72	0.17	0.00	1.00	441	0.73	0.17	0.00	1.00
Reading achievement (1999)	435	73.30	5.42	53.11	92.54	441	72.34	4.74	57.00	85.77
OEYP expenditure per pupil	435	279.98	141.65	18.16	687.05	441	280.08	140.93	18.16	687.05
Cohort 2 (2000-01) Student-Level Descriptive Statistics										
Grade group in 2000-01	48,333	0.54	0.50	0.00	1.00	49,349	0.53	0.50	0.00	1.00
Gender	48,333	0.57	0.50	0.00	1.00	49,349	0.57	0.49	0.00	1.00
Minority	48,333	0.80	0.40	0.00	1.00	49,349	0.80	0.40	0.00	1.00
Economically disadvantaged	48,333	0.76	0.43	0.00	1.00	49,349	0.77	0.42	0.00	1.00
Prior retention	48,333	0.13	0.33	0.00	1.00	49,349	0.13	0.33	0.00	1.00
TAAS reading 2000	48,333	72.84	15.35	1.00	101.00	49,349	71.83	13.09	0.00	93.00
TAAS reading 2002	48,333	77.93	14.40	8.00	101.00	49,349	77.46	10.00	8.00	93.00
Days taught in OEYP	48,333	14.13	7.60	1.00	30.00	49,349	14.11	7.61	1.00	30.00
School attendance	48,333	95.54	4.55	31.82	100.00	49,349	95.55	4.55	31.82	100.00
OEYP type	48,333	0.32	0.47	0.00	1.00	49,349	0.32	0.47	0.00	1.00
Cohort 2 (2000-01) District-Level Descriptive Statistics										
Economically disadvantaged	427	0.75	0.15	0.08	1.00	430	0.74	0.15	0.08	1.00
Reading achievement (2000)	427	73.52	5.66	50.58	92.10	430	72.57	5.03	55.42	87.24
OEYP expenditure per pupil	427	306.21	162.30	52.59	693.39	430	303.71	160.21	52.59	693.39

Student-Level Variables

- **After controlling for the effect of student-level characteristics (academic and social background), extended-day participants had higher TAAS reading and mathematics scores than extended-year/intercession participants.**
- **There was no positive relationship between days students spend in OEYP (up to 30 instructional days) and TAAS scores.**
- **A student's school attendance rate had a stronger influence on TAAS mathematics scores than on TAAS reading scores.**

Table 2.23 shows that student-level predictors associated with higher TAAS reading scores include being female, economically advantaged, non-minority, not retained prior to OEYP, and attending grades 6 through 8. Higher TAAS reading pretest scores were also strongly associated with higher posttest reading scores. For example, for cohort 1 OEYP students, a unit increase in 1999 TAAS reading scores was associated with a 0.49 unit increase in 2001 TAAS reading scores. Other student characteristics being equal, the average TAAS posttest reading scores of extended-day participants were 1.43 TLI units higher in cohort 1 and 1.28 TLI units higher in cohort 2 than the average posttest reading scores of extended-year/intercession participants. In addition, there was no significant positive relationship between OEYP instructional days (up to 30 days per student) and TAAS reading TLI scores. This is in line with findings that small increases (10-15%) in schooling time show no appreciable gains in achievement (Glass, 2002).

Similar student-level predictors were associated with higher TAAS mathematics scores (Table 2.23). These included being female, economically advantaged, non-minority, not retained prior to OEYP, and having a higher TAAS mathematics pretest score. Unlike TAAS reading, higher mathematics scores were associated with attending grades 3 through 5, and lower scores were associated with attending grades 6 through 8. School attendance was a stronger predictor of mathematics scores than reading scores, although the impact was small. For example, in cohort 1, a 1% increase in the attendance rate resulted in a 0.09 TLI unit increase in mathematics posttest scores, net of other level 1 predictors. As with reading, extended-day participants were scoring about 1.2 TLI units (1.22 in cohort 1 and 1.15 in cohort 2) higher than extended-year/intercession participants with academic and social backgrounds similar to their own. Also, as with the reading analyses, there was not a positive relationship between OEYP instructional days and subsequent TAAS mathematics scores. Note that the coefficients for OEYP instructional days were uniformly small and negative across the content areas and cohorts.

District-Level Variables

- **After controlling for the effect of student characteristics (academic and social background) and district social context and OEYP per pupil expenditures, OEYP students having higher achieving classmates performed better in TAAS reading and mathematics.**
- **There was no significant relationship between OEYP dollars per pupil and TAAS reading and mathematics scores.**

Contextual effects occur when the aggregate of a student-level characteristic is related to an outcome variable, even after controlling for the effect of the student-level characteristic. An example would be average social class of a school being related to achievement after controlling for individual students' social class (Raudenbush and Bryk, 2002). HLM facilitates this type of multi-level analysis by specifying separate student and district equations. Following this model, Table 2.23 shows that there was a significant district-level contextual effect for both reading and mathematics. The achievement level of OEYP students has a positive impact on subsequent OEYP district TAAS reading and mathematics scores. For example, in cohort 1, a 1.2 standard deviation increase (6.2 TLI units) in average reading pretest scores was associated with a 1-unit increase in a district's reading posttest scores, after controlling for student-level variables. Likewise, in cohort 2, a 1.7 standard deviation increase (8.3 TLI units) in mathematics pretest scores was associated with a 1-unit increase in a district's mathematics posttest scores. Finally, average OEYP dollars spent per student did not have a significant effect on district reading or mathematics scores.

Table 2.23. HLM Analyses of TAAS Mathematics and Reading TLI Scores of Cohort 1 (1999-00) and Cohort 2 (2000-01) OEYP Students

Conditional Model		Reading		Mathematics	
		Cohort 1	Cohort 2	Cohort 1	Cohort 2
Student-Level Variables	**District-Level Variables**	**Gamma Coefficient/ (*t*)**	**Gamma Coefficient/ (*t*)**	**Gamma Coefficient/ (*t*)**	**Gamma Coefficient/ (*t*)**
Intercept		75.87 (586.50**)	77.38 (594.88**)	76.05 (665.25**)	77.31 (682.46**)
	Economically disadvantaged context	1.02 (1.11)	-1.03 (-1.08)	0.20 (0.25)	-1.14 (-1.43)
	Achievement context	0.16 (4.91**)	0.12 (3.94**)	0.15 (5.53**)	0.12 (4.11**)
	OEYP per pupil expenditure	-0.0013 (-1.25)	-0.0008 (-0.86)	-0.0016 (-1.76)	-0.0006 (-0.69)
Gender		-0.61 (-3.56*)	-0.25 (-2.18)	-0.44 (-3.62*)	-0.09 (-1.10)
Economically disadvantaged		-1.19 (-8.13**)	-1.35 (-10.19**)	-0.37 (-3.35*)	-0.28 (-2.69*)
Prior retention		-2.31 (-12.89**)	-2.40 (-13.84**)	-1.89 (-13.69**)	-2.02 (-15.34**)
School attendance		0.04 (2.60)	0.01 (0.82)	0.09 (8.44**)	0.07 (4.87**)
TAAS pretest		0.49 (57.98**)	0.48 (58.90**)	0.41 (52.62**)	0.39 (49.99**)
Days taught in OEYP		-0.06 (-1.96)	-0.02 (-1.64)	-0.04 (-1.73)	-0.02 (-1.04)
OEYP type		1.43 (3.11*)	1.28 (3.73**)	1.22 (3.14*)	1.15 (4.36**)
Minority		-0.74 (-4.14**)	-1.43 (-8.83**)	-0.06 (-0.45)	-0.64 (-5.71**)
Grade group in OEYP year		1.53 (6.72**)	1.09 (4.56**)	-3.93 (-18.63**)	-4.53 (-21.08**)

Notes. All continuous variables without a true 0 were grand-mean centered. In the student-level model, the intercept was specified as random and the independent variables were specified as fixed. The intraclass correlation coefficients were 0.09 (cohort 1 reading), 0.11 (cohort 1 math), 0.08 (cohort 2 reading), and 0.12 (cohort 2 math). Compared to a null model, the student-level model resulted in a within-district variance reduction of 30.1% in cohort 1 reading, 29.3% in cohort 1 math, 27.7% in cohort 2 reading, and 28.0% in cohort 2 math. The district-level model, conditional on the student-level model, resulted in a between-district variance reduction of 14.2% in cohort 1 reading, 14.4% in cohort 1 math, 13.9% in cohort 2 reading, and 11.5% in cohort 2 math.

*$p < .01$; **$p < .001$.

Association of Student-and District-Level Factors with Retention

Relationships between OEYP student and district characteristics and retention status (a binary outcome, retained or not retained) were analyzed using a hierarchical generalized linear model (HGLM) with a Bernoulli sampling model, a log odds or logit link function, and level-1 (student) and level-2 (district) structural models identical to those in HLM. HGLM presents results for both unit-specific and population-average models. The unit-specific model holds constant school district attended, while the population-average model does not, but averages over all districts. Because the average log-odds of retention was found to vary significantly across districts (variance in district average log-odds of retention = 0.81 for cohort 1 and 0.83 for cohort 2, with significant chi-square values in both cases), this variation should be controlled or held constant. Consequently, only unit-specific results will be presented and discussed below. (Note, however, that results are similar for both models.)

Included in separate HGLM analyses were students who participated in OEYP in 1999-00 (cohort 1) and 2000-01 (cohort 2). Each group included about 70,000 OEYP students from about 500 school districts. The OEYP students participated in extended-day or extended-year/intercession programs in their participation year and constituted at least 10 students per school district. These data were used to investigate the effect of OEYP student and district characteristics on retention status (2000 retention status for cohort 1 and 2001 retention status for cohort 2).

As previously defined, student characteristics included gender, economic status, prior retention, OEYP program type, days taught in OEYP, minority status, and grade group in the OEYP participation year. School attendance in the year of OEYP participation and the average of the TAAS reading and mathematics TLI scores in the year of participation were also used as student-level predictors (see Table 2.24). District-level variables included the district OEYP mean of the TAAS combined reading and mathematics score (achievement contextual effect), the district proportion of disadvantaged OEYP students, and the district OEYP per pupil expenditure for the appropriate cohort year.

Student-Level Variables

- **After controlling for the effect of student-level characteristics (academic and social background), an increase in the school attendance rate decreased the chances of retention.**
- **For otherwise similar students, more instructional days in OEYP decreased the chances of retention for extended-year/intercession participants.**
- **For otherwise similar students, fewer instructional days in OEYP decreased chances of retention for extended-day participants.**

As one might expect, being male and economically disadvantaged were associated with higher odds[1] of retention (Table 2.25). Having higher TAAS scores, being in the middle-school grades, and having been retained prior to OEYP participation were associated with lower odds of retention. More importantly, school attendance was related to lower retention. A 1% increase in the attendance rate (above the average attendance rate) corresponded to a 0.07 reduction in the log-odds of retention in cohort 1 and to a 0.05 reduction in cohort 2. These log-odds of retention corresponded to odds of 0.93 and 0.95, respectively. If, for example, there are two otherwise similar cohort 1 students but one has a 1% higher attendance rate, the odds of retention for that student are 0.93 times the odds for the student without the additional attendance. In other words, the student with the 1% higher attendance rate will have a slightly smaller chance of being retained.

[1] Odds are the probability that an event will occur divided by the probability that the event will not occur. If the weather forecast says that there is a 20% chance of rain, then there is an 80% chance that it will not rain, and the odds of rain are 0.20/0.80 or 0.25. If the forecast says that there is a 50% chance of rain, then there is also a 50% chance that it will not rain, and the odds of rain are 0.50/0.50 or 1.00. If the forecast says that there is an 80% chance of rain, then there is a 20% chance that it will not rain, and the odds of rain are 0.80/0.20 or 4.00.

The effect of the number of instructional days in the OEYP program varied across program types. That is, there was a significant interaction (coefficient = 0.08, t = 7.82 in cohort 1, and coefficient = 0.07, t = 5.95 in cohort 2). The relationship between OEYP days taught and the log-odds of retention was stronger for extended-year/intercession participants. Other factors being equal, for extended-year/intercession participants each additional day of instruction in OEYP resulted in a -0.06 reduction in the log-odds of retention in cohort 1 and a -0.07 reduction in cohort 2. However, for extended-day participants, each additional day of instruction in OEYP resulted in a 0.02 increase in the log-odds of retention in cohort 1 and neither an increase or a decrease in cohort 2 [days taught coefficient + 1 times interaction coefficient or –0.07 + (1)(0.07) = 0].

The interaction between OEYP days taught and program type means that the program type effect depends on the days taught. In cohort 1, when OEYP days taught were 17 or fewer, the log-odds of retention favored extended-day participants, and when OEYP days taught were 18 or more (with a maximum of 30), the log-odds favored extended-year/intercession participants. For example, if OEYP days taught were 10, the extended-day participants would have 0.54 times (exp{-0.62}) the odds of retention (a smaller chance) of otherwise similar students in the extended-year/intercession program. Yet if OEYP days taught were 25, the extended-day participants would have 1.79 times (exp{0.58}) the odds of retention (a greater chance) of otherwise similar students in the extended-year/intercession program.

In cohort 2, similar results were found. When OEYP days taught were 22 or fewer, extended-day participants were favored (smaller retention chances). When OEYP days taught exceeded 22, extended-year/intercession program students were favored (smaller retention chances).

OEYP extended-day programs may include homework assistance, tutorials, and remedial study. Students having less of a need for such help may attend fewer days. This may result in fewer instructional days being associated with decreased chances of retention. On the other hand, OEYP extended-year programs may have a fixed number of days of scheduled instruction for students who are in danger of being retained. Successful completion of the program may preclude retention. Those OEYP students who attend more of the scheduled days would certainly be expected to have lower chances of retention.

District-Level Variables

- **After controlling for the effect of student characteristics (academic and social background) and district social and academic contexts, higher OEYP per-pupil expenditures were associated with increased student retention.**

The contextual variables of social class and overall achievement level did not influence district retention (Table 2.25). However, retention was negatively related to OEYP dollars per pupil after controlling for student demographic and performance variables as well as for district social class and achievement contexts. (Note that when the square root of the district size was added as a control variable, the coefficients for OEYP expenditure per pupil were essentially identical to the values shown in Table 2.25.) Using cohort 2 as an example, two otherwise similar districts differing by $100 in OEYP per pupil expenditure could be expected to be 0.22 units apart in log-odds of retention, or relative odds of 1.25. Consider the cohort 2 elementary white female who was not economically disadvantaged, had no prior retention, was in the extended year/intercession program, had average school and OEYP attendance, average TAAS scores, and attended a typical school district. She had a predicted log-odds of retention of –3.47, or a probability of 0.030. Adding $100 to the district per pupil expenditure would result in predicted log-odds of –3.25, or a predicted probability of 0.037. Adding an additional $100 would increase the predicted probability of retention to 0.046. Thus, higher OEYP per pupil expenditures were associated with slightly increased chances of being retained.

Table 2.24. Descriptive Statistics for Student Retention Data

Variable Name	N	Mean	SD	Minimum	Maximum
Cohort 1 (1999-00) Student-Level Descriptive Statistics					
Grade group in 1999-00	70,193	0.42	0.49	0.00	1.00
Gender	70,193	0.55	0.50	0.00	1.00
Minority	70,193	0.82	0.39	0.00	1.00
Economically disadvantaged	70,193	0.77	0.42	0.00	1.00
Prior retention	70,193	0.12	0.33	0.00	1.00
Retention in 2000	70,193	0.05	0.21	0.00	1.00
Combined 2000 TAAS score	70,193	69.01	16.28	0.50	97.00
Days taught in OEYP	70,193	15.39	8.29	0.10	30.00
School attendance	70,193	96.13	3.99	32.60	100.00
OEYP type	70,193	0.28	0.45	0.00	1.00
OEYP days taught X OEYP type	70,193	2.00	4.71	0.00	30.00
Cohort 1 (1999-00) District-Level Descriptive Statistics					
Economically disadvantaged	526	0.74	0.16	0.08	1.00
Reading and math achievement	526	69.49	5.74	52.16	90.70
OEYP expenditure per pupil	526	284.97	140.13	18.16	698.94
Cohort 2 (2000-01) Student-Level Descriptive Statistics					
Grade group in 2000-01	69,348	0.42	0.49	0.00	1.00
Gender	69,348	0.56	0.50	0.00	1.00
Minority	69,348	0.81	0.39	0.00	1.00
Economically disadvantaged	69,348	0.77	0.42	0.00	1.00
Prior retention	69,348	0.13	0.34	0.00	1.00
Retention in 2001	69,348	0.05	0.22	0.00	1.00
Combined 2001 TAAS score	69,348	71.06	15.50	1.50	97.00
Days taught in OEYP	69,348	13.96	7.58	1.00	30.00
School attendance	69,348	95.85	4.23	31.82	100.00
OEYP type	69,348	0.33	0.47	0.00	1.00
OEYP days taught X OEYP type	69,348	2.16	4.20	0.00	30.00
Cohort 2 (2000-01) District-Level Descriptive Statistics					
Economically disadvantaged	499	0.75	0.15	0.08	1.00
Reading and math achievement	499	71.21	6.69	12.51	89.13
OEYP expenditure per pupil	499	308.79	159.31	52.59	693.39

Table 2.25. HGLM Analyses of Retention Status of Cohort 1 (1999-00) and Cohort 2 (2000-01) OEYP Students

Conditional Model		Cohort 1	Cohort 2
Student Level Variables	**District Level Variables**	**Gamma Coefficient/ (*t*)**	**Gamma Coefficient/ (*t*)**
Intercept		-3.58 (-60.71**)	-3.48 (-60.41**)
	Economically disadvantaged context	-0.30 (-0.72)	0.64 (1.47)
	Achievement context	0.02 (1.39)	0.01 (1.57)
	OEYP per pupil expenditure	0.0017 (4.20**)	0.0022 (6.15**)
Gender		0.34 (8.74**)	0.27 (7.14**)
Economically disadvantaged		0.18 (3.47*)	0.24 (4.55**)
Prior retention		-0.51 (-8.24**)	-0.52 (-8.95**)
School attendance		-0.07 (-19.13**)	-0.05 (-14.51**)
Combined TAAS reading and math score		-0.03 (-33.25**)	-0.03 (-32.68**)
Days taught in OEYP		-0.06 (-18.14**)	-0.07 (-19.50**)
OEYP type		-1.42 (-11.65**)	-1.55 (-13.33**)
Minority		0.02 (0.39)	-0.00 (-0.02)
Grade group in OEYP year		-0.19 (-4.57**)	-0.65 (-14.98**)
OEYP days taught X OEYP type		0.08 (7.82**)	0.07 (5.95**)

Notes. All continuous variables without a true 0 were grand-mean centered. Student-level predictors were specified as fixed with error terms constrained to be 0. Intercepts varied randomly.
*$p < .01$; **$p < .001$.

CONCLUSIONS AND IMPLICATIONS

First established by the 73rd Texas Legislature in 1993, the Optional Extended Year Program (OEYP) is a state-funded program with the goal of meeting the needs of elementary and middle school students who are at risk of not being promoted to the next grade level. Funds allow districts to provide an extended-year program for up to 30 instructional days for eligible students, with the ultimate goal of reducing retention rates. School districts in which at least 35% of students in kindergarten through grade eight are from economically disadvantaged families are eligible for non-competitive grants to serve students in the OEYP. Districts' level of funding is based on the amount necessary to offer extended-year services to not more than 10% of the at-risk student population in kindergarten through grade eight. The purpose of this study is to assess the effective use of OEYP funds to improve student learning for targeted students. The study encompasses four school years (1999-00 to 2002-03).

What are the characteristics of districts and students receiving OEYP grants?

- **Characteristics of districts.** Between 1999-2000 and 2002-03, the total number of districts receiving OEYP funds was 695, 682, 672, and 684, respectively. OEYP grantees were distributed across all of the Education Service Center (ESC) regions. Nearly half of OEYP districts fall into the *very small* category. However, compared to the state, fewer OEYP districts are *very small* (fewer than 1,000 students) and more are *small* and *mid-sized* (1,001 to 10,000 students).
- **Awards paid.** The average award actually paid to districts was between \$76,000 and \$80,000. Paid awards ranged from \$317 to over \$5,000,000. Approximately 40% of districts received less than \$10,000 for their OEYP program.
- **Characteristics of students.** About 190,000 students from nearly 700 school districts participated in the OEYP each year. OEYP participants are distributed across grades 1 through 8, with the largest proportion being third graders. This trend likely reflects the statewide commitment that students must achieve grade-level standards by third grade in order to be promoted (i.e., Student Success Initiative).

  Compared to the state, OEYP served a greater proportion of Hispanic students (about 64% versus 40% statewide), slightly more African-American students (about 18% versus 14%), and substantially less White students (about 17% versus 42%). OEYP students were also more likely to be economically disadvantaged (about 79% compared with 56% across Texas) and limited English proficient (about 31% compared with 15%).

How did grant resources supplement existing educational programs?

- **OEYP program types.** About two-thirds of OEYP students participated in an extended-year or intercession program only, whereas about one-fourth only participated in an extended-day program. Across four school years, the prevalence of extended-day and extended-week programs increased, while the emphasis on extended-year or intersession programs decreased.
- **Grade levels and content areas targeted.** At least one third of the districts provided programs for students in grades 1 and 2, whereas nearly half targeted each of the grades 3 through 8. In district grant applications, mathematics and reading were the most frequently targeted content areas for OEYP programs.
- **Program activities.** OEYP instructional activities focused most often on reading/language arts (e.g., reading strategies, computer-assisted instruction, TEKS) and mathematics (e.g., computer-assisted instruction, TEKS). Districts mainly focused their professional development opportunities for teachers and staff on instructional strategies and strategies for teaching students at risk. Districts most

frequently planned to involve parents through conferences, parent workshops, and various communication strategies.

- **Instructional days available.** On average, the number of OEYP instructional days available for students declined across years, with 20 days in 1999-00, 17 in 2000-01, and 15 in both 2001-02 and 2002-03. Intercessions or extended-year programs had the largest number of instructional days (between 19 and 21 days each year).

What was the effect of grant resources on targeted students?

To determine the effectiveness of the OEYP program in improving student success, we examined OEYP students' attendance and retention rates and performance on state-level assessments. In addition, we explored the relationships between student achievement and extended OEYP participation, program types, and instructional days.

- **Attendance.** Students' average OEYP attendance rates for four school years (81% to 86%) are considerably lower than their attendance rates during the regular school year (about 96%). OEYP students' attendance rates during the regular school year are comparable to state averages and remained relatively stable across years. Students attended OEYP extended-year and intercession programs at a higher rate (from 86% to 90% of instructional days) than extended-day (54% to 80% of days) or extended-week (62% to 70% of days) programs. It is possible that districts may have instituted more stringent attendance requirements for extended-year and intercessions programs.
- **Retention.** Findings suggest that districts are more likely to use retention in the early grades as a means to support student academic performance. Compared to state averages, retention rates of OEYP students are far higher for grades 1 through 3 (about 17, 12, and 6 percentage points, respectively) but only slightly higher for students in grades 4 through 8 (about 2 percentage points). Across four years, about 23% of OEYP first graders, 16% of second graders, and 9% of third graders were retained. In contrast, retention rates for students in grades 4 through 8 were typically less than 5%. For all grade levels, student retention rates tended to increase across the four OEYP program years.
- **State-level assessments.** Passing rates on state assessments (TAAS reading, math, writing, science, social studies, and all tests) were well below state averages for the four OEYP student cohorts studied. However, for cohort 1 (1999-2000) and cohort 2 (2000-01) students, TAAS passing rate gains (from the year before to the year after full OEYP participation) exceeded state gains. On the other hand, the TAAS to TAKS passing rate gains for cohort 3 students (2001-02) were mostly less than state gains. Thus, the achievement gap between OEYP students and state averages was narrowed for cohorts 1 and 2, but not for cohort 3.
- **Extended participation opportunities and achievement.** We also investigated the tendency for students to participate in the OEYP for more than one year. About 60% of OEYP students served in 1999-00 only participated that year, while about 40% participated at least one more year. With a few exceptions, cohort 1 students (1999-00) who participated in OEYP for more years had lower TAAS passing rates than their counterparts who attended fewer years. Thus, not surprisingly, it is the lower performing students who are more likely to participate in OEYP for multiple years.
- **OEYP program type and student achievement.** It was also of interest to determine whether students' performance varied according to the type of OEYP program they attended. Clearly, students who only participated in extended-day or extended-week programs had higher TAAS and TAKS scores and lower retention rates than students enrolled in extended year or intercession programs. Still, this does not suggest that there is a causal link between extended-day and extended-week programs and improved academic performance. Instead, it is plausible that lower achieving students

may be required to attend summer school (extended year) or intercessions (year-round schools) to avoid retention.

- **Instructional days and student achievement.** In general, it appears that a students' academic need may dictate the number of available OEYP instructional days. In the year following full OEYP participation, higher TAAS and TAKS passing rates are associated with lower percentages of OEYP prescribed instructional days attended. For example, 72% of students in cohort 1 (1999-00) who attended 0-49% of OEYP days passed TAAS Reading, whereas only 66% of students who attended 90-100% of days passed TAAS Reading.

What program elements are associated with student outcomes?

To further explore the association between OEYP student and district characteristics and TAAS reading and mathematics TLI scores, researchers used hierarchical linear modeling (HLM). Separate HLM analyses were conducted using OEYP participants in 1999-00 (cohort 1) and 2000-01 (cohort 2). Each group included more than 40,000 students from over 400 school districts. These students participated in extended-day or extended-year/intercession programs in their respective districts. Separate HLM analyses were also conducted for retention. Each group included about 70,000 students from about 500 school districts.

Student-Level Factors and Outcomes

- Controlling for important student-level characteristics (i.e., academic and social background), extended-day participants had higher TAAS reading and mathematics scores than extended-year/intercession participants. This suggests that students who receive tutorial and other assistance at the "point of need" during the school year may do better academically than those who attend an intercession or summer school after they have failed to master content during a grading period or year.
- There was no positive relationship between the instructional days students spend in OEYP (up to 30 instructional days) and TAAS scores. However, for otherwise similar students, *more* instructional days in OEYP decreased the chances of retention for extended-year/intercession participants. This may be explained by the fact that OEYP extended-year/intercession programs have a fixed number of scheduled days of instruction for students who are in danger of being retained, and successful program completion precludes retention. In contrast, for extended-day participants, *fewer* instructional days in OEYP decreased chances of retention. Overall findings for extended-day programs suggest that students may receive homework assistance, tutorials, and remedial study on an as-needed basis. Thus, students having less of a need for such help may attend fewer days.
- A student's school attendance rate was an important predictor of academic performance. School attendance had a stronger influence on TAAS mathematics scores than on TAAS reading scores. In addition, for otherwise similar students, an increase in the school attendance rate decreased the chances of retention. Student attendance is important because it provides an indicator of student overall commitment to and engagement in school. Consistent attendance also helps students to "keep up" with assignments and participate in class activities. This is especially important for mathematics, which has a spiraling scope and sequence, with lower level knowledge and skills prerequisites for mastering higher level concepts.

District-Level Factors and Outcomes

- After controlling for student-level characteristics, OEYP students' academic achievement and chance of retention varied significantly by district. This suggests that some districts and schools are more successful in meeting the needs of students in at-risk situations.

- Evidence from this study confirms the importance of the school context. Other student-level factors being equal and net of district social context and OEYP expenditures, OEYP students having higher achieving classmates performed better in TAAS reading and mathematics.
- Equally important, there was no compelling evidence that increasing per-pupil OEYP expenditures improved student performance. There was no significant relationship between OEYP dollars spent per pupil and TAAS reading and mathematics scores. Moreover, higher OEYP per-pupil expenditures were associated with a slightly increased chance of student retention. Results regarding expenditures suggest that *how* districts use available resources is critically important in improving outcomes for students at risk. Simply increasing available dollar allocations may not achieved desired effects.

What are the implications for addressing the needs of students at risk?

- **Enhancing the academic prospects for students at risk hinges on overall improvement of learning opportunities in schools and classrooms.** Findings from this study reinforce the importance of improving the overall school environment as a means to enhance the learning opportunities of students at risk. Results for "value-added" modeling using HLM suggest that, after controlling for important student-level characteristics, some districts and schools are more successful than others in supporting the academic performance of students at risk. Furthermore, evidence indicates that OEYP students who attend schools with higher achieving classmates performed better on state-level assessments. Results for this study are consistent with other research citing the importance of the school context. Research shows that students tend to learn more when taught by "effective teachers" and teachers become more effective when they work in "effective schools" (Stringfield & Datnow, 2002). Waxman, who has studied at-risk populations extensively, says, "It is apparent that some of the risks associated with students' failure in school are due to the particular school the student attends" (1992, p. 7). Similarly, others suggest that we have used remediation as a means to "change the student" rather than altering the student-school relationships through educational change (Bitting, Cordero, & Baptiste, 1992).
- **Efforts directed at improving student attendance during the regular school year may have a greater effect on student achievement than remedial interventions.** Results for this study reinforce the importance of school attendance in the academic success of students in at-risk environments. In this study, school attendance was an important predictor of performance on state-level assessments, especially mathematics. An increase in school attendance was also associated with decreased chances of retention. Findings suggest that resources directed toward addressing the factors that reduce school attendance during the regular school year may produce greater academic gains for students at risk than assigning them to remedial interventions with other low-achieving students.
- **Low student attendance in extended-day, -week, and -year programs limits program effectiveness.** Consistent student participation in OEYP initiatives was a problem. Findings for four student cohorts (2000 to 2003) suggest that student attendance in programs is sporadic. For example, students enrolled in extended year/intercession programs attended about 89% of days. This meant that in a typical 20-day program, a student would receive about 17.5 days of instruction. Attendance was even less regular for extended-day and extended-year programs. A typical student enrolled only in an extended-day program attended about 80% of days. Thus, an average student in cohort 4 would have attended 5.6 of 7.4 after-school program days. It is doubtful that the number of days available and attended is adequate to impact either achievement or retention. In an extensive study of the allocation and duration of schooling, Glass (2002) found that small increases (10-15%) in time for schooling resulted in no significant achievement gains.

- **Little is known about the quality of programs funded by OEYP**. As noted above, quantitative evidence indicates that the number of available OEYP instructional days (which declined from 20 to 15 over four grant years) may be inadequate to make a difference in achievement for at-risk students. In addition, we know very little about the quality of the learning experiences available for students. Based on a review of a sample of district proposals (2002-03), it appears that OEYP programs focus primarily on reading and mathematics and many districts use computer-assisted programs to deliver instruction (usually learning systems for basic skill acquisition). Beyond this, there is little available evidence to show whether the opportunities to learn in OEYP programs were appropriate for students in at-risk situations.

- **Student retention rates increased between 1999-00 and 2002-03, especially for first, second, and third graders.** If we measure the OEYP against its primary goal—the reduction of student retention—outcomes suggest that the program was unsuccessful in attaining its overarching goal. Retention rates for students at risk increased across four years. Districts increasingly retained students in first grade (from 18% to 26%), second grade (from 12% to 17%), and third grade (from 7% to 11%). Retention rates also increased about 1 percentage point for grades 4 to 8. Increased retention of at-risk students in the early grades is almost certainly a response to the Student Success Initiative and the requirement that students meet grade-level standards. However, further research is needed to examine the impact of increased retention in light of the fact that other studies have shown detrimental effects of retention on students (e.g., Nagaoka & Roderick, 2004).

- **The cost-effectiveness of the OEYP is questionable.** Efforts aimed at examining associations between OEYP funding levels and both student achievement and retention suggest there was no significant relationship between OEYP dollars spent per pupil and academic achievement or reduced retention. Our study was not designed to be a comprehensive cost-benefit analysis, but findings raise questions about the cost-effectiveness of the initiative statewide.

- **State-level initiatives aimed at improving instruction and learning for students at risk should be accompanied by evaluations to study program effectiveness.** Discretionary grants provide a means for states to gather data and determine future policies regarding funding for programs and services for students at risk. However, conducting scientifically rigorous evaluations relies on designing and conducting studies at the onset of funding and program implementation. Funding for future initiatives supporting students at risk should be accompanied by resources for program evaluations.

CHAPTER 3
TEXAS AFTER SCHOOL INITIATIVE (TASI)

INTRODUCTION

In 1999, the Texas Legislature appropriated $10.5 million for the creation of the Texas After School Initiative (TASI). The program funds after-school programs targeting at-risk middle school students. TASI services are intended for students ages 10 to 14 at-risk of academic failure and/or at-risk of committing juvenile offenses. According to TASI standards, identification of students at-risk of academic failure is based on meeting any of these characteristics:

- Failure to pass one or more TAAS subtests at the last administration period,
- Retention in one or more grade levels,
- Failing one or more classes in a reporting period,
- Recurrent pattern of absences,
- Counselor and special program referrals with appropriate documentation,
- Teacher or principal observations and documentation,
- Parent request and principal approval.

Characteristics of students at-risk of committing juvenile offenses include:

- Referrals to the Juvenile Justice System,
- Recurrent pattern of absences,
- Disciplinary referrals with documentation from counselors and special program staff,
- Teacher or principal observations and documentation,
- Parent request and principal approval.

TASI programs must address the needs of targeted students through an academics-based curriculum linked to the TEKS, a character education or citizenship component, and parent and/or mentor involvement. The purposes of TASI programs include increasing academic achievement, decreasing referrals to the Juvenile Justice System, and obtaining parent and mentor involvement in activities targeting at-risk middle school students. The 77th Texas Legislature renewed TASI’s $10.5 million appropriation for the 2002-03 biennium.

Organization of the Chapter

Sections to follow include a brief literature review of after-school programs and an overview of this study’s methodology. Additionally, TASI program findings are presented for the following topics: (a) TASI grantees and their students; (b) TASI program activities; (c) student outcomes for core courses, discipline referrals, attendance, state-level assessments, and retention; (d) association of student- and district-level factors with academic achievement; (e) association of student- and district-level factors with retention; and (f) conclusions and implications.

RESEARCH ON AFTER-SCHOOL PROGRAMS

After-school programs are not new on the educational landscape. Since the late 1800s, after-school programs and clubs have existed with the original goal of keeping youngsters off the streets where they are unsupervised and susceptible to the dangers of urban life (Halpern, 2002). More recently, as the emphasis on standardized test scores and accountability has increased, educators have begun to view after-school programs as an opportunity to enhance student achievement by extending academic activities into the hours beyond the typical school day. Surprisingly, few large-scale experimental or quasi-experimental research studies have considered the effect of after-school programs on either academic achievement or social and developmental measures. Research on after-school programs has more often relied on less rigorous research designs, thus limiting conclusions. Another challenge associated with studying after-school programs is the varied configurations and objectives that exist. Some programs focus on providing recreational and cultural activities, others target prevention of risky behaviors among youth (e.g., alcohol/drug use, gang activity), and still others have primarily academic objectives.

The available research on after-school programs generally shows mixed results. A number of studies have shown positive impacts of after-school programs on non-academic measures such as reductions in risky behavior and increases in positive peer relationships and conflict resolution (Beuhring, Blum, & Rinehart, 2000; Pierce, Hamm, & Vandell, 1999; Zill, Nord, &Loomis, 1995 as cited in Miller 2001). Several quasi-experimental studies conducted to evaluate after-school programs in school districts have indicated positive impacts on standardized test scores. A 1998 evaluation of Sacramento's START program showed that 67% of participants improved their reading and math scores as compared to the matched-comparison group students (Lamare, 1998 as cited in Brown, McComb, & Scott-Little, 2003). Similarly, an evaluation of four After-School Learning and Safe Neighborhoods Partnerships Programs (ALSSNPP) in Santa Ana Unified School District found that participants' reading and math scores improved significantly over matched-comparison group students, especially for students who attended regularly or were classified as Limited English Proficient (Prenovost, 2001 as cited in Brown, McComb, & Scott-Little, 2003).

The largest-scale study of after-school programs to date—the national evaluation of the 21st Century Learning Community Learning Centers—showed much less promising results. This program, first authorized by Congress in 1994, established after-school centers in about 7,500 public schools across the nation to offer academic and recreational activities. First-year evaluation results indicate that 21st Century centers have limited academic impact on students. Test scores and grades in most subjects for center participants were virtually the same as comparison group students. Additionally, participation in 21st Century programs did not impact students' rate of homework completion. Subgroup analysis, however, did show some small, positive effects on grades, absenteeism, and tardiness for African American and Hispanic middle school students (Dynarski, Moore, Mullens, Gleason, James-Burdumy, Rosenberg, Pistorino, Silva, Deke, Mansfield, Heaviside, & Levy, 2003). This finding supports other research showing that minority and low-income students reap greater benefits from after-school programs (Miller, 2001; Hamilton & Klein, 1998; Schinke, Cole, & Poulin, 1998; Witt, 1997).

Findings for possible non-academic impacts of 21st Century programs were equally mixed. Programs helped increase the proportion of students being cared for by an adult after school by reducing the percentage cared for by an older sibling, but did not reduce the number of students staying at home alone after school ("latchkey" kids). As for social and behavioral outcomes, participation in 21st Century programs had virtually no impact. In fact, middle school participants were more likely to report selling or using drugs than comparison group students (although the incidence was low). Furthermore, social and developmental skills, such as conflict resolution and teamwork were not impacted by the program (Dynarski, et al., 2003). In contrast, participation in 21st Century programs was associated with increased parental involvement in the school. Parents of both elementary and middle school participants were more likely to volunteer at their child's school, attend meetings, or help their child with homework (Dynarski, et al., 2003).

Overall, research has shown some positive impacts of after-school programs on academic and non-academic measures; however, the small-scale nature and non-experimental design of many of these studies limit their generalizability. In contrast, the national evaluation of the 21st Century Learning Community Learning Centers indicated few positive academic or non-academic impacts. Most researchers agree that one of the primary challenges in studying after-school programs is low attendance rates on the part of students. Most studies, including the 21st Century evaluation, have found that student participation in after-school programs is limited and sporadic. Student attendance in 21st Century programs averaged less than two days a week (Dynarski, et al., 2003). Therefore, student attendance issues, if not addressed, will continue to serve as a challenge to widespread academic and social benefits of after-school programs.

METHODOLOGY

The purpose of this evaluation is to assess the effective use of TASI funds to create after-school programs supporting the academic success of targeted students in grades 6 through 8. This report relies on a combination of quantitative and qualitative data and analysis methods as described below. The study includes 60 school districts and 194 campuses receiving both original and continuation TASI funding. Analyses examine results for original grant dollars used over three semesters (spring 2000 through spring 2001) and continuation funding over four semesters (fall 2001 through spring 2003). During four school years (1999-00, 2000-01, 2001-02, and 2002-03), approximately 100,000 unique students participated in TASI. Student counts reflect enrollment figures that use estimates to account for missing data (see Table 3.3).

Data Sources

The primary data sources include TASI program and activity reports submitted by districts and student demographic and performance data collected from the Texas Education Agency (TEA).

Program and activity reports. TASI grant recipients were required to submit program and activity reports to the TEA after each semester in which they served targeted students. Across four program years (1999-00 through 2002-03), districts were asked to submit two reports after each of seven semesters in which they served students. The program report requested district-level information, such as general program information; activities supporting the academics-based, character/citizenship, and parent/mentor involvement components of TASI; staff participation and volunteer involvement; professional development; information dissemination; and district opinions regarding the most successful components. The procedures used to collect data on program reports was altered during spring 2003, and many data elements available in earlier terms were not collected during this term. As a result, some tables include data for only one semester of the final cohort (2002-03).

In addition to the program report, districts also submitted an activity report each semester with student-level data. Activity reports provided information for each TASI program participant in seven areas: student demographics, student eligibility, retention, program attendance, additional activities, discipline referrals, and student performance. As with the program report, all information is self-reported. During the course of the seven program terms, report format changes resulted in some data discontinuity.

Student demographic and performance data. Researchers gathered other student-level data from the Texas Public Education Information Management System (PEIMS) and the Texas Academic Excellence Indicator System (AEIS). Student-level data supplied by participating school districts' activity reports were matched to PEIMS and AEIS data to create a set of master databases. Elements in the databases included student demographic information, such as ethnicity, gender, LEP status, and grade level; Texas Assessment of Academic Skills (TAAS) and Texas Assessment of Knowledge and Skills (TAKS) scores, and attendance and promotion rates.

Limitations

Data accuracy. District compliance with reporting requirements varied over the duration of the initiative (see Table 3.1). Overall, districts submitted program reports at a lower rate than activity reports. Submission rates for program reports varied from 23% (fall 2002) to 67% (spring 2000). For activity reports, the first two terms (spring and fall 2000) had the lowest report submission rates, 62% and 65%, respectively. Beginning with the spring 2001 term, TEA staff contacted districts about report submission. As a result, the submission rate increased slightly for the remaining terms.

Table 3.1. Districts Submitting Program and Activity Reports

Term	Program Reports (District Level)		Activity Reports (Student Level)	
	N	%	N	%
Spring 2000	40	67	37	62
Fall 2000	16	27	39	65
Spring 2001	23	38	42	70
Fall 2001	16	27	46	77
Spring 2002	16	27	44	73
Fall 2002	14	23	51	85
Spring 2003	26	43	47	78

N=60 participating districts.

Varying report submission rates are problematic because, first, it is possible that the districts included in the analysis, by virtue of submitting reports, are not representative of all the districts funded under TASI. Secondly, when comparing results from year to year, it is possible that different response rates across terms lead to incorrect conclusions, as the districts are not the same from one term to the next. As Table 3.2 illustrates, of the 60 original and continuing districts, only 30% of districts submitted activity reports for all seven terms, but 80% of districts submitted reports for four or more terms. This group of 48 districts forms the core TASI group included in analyses—thus, results are most representative of these districts rather than the districts that submitted a report only once or twice or never submitted a report.

Table 3.2. Number of Student Activity Reports Submitted by Districts

Number of Reports Submitted	Number of Districts	Percent of Districts	Cumulative Percent
Seven terms	18	30.0	30.0
Six terms	10	16.7	46.7
Five terms	14	23.3	70.0
Four terms	6	10.0	80.0
Three terms	6	10.0	90.0
Two terms	2	3.3	93.3
One term	3	5.0	98.3
Never submitted a report	1	1.7	100.0
Total	**60**	**100.0**	

Estimating student participation. Student data for each term were combined to estimate the total number of unique students served during the four-year grant period (see Table 3.3). By replacing missing term data with a weighted district term average, the number of unique students served during four TASI program years was estimated at 101,771 students. (See Appendix B for a full explanation.). The estimated number of students for each program year ranged from 13,313 (spring 2000) to 31,945 (2002-03).

Table 3.3. Number of Students Served in TASI by School Year

Year	Term	Duplicated Student Count		Unique Student Count	
		Activity Report N	Estimated N	Activity Report N	Estimated N
1999-00	Spring 2000	9,395	13,313	9,395	13,313
2000-01	Fall 2000	11,142	17,462	15,173	24,742
	Spring 2001	11,207	16,230		
2001-02	Fall 2001	13,246	18,801	21,726	31,771
	Spring 2002	16,512	21,612		
2002-03	Fall 2002	19,987	21,579	26,437	31,945
	Spring 2003	17,235	21,535		
	Total	**98,724**	**130,532**	**72,731**	**101,771**

TASI GRANTEES AND THEIR STUDENTS

Location of Districts Receiving Grants

➢ **The distribution of TASI grantees generally corresponds to Texas population centers.**

The distribution of TASI grantees, in most cases, corresponds with Texas population regions. However, densely populated regions (e.g., ESC 4, Houston and ESC 10, Richardson/Dallas) and the Rio Grande Valley region (ESC 1, Edinburg) have more programs (Table 3.4).

Table 3.4. TASI Grantees by ESC Region

ESC Region	ESC Location	Number of Grantees	Percent of Grantees	Statewide ESC Distribution
1	Edinburg	6	10.0	4.1
2	Corpus Christi	4	6.7	3.9
3	Victoria	2	3.3	3.3
4	Houston	15	25.0	8.3
5	Beaumont	1	1.7	2.9
6	Huntsville	1	1.7	4.9
7	Kilgore	2	3.3	8.4
8	Mt. Pleasant	0	0.0	3.9
9	Wichita Falls	0	0.0	3.3
10	Richardson	7	11.7	9.2
11	Ft. Worth	4	6.7	7.2
12	Waco	2	3.3	7.0
13	Austin	4	6.7	5.8
14	Abilene	0	0.0	3.6
15	San Angelo	1	1.7	3.6
16	Amarillo	1	1.7	5.3
17	Lubbock	1	1.7	5.1
18	Midland	1	1.7	2.9
19	El Paso	3	5.0	1.3
20	San Antonio	5	8.3	6.0

Note. A total of 60 districts received both original and continuation funding.

Characteristics of Districts Receiving Grants

➢ **TASI programs are more heavily concentrated in larger districts (more than 10,000 students). Smaller districts seldom had TASI programs.**

TASI programs tend to be more heavily concentrated in larger districts—62% fall into the *large* or *very large* categories. An additional 23% are *mid-size*. Only one *very small* district had a TASI program. In contrast, larger percentages of districts statewide are in the *very small* or *small* categories (Table 3.5).

Table 3.5. TASI Grantees by District and Campus Student Enrollment Size Categories

District Size: Student Enrollment	Number	Percent	State
Very small: Fewer than 1,000	1	1.7	59.6
Small: 1,000 to 3,000	8	13.3	20.4
Mid-size: 3,001 to 10,000	14	23.3	12.9
Large: 10,001 to 25,000	16	26.7	3.8
Very large: More than 25,000	21	35.0	3.2

Source. TEA AEIS database 2002-03.

➢ **Compared to the state, TASI districts and campuses have larger proportions of Hispanic, LEP, and economically disadvantaged students, smaller proportions of White students, and nearly equal percentages of African Americans.**

As Table 3.6 shows, TASI districts and campuses enroll larger proportions of Hispanic students (51-54%), smaller proportions of White students (23-28%), and comparable percentages of African American students (18%) compared to state averages. Additionally, TASI districts and campuses have larger percentages of economically disadvantaged (about 60%) and Limited English Proficient (LEP) students (12-22%).

Table 3.6. TASI District and Campus Student Demographics (Percent)

Student Demographics	TASI Districts	TASI Campuses	State MS Average
White	23.4	27.9	41.9
Hispanic	54.4	51.3	40.6
African American	18.3	17.6	14.4
Economically disadvantaged	61.5	59.2	50.1
Limited English proficient	21.9	11.9	8.3
Special education	10.7	13.4	13.2

Source. TEA AEIS database 2002-03.

Characteristics of Students Participating in TASI

➢ **Based on estimated counts, the number of students served in TASI programs increased during the four years of the grant from about 13,000 in spring 2000 to almost 32,000 in 2002-03.**

Only 13,313 students participated in TASI during the "start-up" semester (spring 2000). However, the number of student participants increased steadily thereafter: 24,742 in 2000-01; 31,771 in 2001-02; and 31,945 in 2002-03. At the same time, the mean number of students served per district in TASI programs increased from 254 (spring 2000) to 481 (2002-03). TASI participants included a nearly equal proportion of sixth, seventh, and eighth graders (Table 3.7).

Table 3.7. TASI Program Participation

Number	Spr 2000	2000-01	2001-02	2002-03
Districts	37	47	53	55
Campuses	107	146	172	194
Total students	9,395	15,173	21,726	26,437
Grade 6 students	35%	31%	34%	29%
Grade 7 students	36%	37%	34%	38%
Grade 8 students	29%	32%	32%	33%
Students per district (mean)	254	323	405	481
Students per campus (mean)	88	104	126	136
Estimated student population[a]	13,313	24,742	31,771	31,945

[a] Estimated student population based on extrapolation from known data (see Appendix B).
Source: District activity reports.

- **More than three-fourths of TASI students are Hispanic (about 53%) and African American (22%).**

Just over half of TASI participants are Hispanic, while approximately one-fifth are African American and one-fifth are White. Male and female students are equally represented among TASI participants (Table 3.8).

Table 3.8. Demographic Characteristics of TASI Participants

Student Demographics	Spr 2000	2000-01	2001-02	2002-03
White	21%	24%	22%	17%
Hispanic	54%	53%	56%	57%
African American	24%	20%	20%	24%
Female	48%	48%	49%	50%
Male	52%	52%	51%	50%

Source: District activity reports and PEIMS.

- **TASI programs typically offered about four instructional days per week, with nearly two program hours each day.**

On average, students participated in TASI programs slightly less than 4 instructional days per week (3.5 to 3.9) and about 2 hours per day. The mean duration for TASI programs ranged between 13.4 and 15.6 weeks per semester. The mean number of programming days varied across years, from 48.9 in spring 2000 to 58.3 during the 2001-02 school year (Table 3.9).

Table 3.9. General TASI Program Information

Program Characteristics	Spr 2000	2000-01	2001-02	Fall 2002
Program days per week (mean)	3.7	3.5	3.8	3.9
Program hours per day (mean)	2.2	1.9	1.9	2.0
Number of program weeks (mean)	13.4	15.6	15.3	14.2
Number of program days (mean)	48.9	56.0	58.3	55.6

Source: District program reports.

- **TASI programs targeted students at risk of failure—either those meeting the state Compensatory Education requirements or meeting other risk factors.**

While TASI grantees could provide program services for students having no risk characteristics, these students could comprise no more than 35% of all participants served. Although student eligibility varied by year, overall trends indicate that TASI programs served a large majority of at-risk students each school year (between 73% and 90%). Districts and campuses most frequently served students meeting state Compensatory Education requirements, although these percentages were higher in the first spring term (77%) compared to subsequent school years (47% to 54%). (See Table 3.10.)

Table 3.10. Student Eligibility by Semester (Percent)

Eligibility Category	Spr 2000	2000-01	2001-02	2002-03
Meets state Compensatory Education requirements	76.9	46.5	53.8	48.0
Meets other risk factors	12.8	32.3	25.0	26.2
No at-risk characteristics	10.3	21.2	21.2	25.8

Note. Between 2.2% and 22.5% of students lacked eligibility data.
Source: District activity reports.

- **Compared to White students, Hispanic and African American students were more likely to be eligible for TASI services under Compensatory Education requirements.**

Ethnic distributions varied by student eligibility categories. Larger percentages of Hispanic students met state Compensatory Education requirements or other risk factors. African American students more frequently met Compensatory Education requirements. In contrast, greater percentages of White students met other risk factors or no risk factors. TASI programs generally served comparable percentages of male and female students, although male students were more likely to be identified as at risk (Table 3.11).

Table 3.11. Distribution of Student Gender and Race/Ethnicity by Semester and Student Eligibility (Percent)

Student Demographics	Spring 2000	2000-01	2001-02	2002-03
Meets state Compensatory Education requirements				
Hispanic	57.4	57.8	58.3	61.2
African American	24.6	22.0	24.3	26.1
White	16.5	18.2	15.1	11.3
Male	52.1	54.3	52.1	52.4
Female	47.9	45.7	47.9	47.6
Meets other risk factors				
Hispanic	50.4	52.1	59.4	64.5
African American	19.5	17.9	16.7	18.7
White	28.5	24.1	22.6	15.7
Male	56.1	52.9	53.1	52.3
Female	43.9	47.1	46.9	47.7
No at-risk characteristics				
Hispanic	36.2	44.8	42.6	44.4
African American	24.5	14.0	15.5	23.5
White	37.7	34.9	38.9	29.1
Male	45.8	48.1	45.5	43.6
Female	54.2	51.9	54.5	56.4

Note. Between 0.1% and 0.4% of students lacked gender data. Between 0.6% and 2.5% of students lacked ethnicity data.
Source: District activity reports.

➢ **The majority of students served by TASI programs had never been retained in grade.**

Approximately 8% of TASI students had repeated one grade, and approximately 1% had multiple retentions. These rates are markedly higher than state-level retention statistics reported for sixth (about 1.5%), seventh (about 2.7%), and eighth (about 1.9%) grades. Not surprisingly, participants meeting state Compensatory Education requirements or with other risk factors were more likely to have been retained in grade than students with no at-risk characteristics (Table 3.12).

Table 3.12. Prior Student Retention by Semester and Student Eligibility (Percent)

Retention Category	Spring 2000	2000-01	2001-02	2002-03
All TASI participants				
Never retained	91.9	91.4	93.3	88.6
Retained in one grade	7.4	8.2	6.3	10.5
Retained in two or more grades	0.7	0.4	0.3	0.9
Meets state Compensatory Education requirements				
Never retained	90.9	89.2	91.2	85.6
Retained in one grade	8.4	10.2	8.2	13.1
Retained in two or more grades	0.8	0.7	0.5	1.4
Meets other risk factors				
Never retained	86.6	91.4	92.0	88.8
Retained in one grade	12.4	8.1	7.4	10.5
Retained in two or more grades	1.1	0.5	0.4	0.7
No at-risk characteristics				
Never retained	94.1	97.6	98.6	93.7
Retained in one grade	5.7	2.4	1.4	6.0
Retained in two or more grades	0.3	0.0	0.0	0.3

Source: District activity reports.

TASI PROGRAM ACTIVITIES

Required Components

TASI after-school programs for students of middle school age, 10 to 14 years old, were required to directly address the needs of students by incorporating three components:

- an academic–based curriculum linked to the Texas Essential Knowledge and Skills (TEKS),
- a character/citizenship education component, and
- a plan for parental and/or mentor involvement.

Each grantee designed a program that would help students gain practical knowledge and skills which would enable them to become successful in school as well as successful and productive adults in later life. As part of their program evaluations, districts identified strategies used to provide academic and character/citizenship services as well their plan for parent or mentor involvement.

➢ **TASI districts dedicated the greatest percentage of after-school time to the academic-based component.**

For more than three-quarters of TASI programs, 41% or more of after-school time was spent on academics. In contrast, the majority of programs spent 40% or less of time on the character/citizenship component and 20% or less time on the parental or mentor component (see Table 3.13 and Figure 3.1).

Table 3.13. Time Dedicated to Various TASI Program Components

Component	Spr 2000 *N*=40	2000-01 *N*=28	2001-02 *N*=21	Fall 2002 *N*=14
Academics-based				
20% or less	5.0	7.7	3.1	7.1
21-40%	12.5	7.7	6.3	7.1
41-60%	22.5	28.2	21.9	28.6
61-80%	42.5	38.5	25.0	28.6
81% or more	17.5	17.9	43.8	28.6
Character/citizenship				
20% or less	28.2	43.6	32.3	42.9
21-40%	53.8	30.8	45.2	50.0
41-60%	12.8	15.4	9.7	7.1
61-80%	2.6	5.1	3.2	--
81% or more	2.6	5.1	9.7	--
Parent/mentor involvement				
20% or less	52.5	71.8	62.5	71.4
21-40%	42.5	12.8	9.4	21.4
41-60%	2.5	7.7	15.6	--
61-80%	2.5	5.1	3.1	--
81% or more	--	2.6	9.4	7.1

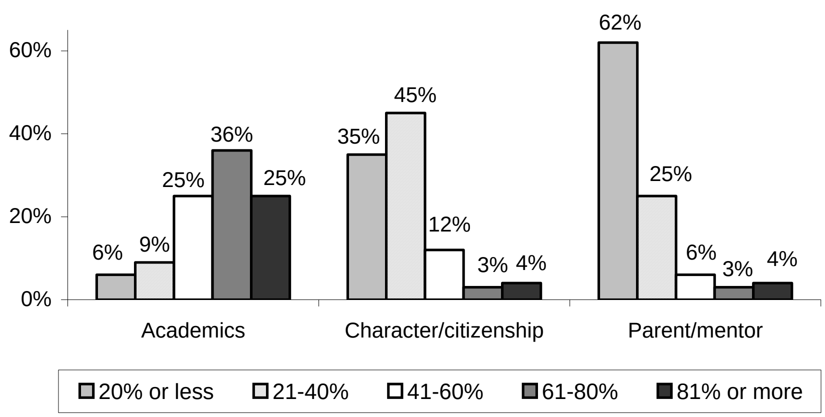

Figure 3.1. Mean percent of districts dedicating various time allocations to TASI program components (four cohorts).

Program Configuration

- **After-school programs most frequently relied on medium-sized group activities (7 to 19 students) for both academic-based and character/citizenship program components,**

TASI programs used a variety of grouping configurations: however, medium-sized groups (with 7 to 19 students) occurred most frequently. Individual and small-group activities (6 or less students) were also commonly used. Large-group activities (20 or more students) occurred substantially less often in TASI programs. Students, however, were more likely to participate in large-group character/citizenship activities compared to academic activities. (See Table 3.14 and Figure 3.2.)

Table 3.14. Types of Student-Level Services Provided – Academic and Character/Citizenship Components (Percent of Programs)

Grouping Configurations	Spring 2000 *N*=40		2000-01 *N*=28		2001-02 *N*=21		Fall 2002 *N*=14	
	AC	CC	AC	CC	AC	CC	AC	CC
Individual	70.0	68.4	82.1	67.9	85.7	81.0	78.6	64.3
Small group (6 or less)	65.0	73.7	85.7	82.1	85.7	90.5	64.3	64.3
Medium group (7 to 19)	97.5	97.4	85.7	82.1	95.2	100.0	100.0	92.9
Large group (20 or more)	47.5	47.4	50.0	67.9	52.4	66.7	50.0	50.0

Source: District program reports. *Note*. AC=academics-based program component; CC=character/citizenship component.

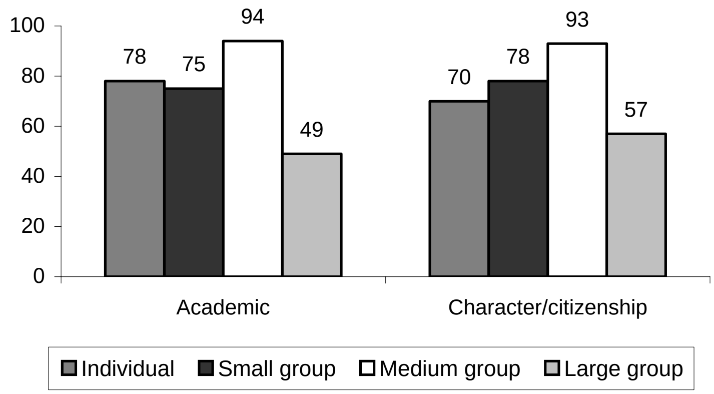

Figure 3.2. Mean percent of districts using various grouping strategies to deliver academic and character/citizenship services (four cohorts).

Academic Component

- **Instructional technology as well as more traditional instructional approaches were commonly used in the TASI academic components.**

Table 3.15 shows that districts relied on several technology-based programs for delivering aspects of TASI academic activities. *Lightspan* was the most commonly used program throughout the grant's duration. General use of technology in academic activities (e.g., word processing, Internet) was also used by between 26% and 46% of districts. Overall, the use of specific technology programs declined, while general technology use increased slightly.

The instructional approaches used by participating districts varied by year, but tutoring remained one of the most commonly used strategies throughout the four-year period. Districts also frequently reported that the academic component was enhanced through the provision of field trips and guest speakers. A few districts implemented commercial programs, such as *Voyager* or *HOSTS (Helping One Student to Succeed).*

Table 3.15. Activities Used in the Academics-Based Component (Percent)

Activity	Spr 2000 N=40	2000-01 N=39	2001-02 N=32	Fall 2002 N=13
Technology				
Lightspan	40.0	38.5	25.0	15.4
Accelerated Math	--	12.5	6.3	--
Accelerated Reader	2.5	6.3	6.3	--
NovaNet/PLATO/A+LS	5.0	5.1	--	--
General technology	32.5	25.6	40.7	46.2
Technology lab	2.5	6.3	--	--
Instructional approach				
Individualized	--	4.3	9.4	15.4
Grouping	25.0	2.6	12.5	23.1
Remediation	--	10.3	15.7	--
Hands-on	12.5	28.2	15.7	38.5
LEP/ESL	2.5	4.3	6.3	15.4
Tutoring	32.5	53.8	71.9	69.2
Projects	10.0	28.2	50.0	15.4
TAAS/TAKS activities	25.0	28.2	21.9	30.8
Curricular enhancement (e.g., field trips, speakers, etc.)	32.5	28.2	18.8	23.1
Commercial academic program				
Voyager	27.5	12.8	10.3	15.4
HOSTS	10.0	10.2	--	--

Source: District program reports. Information unavailable in 2003. *Note*. Percent of districts citing an activity. A+LS=A+dvanced Learning System ®.

- **Time dedicated to technology declined somewhat over the grant period.**

In the first semester of the grant, 55% of districts dedicated 41% or more time to technology. During the remaining three grant years, only 38% to 43% of districts dedicated 41% or more of program time to technology use (Table 3.16).

Table 3.16. Time Dedicated to Technology Use (Percent of Programs)

Component	Spring 2000 *N*=40	2000-01 *N*=28	2001-02 *N*=21	Fall 2002 *N*=14
20% or less	27.5	30.8	25.0	42.9
21-40%	17.5	30.8	34.4	14.3
41-60%	30.0	15.4	25.0	28.6
61-80%	20.0	15.4	9.4	14.3
81% or more	5.0	7.7	6.3	--

Character Education/Citizenship Component

- **Districts used a combination of commercial programs (*Voyager, ROPES, Character Counts, etc.),* external supports (guest speakers, field trips, community service, etc.), and other activities (athletics, fine arts, etc.) as part of the TASI character education/citizenship component.**

Voyager was the most consistently used commercial program in TASI character education/citizenship activities. Districts also joined with external entities to provide character/citizenship activities. These linkages most often came in the form of guest speakers, community service activities, and field trips. Other activities students participated in frequently included athletics or fitness programs and arts/crafts/theater activities. Topics most frequently addressed in TASI programs include a citizenship, self-esteem, self-discipline, and social skills (Table 3.17).

Table 3.17. Activities Used in the Character Education/Citizenship Component

Activity	Spring 2000 N=40	2000-01 N=39	2001-02 N=32	2002-03 N=39
Commercial programs				
Voyager	22.5	10.2	39.6	10.2
ROPES	17.5	8.7	12.5	7.7
Character Counts	5.0	11.3	12.5	5.1
Boystown Social Skills	5.0	10.3	--	--
Communities in Schools	--	6.3	--	5.1
Teen Leadership	--	4.3	6.3	5.1
7 Habits of Effective Teens	7.5	10.3	--	3.8
Topics				
Citizenship	35.0	43.6	43.8	20.5
Self-esteem	22.5	20.5	9.4	10.2
Self-discipline	30.0	23.1	12.5	23.1
Social skills (anger mgmt, teamwork)	25.0	41.0	50.0	30.8
Life skills (career, drug awareness)	10.0	28.2	18.8	25.7
Moral/ethical issues	2.5	17.4	31.3	7.7
External linkages				
Guest speakers	37.5	30.8	31.3	28.2
Field trips	17.5	25.6	15.7	10.2
Community service	20.0	18.0	18.8	28.2
Mentoring	--	13.0	25.1	15.4
Physical development (karate, self-defense)	15.0	17.9	6.3	7.7
Facilitator (e.g., Boys & Girls Club)	7.5	4.3	18.8	3.8
Services/activities				
Athletics or fitness	35.0	23.1	18.8	38.5
Arts/crafts/theater	15.0	10.3	9.4	17.9
Student counseling	7.5	7.7	9.4	10.3
Social services	--	8.7	10.3	--
Clubs	5.0	5.1	6.3	7.7
Projects (e.g., recycling, gardening)	--	12.8	6.3	12.8

Parent and Mentor Component

➢ **Traditional means of communicating with parents (meetings, mail, telephone) and involving parents (training, volunteering) were most commonly used in TASI programs.**

Parent meetings or mail and telephone were the most frequently used methods of communication. Home visits or individual parent conferences seldom occurred. Sharing materials or progress reports with parents also occurred infrequently (4% to 9% of districts). Districts provided other activities and services to parents, such as training or educational classes, volunteer opportunities, and occasions for parents to visit students’ classrooms or performances (Table 3.18).

Table 3.18. Activities Utilized in the Parent/Mentor Involvement Component

Activity	Spring 2000 N=40	2000-01 N=39	2001-02 N=32	Fall 2002 N=13
Communication				
Parent meetings	40.0	46.2	53.2	76.9
Communication (e.g., mail, phone)	12.5	25.6	37.5	38.5
Language accommodation	7.5	12.8	--	15.4
Home visits	--	12.8	--	--
Parent conferences	--	5.1	6.3	7.7
Parent center	--	5.1	--	--
Information				
Materials	--	4.3	9.4	--
Progress reports	--	8.7	6.3	--
Activities				
Parent training/education	50.0	43.6	37.6	38.5
Volunteer opportunities	30.0	35.9	50.1	53.8
Observations (e.g., classes, performances)	32.5	12.8	15.7	7.7
Projects involving parents	7.5	17.9	12.5	15.4
Parent survey	5.0	4.3	6.3	7.7
Parent counseling	2.5	--	6.3	--

- **Parent involvement most commonly meant attending a parent night or serving as a helper. In contrast, mentors most often served as tutors or speakers.**

In describing the nature of parent involvement, TASI programs most frequently reported that parents attended parent nights (between 71% and 90% of programs) or served as helpers (between 68% and 86% of programs). Mentors more often served as tutors, speakers, or helpers (Table 3.19).

Table 3.19. Parent and Mentor Activities (Percent of Programs)

Category	Spr 2000 *N*=40	2000-01 *N*=28	2001-02 *N*=21	Fall 2002 *N*=14
Parent involvement				
Parent Night attendees	89.7	85.7	85.7	71.4
Helpers	71.8	67.9	85.7	78.6
Instructional aides	38.5	42.9	52.4	50.0
Speakers	33.3	42.9	57.1	35.7
Tutors	30.8	46.4	52.4	50.0
Teachers	20.5	25.0	47.6	35.7
Mentor involvement				
Tutors	64.1	64.3	61.9	78.6
Speakers	61.5	50.0	61.9	57.1
Helpers	56.4	46.4	52.4	64.3
Teachers	53.8	50.0	52.4	50.0
Instructional aides	48.7	42.9	52.4	57.1
Parent Night attendees	48.7	42.9	47.6	42.9

Source: District program reports. Information unavailable in 2003.

Participation in Additional Activities

➢ **TASI students most commonly engaged in extracurricular and community service activities.**

Districts also reported on the participation of TASI students in other school activities. Table 4.20 shows that the percentage of students participating in activities varied by term. However, TASI students were most likely to be involved in extracurricular activities and least likely to be involved in intramurals. Differences by eligibility emerged—students with no risk factors had greater participation rates in extracurricular activities and student clubs, while at-risk students tended to be more involved in community service activities (Table 3.20).

Table 3.20. Student Participation in Additional School Activities (Percent)

School Activity	Spring 2000	2000-01	2001-02	2002-03
All TASI participants				
Community service	17.2	11.6	17.2	19.6
Extracurricular activities	26.5	17.5	21.6	30.3
Intramural activities	15.0	3.4	7.5	8.6
Student clubs	12.6	10.9	14.1	15.4
Meets state Compensatory Education requirements				
Community service	16.3	15.7	234.6	21.8
Extracurricular activities	25.2	20.1	21.1	27.6
Intramural activities	14.4	4.0	9.5	8.4
Student clubs	12.3	11.7	16.5	14.8
Meets other risk factors				
Community service	18.5	12.9	12.3	20.6
Extracurricular activities	32.3	19.4	21.8	34.7
Intramural activities	14.3	3.1	6.5	10.7
Student clubs	11.7	11.5	11.7	16.5
No at-risk characteristics				
Community service	23.0	11.9	18.4	16.7
Extracurricular activities	39.1	22.3	34.2	32.1
Intramural activities	16.4	3.9	8.9	7.6
Student clubs	18.0	16.0	20.6	16.3

STUDENT OUTCOMES

Passing Core-Content Courses

➢ **The majority of TASI students (84% to 89%) passed core content-area courses.**

Between 84% and 89% of TASI students passed core-content courses, although passing rates were slightly lower for mathematics courses. Students with no risk characteristics had the highest passing rates (more than 90% for all core-content areas each semester). Passing rates for participants meeting Compensatory Education requirements or having other risk factors generally lagged approximately 10 percentage points below their non-at-risk counterparts (Table 3.21).

Table 3.21. Percentage of Students Passing Core-Content Area Courses

Time Period	Language Arts		Mathematics		Social Studies		Science	
	N	Pass	*N*	Pass	*N*	Pass	*N*	Pass
All TASI participants								
Spring 2000	7,532	83.9	7,568	83.8	6,598	87.6	6,425	86.7
2000-01	13,882	87.4	14,133	83.8	14,005	88.5	14,011	87.1
2001-02	19,100	86.7	19,302	84.3	19,166	87.6	18,925	88.1
2002-03	24,922	88.4	25,074	85.8	25,081	89.2	25,005	88.8
Meets state Compensatory Education requirements								
Spring 2000	4,812	85.4	4,823	81.8	4,797	86.2	4,715	84.8
2000-01	5,206	84.4	5,396	80.7	5,350	85.9	5,352	84.7
2001-02	8,656	86.1	8,746	82.9	8,712	86.2	8,591	87.5
2002-03	11,416	85.4	11,527	81.5	11,547	86.1	11,542	85.6
Meets other risk factors								
Spring 2000	933	85.2	938	79.0	931	85.9	930	86.0
2000-01	3,663	85.0	3,695	80.9	3,662	86.8	3,664	84.8
2001-02	3,982	86.2	4,051	83.7	4,021	88.3	3,954	88.0
2002-03	6,397	87.5	6,429	86.0	6,416	89.2	6,401	88.5
No at-risk characteristics								
Spring 2000	722	90.9	749	91.5	745	91.9	739	92.4
2000-01	2,412	95.2	2,424	92.5	2,409	95.7	2,407	94.6
2001-02	3,421	95.9	3,423	94.4	3,426	96.0	3,385	96.3
2002-03	6,272	95.0	6,279	93.5	6,289	95.4	6,280	95.7

Note. Passing percentage based on number of courses taken. Columns may not sum because some students lack eligibility data.

Discipline Referrals

- **Discipline problems are an issue for some TASI students. Nearly one-fifth of students had four or more office referrals (17% to 20%), and a small percentage of students were referred to alternative education programs (about 5%) or juvenile justice programs (less than 1%).**

Across the four years, approximately 20% of TASI students meeting Compensatory Education requirements or other risk factors have been referred to the office four or more times. In comparison, approximately 10% of students with no risk characteristics have received four or more office referrals. Placements in alternative education or juvenile justice programs remained low across semesters, however alternative education placements increased somewhat over time. Not surprisingly, students with no risk characteristics had fewer alternative education or juvenile justice placements (Table 3.22).

Table 3.22. Student Disciplinary Referrals (Percent)

Referral Category	Spring 2000	2000-01	2001-02	2002-03
All TASI participants				
No office referrals	--	52.7	54.2	55.1
1 to 3 office referrals	--	28.8	26.0	27.6
4 or more office referrals	1.5	18.6	19.8	17.3
AEP placement	0.2	3.3	5.2	5.6
JJAEP referral	0.5	0.6	0.4	0.6
Meets state Compensatory Education requirements				
No office referrals	--	48.0	51.1	50.0
1 to 3 office referrals	--	30.6	27.9	29.2
4 or more office referrals	1.4	21.4	21.0	20.8
AEP placement	0.1	3.8	5.5	7.4
JJAEP referral	0.4	0.9	0.6	0.8
Meets other risk factors				
No office referrals	--	51.6	50.4	53.8
1 to 3 office referrals	--	29.5	25.9	28.8
4 or more office referrals	2.8	19.0	23.7	17.4
AEP placement	0.0	4.5	7.2	4.6
JJAEP referral	2.2	0.7	0.4	0.5
No at-risk characteristics				
No office referrals	--	67.6	68.9	67.6
1 to 3 office referrals	--	22.1	23.0	23.3
4 or more office referrals	2.2	10.3	8.1	9.1
AEP placement	0.0	2.2	1.7	3.3
JJAEP referral	0.3	0.4	0.3	0.3

Note. Office referral data not collected in spring 2000 (denoted by --).
AEP = Alternative Education Program. JJAEP = Juvenile Justice Alternative Education Program.

Comparisons Between TASI and Non-TASI Students

Estimating the impact of a program intervention requires comparisons between program participants and a comparable group of non-served students. Although we have data for all grades 6-8 students in each participating TASI campus, it is impossible to form a *true* TASI comparison group. By program mandate, only students at risk of academic failure and/or at risk of committing juvenile offenses received TASI services. Thus, although non-served students might include some students *at risk,* the majority of students in the comparison group will have fewer risk factors. In an attempt to create a more comparable group of non-served students, we have restricted the comparison group to those students who are similar to the TASI-served students on seven dimensions: grade level, ethnicity, gender, economic disadvantage status (based on eligibility for free or reduced-price lunch), limited English proficiency, whether or not they repeated their current grade, and district attended. The characteristics of TASI and selected students are given in Table 3.23.

Table 3.23. Characteristics of Students Included in Comparison Groups

Characteristic	Cohort 1 N=15,206	Cohort 2 N=23,974	Cohort 3 N=33,814	Cohort 4 N=38,802
Grade				
Sixth	33.8	31.4	33.5	30.3
Seventh	37.3	37.2	34.7	36.9
Eighth	29.0	31.4	31.8	32.8
Gender				
Male	52.0	52.3	51.1	50.0
Female	48.0	47.7	48.9	50.0
Race/Ethnicity				
Hispanic	55.4	52.5	53.9	55.9
African American	23.1	21.0	21.3	22.4
White	20.1	24.5	22.5	19.8
Other/NA	1.4	2.0	2.3	1.8
Repeating grade level	1.3	1.4	1.4	1.4
Limited English proficient	15.8	11.7	12.6	13.6
Economically disadvantaged	63.8	63.8	66.4	68.7

Of the 15,206 students in cohort 1, half (7,603) are TASI students and half are non-TASI students. Cohorts 2 through 4 have a greater number of students because the number of students served in TASI programs increased during those years. Again, half of the students are in TASI and half are non-TASI. Most demographic characteristics are similar across all four cohorts. Changes across time reflect changes in the demographics of TASI served students. Over time, the percentage of male students, White students, and sixth-grade students decreased, whereas the percentage of economically disadvantaged students increased.

Attendance Rates

Using data from PEIMS, the effect of the TASI program on student attendance rates is explored using time-series analysis. As stated previously, each program year forms one cohort of students, and each cohort of students is analyzed separately. Five years of attendance data are available for cohort 1 students (1997 through 2002), five years for cohort 2 (1998 to 2003), four years for cohort 3 (1999 to 2003), and three years for cohort 4 (2000 to 2003). The analysis is restricted to matched students with valid data for all years. The number of students included in the analysis is given in Table 3.24. Of the 14,334 students in cohort 1, 14,155 are in their grade (6th, 7th, or 8th) for the first time and 179 are repeating their grade level. There are 22,130 students in cohort 2; 32,621 in cohort 3; and 38,802 in cohort 4. The vast majority of students are in their grade for the first time.

Table 3.24. Number of Students Included in Attendance Rate Analysis

Cohort/Student Category		TASI	Non-TASI	Total
Cohort 1 1999-00	All students	7,201	7,133	14,334
	First time in grade	7,115	7,040	14,155
	Repeating grade	86	93	179
Cohort 2 2000-01	All students	11,160	10,970	22,130
	First time in grade	11,022	10,829	21,851
	Repeating grade	138	141	279
Cohort 3 2001-02	All students	16,348	16,273	32,621
	First time in grade	16,127	16,052	32,179
	Repeating grade	221	221	442
Cohort 4 2002-03	All students	19,401	19,401	38,802
	First time in grade	19,126	19,126	38,252
	Repeating grade	275	275	550

Note. "First time in grade" refers to students who are enrolled in 6th, 7th, or 8th grade for the first time. "Repeating grade" refers to students who remained at the same grade level as the previous school year

- **In general, TASI students' attendance rates have not improved over time. Attendance rates for TASI students, however, are consistently higher than rates for non-TASI students.**

Longitudinal attendance rate data for students in each of the four cohorts show that attendance rates are near state averages (95%) but decline as students progress to higher grade levels, except for cohort 4 students who increased their attendance rate over time. Although TASI students have better attendance rates than non-TASI students, differences *cannot* be attributed to the after-school program since the difference between TASI and non-TASI students remains relatively stable across years. These data, however, *do* show that TASI students have a more positive school attendance profile than demographically similar students who did not participate in TASI. Attendance rate differences may reflect motivational or attitudinal characteristics of students that make them more strongly connected to the school or more willing to participate in educational activities that extend the school day.

Table 3.25. Longitudinal Attendance Rates for All Students

	Cohort 1 1999-00		Cohort 2 2000-01		Cohort 3 2001-02		Cohort 4 2002-03	
Year	TASI Students	Non-TASI Students	TASI Students	Non-TASI Students	TASI Students	Non-TASI Students	TASI Students	Non-TASI Students
1997-1998	96.7	96.4						
1998-1999	96.1	95.8	96.6	96.3				
1999-2000	95.8	95.1	96.6	96.0	96.8	96.4		
2000-2001	94.7	94.1	95.7	94.9	96.3	95.6	93.1	92.0
2001-2002	93.3	92.8	95.0	94.2	95.7	94.8	96.2	95.5
2002-2003			93.7	93.1	94.8	94.0	95.7	94.7
Change	**-3.4**	**-3.6**	**-2.9**	**-3.2**	**-2.0**	**-2.4**	**+2.6**	**+2.7**

Student attendance rates, disaggregated by students in a grade for the first time and those who are repeating a grade level, are displayed in Figures 3.3 through 3.6 for the four student cohorts.

- **First-time students have higher attendance rates than students repeating a grade level for both TASI and non-TASI comparison groups. Although attendance rates for repeating TASI students declined over time, a positive change was observed during the TASI program implementation year for the last three cohorts.**

Disaggregation of cohort 1 students' attendance data in Figure 3.3 by first-time and repeating students shows that first-time students have notably higher attendance rates. In addition, TASI students had slightly higher attendance rates than non-TASI students. For all comparison groups, attendance rates decline over time. The attendance rate decline for students repeating a grade stabilized slightly between the 1998-99 and the 1999-00 school years, but the plateau was similar for both TASI and non-TASI students.

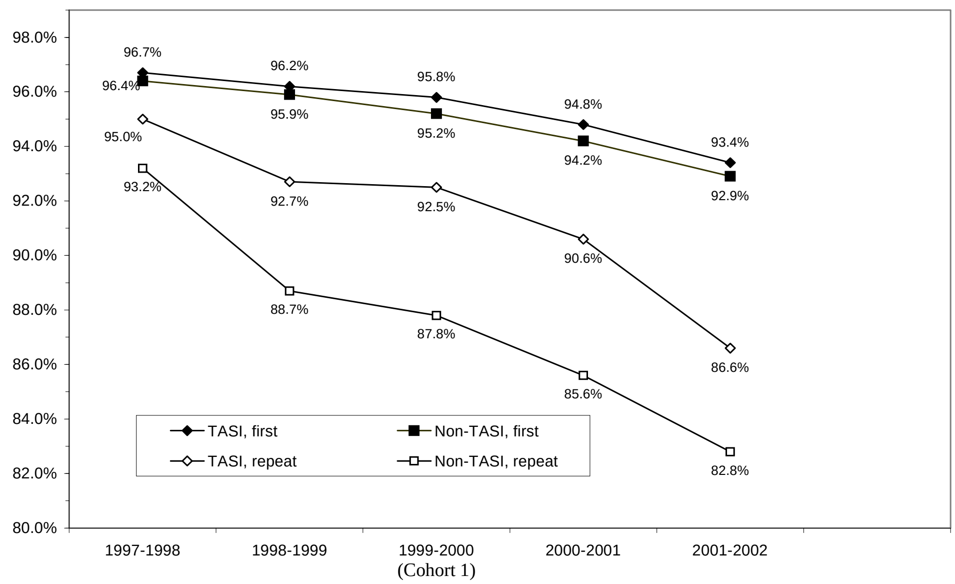

Figure 3.3. Attendance rates for cohort 1, by students in their grade for the first time and students repeating a grade level.

Figure 3.4 shows that cohort 2 students also exhibited a downward trend in attendance rates across years—however, the trend is altered for TASI participants who were repeating their grade level. This group of TASI students actually experienced an increase in attendance rates for the program year (2000-01). Unfortunately, this positive trend was not maintained, as the general attendance rate decline resumed for repeating students the following school year (2001-02).

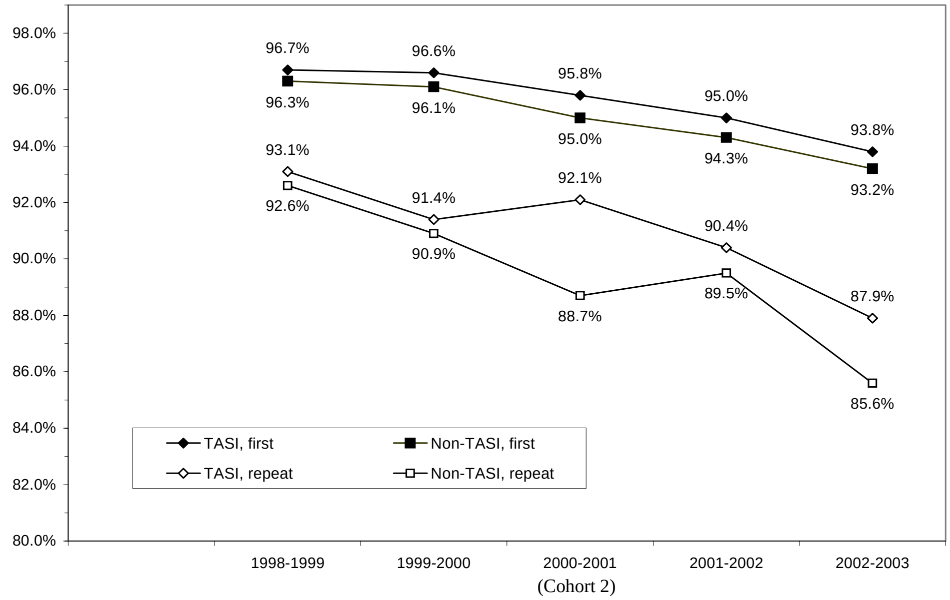

Figure 3.4. Attendance rates for cohort 2, by students in their grade for the first time and students repeating a grade level.

Results for attendance rates are similar for cohort 3 students. TASI participants who were repeating a grade experienced a slight attendance increase for the TASI program year (2001-02) with a resumption of a downward trend the following year.

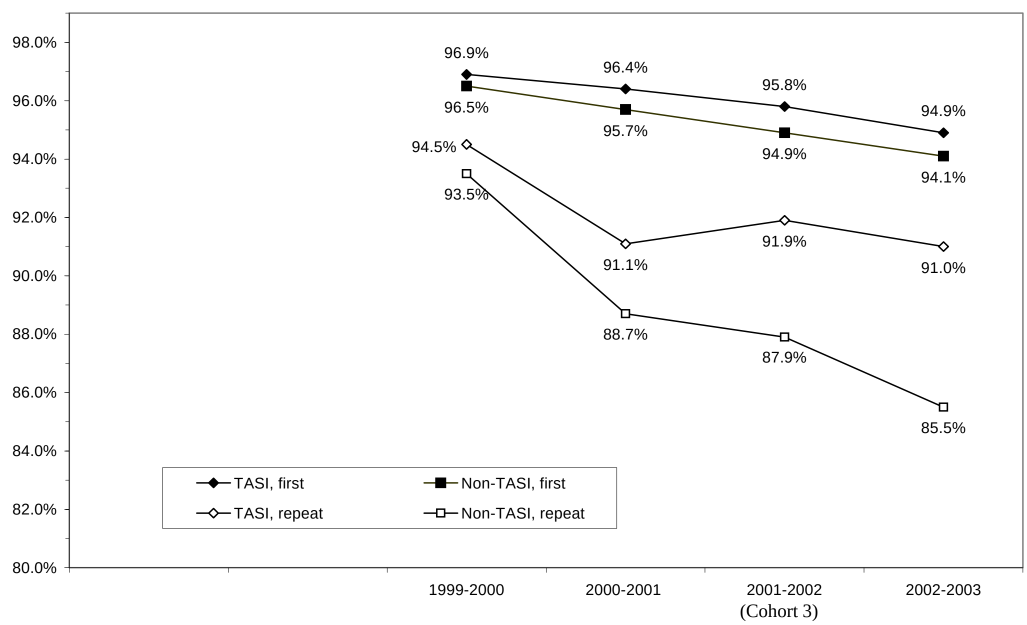

Figure 3.5. Attendance rates for cohort 3, by students in their grade for the first time and students repeating a grade level.

Attendance results for cohort 4 students differ from the other cohorts. For cohort 4 students in their grade for the first time, attendance rates spiked the year before TASI participation then declined slightly during the TASI year. For students repeating a grade level, TASI students had markedly higher attendance rates that were sustained during the TASI program year.

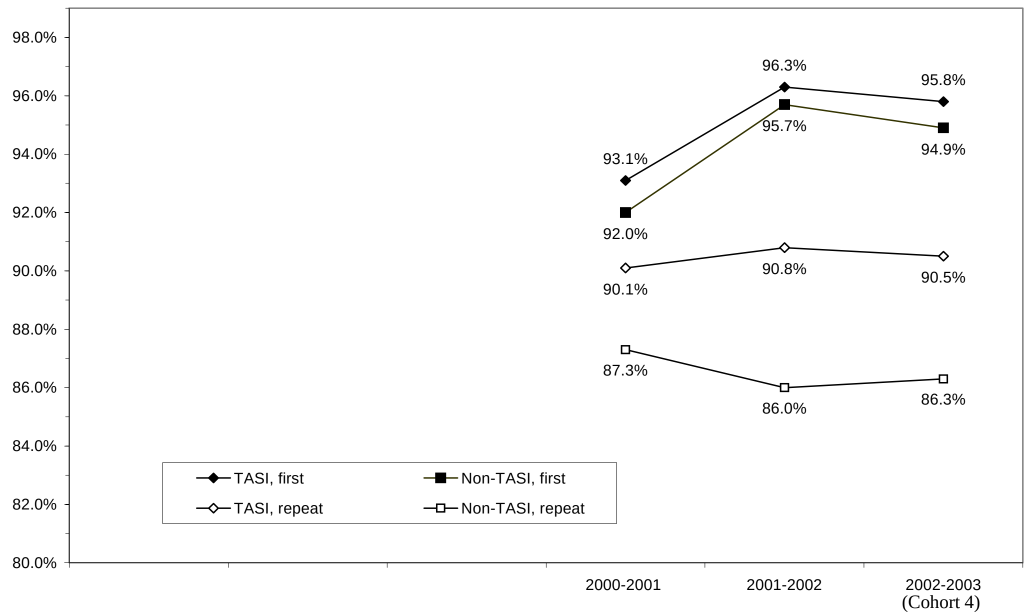

Figure 3.6. Attendance rates for cohort 4, by students in their grade for the first time and students repeating a grade level.

State-Level Assessments

In an effort to evaluate the effect of TASI participation on student academic performance, TAAS reading and mathematics test scores were merged with the student-level database. TAAS performance is measured by whether or not a student passed the reading and mathematics tests. Available scores include those for the year prior to TASI participation and at the end of the TASI program year. The sample is restricted to students who have TAAS data for both testing years.[1] Analyses were conducted separately for first-time students and students repeating their grade level.[2] During the fourth cohort year (2002-03), the TAAS test was replaced with the TAKS and therefore no comparison can be made to a pretest. The TAKS posttest is given for cohort 4 in tables 3.26 and 3.27.

Students in Grade Level for the First Time

- **TASI students had lower TAAS passing rates for both reading and mathematics compared to non-TASI students, but the achievement gap between groups narrowed slightly for cohorts 1 to 3. Despite apparent progress, the achievement gap between TASI and non-TASI students increased in both subject areas for cohort 4 students who completed the TAKS assessments.**

Table 3.26 shows that only 67.4% of TASI students in cohort 1 passed TAAS reading before participating in an after-school program, whereas 79.5% of non-TASI students passed (an achievement gap of 11.7 percentage points). At the end of the TASI program year, 72.5% of TASI students passed TAAS reading compared to 82% of non-TASI students (for an achievement gap of 9.5 percentage points). Although

[1] Absent, ARD exempt, and LEP exempt student scores are not used.
[2] Results for all students parallel those for first-time students.

non-TASI students outperformed TASI students on both assessments, the performance gap narrowed slightly (2.2 percentage points). This slight narrowing of the achievement gap across cohorts was consistent for both TAAS reading and mathematics tests, with the largest gap reduction occurring for TAAS reading in cohort 2 (3.2 percentage points) and the smallest for TAAS mathematics in cohort 3 (1.2 points).

Despite encouraging TAAS results, outcomes for cohort 4 students as measured by the new state assessment—Texas Assessment of Knowledge and Skills (TAKS)—show that the achievement gap between comparison groups widened, especially in math.

Table 3.26. TAAS/TAKS Reading and Mathematics Passing Rates, First Time Students

Cohort/ Test Category		Reading			Mathematics		
		TASI Students	Non-TASI Students	Achievement Gap	TASI Students	Non-TASI Students	Achievement Gap
Cohort 1 1999-00 N=11,692	Pretest	67.4%	79.2%	11.7	71.0%	82.2%	11.1
	Posttest	72.5%	82.0%	9.5	75.7%	84.2%	8.4
Cohort 2 2000-01 N=18,588	Pretest	73.9%	82.5%	8.7	80.3%	86.8%	6.4
	Posttest	80.2%	85.7%	5.5	83.5%	87.5%	4.0
Cohort 3 2001-02 N=26,400	Pretest	80.2%	85.5%	5.3	86.9%	90.4%	3.5
	Posttest	85.5%	88.8%	3.3	88.1%	90.4%	2.3
Cohort 4 2002-03 N=31,860	Pretest[a]	--	--	--	--	--	--
	Posttest	78.5%	83.0%	4.5	60.9%	67.9%	7.0

Note. Cohorts have equal numbers of TASI and non-TASI students (cohort 1–5,846 students; cohort 2–9,294 students; cohort 3–13,200 students; and cohort 4 – 15,930).
[a]Texas first administered the TAKS assessment in 2002-03; thus, pretests are unavailable.

Students Repeating a Grade Level

- **For the small number of students repeating their grade level, the TAAS passing rate gap was narrowed between TASI and non-TASI student cohorts. In fact, TASI students in cohort 3 passed TAAS reading at a higher rate than non-TASI students. Moreover, TASI students maintained their passing rate advantage over non-TASI students on TAKS reading and nearly equaled comparison-group students for mathematics.**

Comparisons in Table 3.27 show that a small number of students repeating their grade level had far lower TAAS passing rates than students in their grade level for the first time. Cohort 1 TASI students had a passing rate of only 24.6% for TAAS reading, whereas non-TASI students had a passing rate of 43.9% (a gap of 19.3 percentage points). Both student groups substantially increased their passing rates by the end of the program year, with TASI students having a slightly larger increase (5.3 percentage points). Given the extremely low starting point, the change may not reflect program effects but may instead result from the fact that students with extremely low scores have no place to go other than up (known as regression to the mean). Examining TAAS mathematics passing rates for cohort 1 students, TASI and non-TASI students have similar starting points (28.1% and 33.3%, respectively), and because both groups have low pretest scores, regression to the mean affects both groups equally. Consequently, the 1.8 percentage point gap reduction for TAAS mathematics is considerably less than for TAAS reading.

Table 3.27. TAAS/TAKS Reading and Mathematics Passing Rates, Students Repeating Their Grade

Cohort/ Test Category		Reading: TASI Students	Reading: Non-TASI Students	Reading: Achievement Gap	Mathematics: TASI Students	Mathematics: Non-TASI Students	Mathematics: Achievement Gap
Cohort 1 1999-00 N=114	Pretest	24.6%	43.9%	19.3	28.1%	33.3%	5.3
	Posttest	52.6%	66.7%	14.0	52.6%	56.1%	3.5
Cohort 2 2000-01 N=188	Pretest	40.4%	47.9%	7.4	44.7%	54.3%	9.6
	Posttest	63.8%	70.2%	6.4	71.3%	72.3%	1.1
Cohort 3 2001-02 N=262	Pretest	49.6%	51.9%	2.3	46.6%	57.3%	10.7
	Posttest	78.6%	66.4%	+12.2	75.6%	77.1%	1.5
Cohort 4 2002-03 N=350	Pretest[a]	--	--	--	--	--	--
	Posttest	61.1%	57.7%	+3.4	36.6%	40.0%	3.4

Note. Cohorts have equal numbers of TASI and non-TASI students (cohort 1–57 students; cohort 2–94 students; cohort 3–131 students; cohort 4 – 175 students).
[a]Texas first administered the TAKS assessment in 2002-03; thus, pretests are unavailable.

The most dramatic change in TAAS passing rates occurred for cohort 3 students in the area of reading. Comparison groups for cohort 3 had similar passing rates for the year prior to participation in TASI: 49.6% for TASI and 51.9% for non-TASI students, an achievement gap of only 2.3 percentage points. By the end of the program year, TASI students passed TAAS reading at a rate of 78.6%, while only 66.4% of non-TASI students passed. TASI students not only closed the achievement gap by 14.5 percentage points, but more importantly, they outperformed non-TASI students.

For Cohort 4, TASI students repeating a grade level maintained their positive advantage over non-TASI students on the TAKS reading assessment. The 61.1% of TASI students passing TAKS reading exceeded comparison students by 3.4 percentage points. However, for both TASI and non-TASI students passing rates for TAKS mathematics dropped dramatically compared to TAAS (only 36.6% and 40.0% passed, respectively). The achievement gap between TASI and non-TASI students also increased.

The TAAS/TAKS reading passing rates at the end of each cohort year are displayed graphically in Figure 3.7 for students in their grade for the first time and students repeating their grade level. This additional representation of the data presented previously in Tables 3.26 and 3.27 illustrates how the gap between TASI and non-TASI students' TAAS passing rates for reading closed over time. First-time students experienced higher passing rates than repeating students. For students repeating a grade, TASI students in cohort 3 had a significantly higher passing rate while the rate for non-TASI students remained relatively stable.

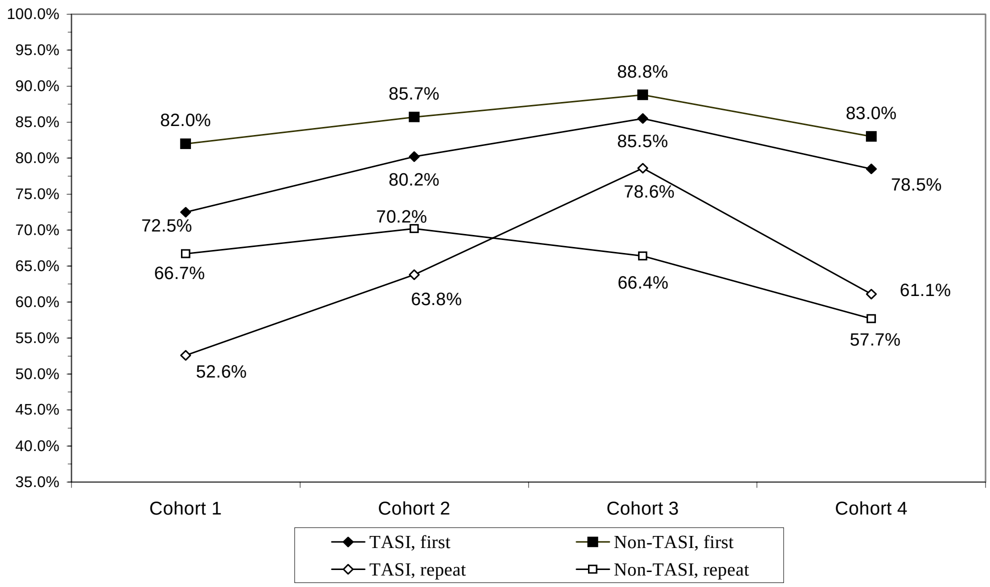

Figure 3.7. Posttest passing rates for TAAS reading (cohorts 1-3) and TAKS reading (cohort 4), by students in their grade for the first time and students repeating a grade level.

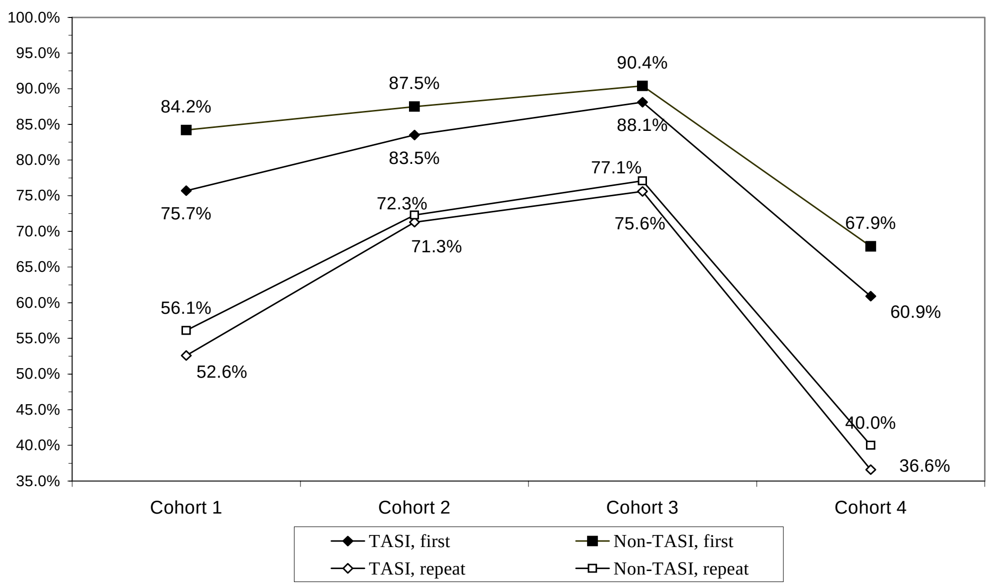

Figure 3.8. Posttest passing rates for TAAS mathematics (cohorts 1-3) and TAKS mathematics (cohort 4), by students in their grade for the first time and students repeating a grade level.

Grades 6, 7, and 8

- **Grade-level results show that TASI students generally had lower TAAS passing rates for both reading and mathematics than non-TASI comparison group students across all grade levels. Consistent with results for all students, the achievement gap between TASI and non-TASI students narrowed slightly.**

TAAS reading and mathematics passing rates for grades 6, 7, and 8 are included in Tables C.2, C.3, and C.4 in Appendix C. Overall, grade-level results mirror trends for all students. Non-TASI students have higher TAAS passing rates for all grade levels. TASI students in cohort 1 had low passing rates ranging from 68.5% (6th grade) to 77.4% (8th grade). TAAS passing rates improved for TASI students in cohorts 2 and 3 across all grade levels, although rates remained below those for non-TASI students. Eighth-grade TASI students in cohort 3, however, passed TAAS reading at nearly identical rates as non-TASI students (91.3% versus 91.9%). TAKS results for cohort 4 students are less promising than previous cohorts TAAS scores, especially for mathematics. Not only were the actual passing rates lower, but across the three grade levels the achievement gap between TASI and non-TASI students increased, especially for TAKS math. For non-TASI students in 6th grade, 72.1% passed TAKS math compared to 62.1% of TASI students. Thus, there was also a 7 percentage point gap in sixth graders TAKS reading favoring non-TASI students. The gap was progressively narrowed for 7th and 8th graders, but the gaps were always greater than differences between the previous cohort's TAAS scores.

Retention Rates

Another important measure of academic success is student promotion to the next grade level. For this analysis, student retention data are only available for cohorts 1 through 3. First, we examine retention rates for *all* students in the three student cohorts. Next, retention rates are explored for students who are enrolled in 6th, 7th, or 8th grade for the first time and students who are repeating the same grade as the previous year.

- **For TASI students, retention rates declined across cohorts, and in cohort 3, TASI students had lower retention rates than non-TASI students.**
- **For the small number of students repeating their grade level, across-cohort trends show that TASI students had lower retention rates than non-TASI students over time.**

Retention in grade level does not appear to be a large problem for middle school students. As Table 3.28 shows, the retention rates for each student cohort (both TASI and non-TASI) are small, with the rate for *all* students 3% or less. This is not true, however, for the few students repeating their grade level. These students have retention rates ranging from 3% to 12%. As a result of the low numbers of repeating students, results for all students and first-time students are nearly identical.

Table 3.28. Retention Rates for All Students, by Cohort and Comparison group

Cohort/ Student Category		TASI Students Number of Students	TASI Students Percent Retained	Non-TASI Students Number of Students	Non-TASI Students Percent Retained
Cohort 1 1999-00	All students	7,603	3.0	7,603	2.5
	First time in grade	7,503	3.0	7,503	2.5
	Repeating grade	100	6.0	100	3.0
Cohort 2 2000-01	All students	11,984	2.9	11,984	3.0
	First time in grade	11,815	2.9	11,815	2.8
	Repeating grade	169	3.6	169	12.4
Cohort 3 2001-02	All students	16,905	2.2	16,905	2.5
	First time in grade	16,675	2.2	16,675	2.4
	Repeating grade	230	3.0	230	6.5

Students repeating their grade level had much higher retention rates than first-time students, for both TASI and non-TASI comparison groups. For cohort 1, TASI students repeating a grade had a retention rate twice the rate of non-TASI students (6% versus 3%). Over time, retention rates for TASI students repeating a grade level declined, from 6% (cohort 1) to 3% (cohort 3). In contrast, retention rates for non-TASI students increased. By cohort 3, the retention rate for non-TASI repeating students was 6.5%, more than twice the rate for TASI students.

Figure 3.9 illustrates the retention rate differences for TASI and non-TASI comparison groups across cohorts. For TASI students in cohort 1, 3% were retained in their grade, a higher proportion than the 2.5% rate for non-TASI students. TASI and non-TASI students in cohort 2 had similar retention rates (2.9% and 3% respectively). For cohort 3, retention rates for TASI students (2.2%) were slightly lower than for non-TASI students (2.5%).

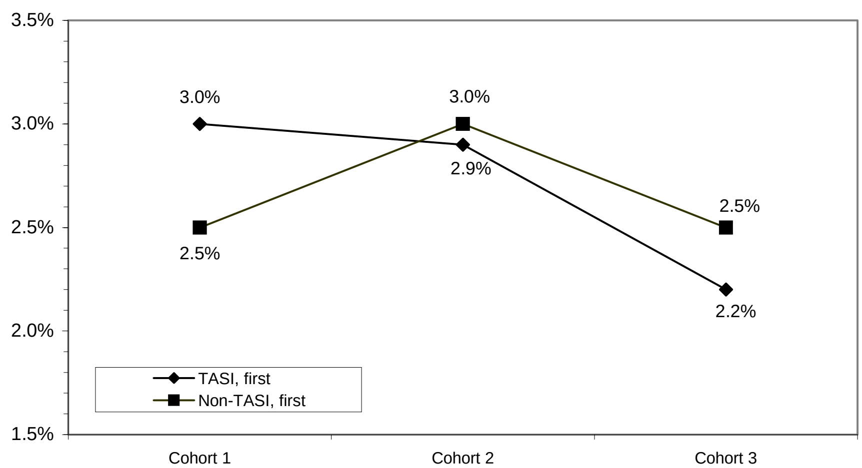

Figure 3.9. Retention rates for all students, by cohort and comparison group.

- **Although student retention varies by grade level, TASI students' retention rates declined across all cohorts for all grade levels. By cohort 3, seventh- and -eighth grade TASI students had lower retention rates than non-TASI students.**

For all student cohorts, grade-level retention rates ranged from 1.8% to 4.1% (as shown in Table 3.29). Seventh graders consistently had the highest retention rates for both TASI and non-TASI students. Retention rates for non-TASI students remained relatively stable across cohorts, with a variation of no more than 0.7 percentage points from cohort 1 to cohort 3 for any grade level. Sixth-grade TASI students had a steady decline in retention rates over time, although in cohort 3, rates remained slightly higher than those for non-TASI students. Seventh-grade TASI students in cohort 1 had the highest retention rate of any group (4.1%) and experienced the largest decline, such that by cohort 3, they had a lower retention rate than non-TASI students. Eighth-grade TASI students also experienced a decline in retention rates, and by cohort 3, they too had a rate lower than non-TASI students.

Table 3.29. Retention Rates for All Students, by Grade Level

Grade/Cohort		TASI Students		Non-TASI Students	
		Number of Students	Percent Retained	Number of Students	Percent Retained
Sixth	Cohort 1 (1999-00)	2,567	2.6	2,567	1.9
	Cohort 2 (2000-01)	3,759	2.8	3,759	2.3
	Cohort 3 (2001-02)	5,670	2.2	5,670	1.9
Seventh	Cohort 1 (1999-00)	2,834	4.1	2,834	3.5
	Cohort 2 (2000-01)	4,461	3.5	4,461	3.7
	Cohort 3 (2001-02)	5,858	2.4	5,858	3.2
Eighth	Cohort 1 (1999-00)	2,202	2.2	2,202	2.1
	Cohort 2 (2000-01)	3,764	2.4	3,764	2.8
	Cohort 3 (2001-02)	5,377	1.8	5,377	2.3

Association of Student- and District-Level Factors with Academic Achievement

The relationships between TASI student and district characteristics and TAAS reading and mathematics TLI scores were explored using hierarchical linear modeling (HLM). HLM was the preferred analytical method because, in most cases, students within school districts are similar to each other because of selection processes and common backgrounds. Consequently, measures within school districts are not independent. Rather, the correlation between measures of students from the same district will tend to be higher than the correlation between measures of students from different districts. Not only does hierarchical linear modeling make no assumption about independence, it estimates the degree of dependence of measures and uses this estimate in the calculation of the precision with which treatment effects are estimated.

Separate HLM analyses were conducted using TASI participants in 2000-01 (cohort 2) and 2001-02 (cohort 3). Cohort 2 included 7,601 students in 42 school districts and cohort 3 included 11,172 students in 45 districts. These students participated in extended-day programs in their respective TASI year, constituted at least 10 students in the school district, and had TAAS scores from the year prior to TASI participation (2000 for cohort 2 and 2001 for cohort 3) and the end of the TASI participation year (2001 for cohort 2 and 2002 for cohort 3). These students were used to investigate the effect of TASI student and district characteristics on TAAS reading and mathematics TLI scores.

The specific student- and district-level variables along with their descriptive statistics are reported in Table 3.30 for TAAS reading and mathematics. The student-level variables included gender (1 if male, 0 if female), economic status (1 if disadvantaged, 0 if not), prior retention (1 if retained the year prior to TASI, 0 if not), school attendance (average rate for TASI participation year), TAAS reading and mathematics TLI pretest scores (2000 for cohort 2 and 2001 for cohort 3), days participated in TASI, minority status (1 minority, 0 if White), and grade level in the TASI participation year.

District-level variables included the district TASI mean TAAS pretest score (achievement contextual effect), the district proportion of disadvantaged TASI students (economically disadvantaged contextual effect), and the district per-pupil TASI expenditure for that year.

Table 3.30. Descriptive Statistics for TAAS Reading and Mathematics Data

Variable Name	N	Mean	SD	Minimum	Maximum
Cohort 2 (2000-01) Student-Level Descriptive Statistics					
Grade 6	7,601	.31	.46	0	1
Grade 7	7,601	.37	.48	0	1
Gender	7,601	.50	.50	0	1
Minority	7,601	.74	.44	0	1
Economically disadvantaged	7,601	.64	.48	0	1
Prior retention	7,601	.02	.13	0	1
School attendance	7,601	96.14	4.09	50.3	100.0
TAAS reading 2000	7,601	78.55	14.52	29.0	101.0
TAAS reading 2001	7,601	81.06	13.80	18.0	100.0
TAAS mathematics 2000	7,601	78.64	11.36	12.0	93.0
TAAS mathematics 2001	7,601	79.43	9.77	13.0	93.0
Days participated in TASI	7,601	28.99	31.47	0	174.0
Cohort 2 (2000-01) District-Level Descriptive Statistics					
Economically disadvantaged	42	63.70	17.86	31.08	97.62
Reading achievement (2001)	42	76.70	4.75	64.42	84.53
Mathematics achievement (2001)	42	77.21	3.17	66.86	82.07
TASI expenditure per pupil	42	727.52	652.54	42.87	3,580.68
Days TASI offered	42	54.58	25.43	3.40	112.25
Cohort 3 (2001-02) Student-Level Descriptive Statistics					
Grade 6	11,172	0.33	0.47	0	1
Grade 7	11,172	0.35	0.48	0	1
Gender	11,172	0.51	0.50	0	1
Minority	11,172	0.75	0.43	0	1
Economically disadvantaged	11,172	0.63	0.48	0	1
Prior retention	11,172	0.01	0.12	0	1
School attendance	11,172	96.16	3.97	41.38	100.0
TAAS reading 2001	11,172	81.54	13.97	17.0	101.0
TAAS reading 2002	11,172	84.10	13.44	11.0	100.0
TAAS mathematics 2001	11,172	80.92	9.60	34.0	93.0
TAAS mathematics 2002	11,172	81.34	9.36	13.0	93.0
Days participated in TASI	11,172	24.75	26.43	0	189.0
Cohort 3 (2001-02) District-Level Descriptive Statistics					
Economically disadvantaged	45	62.08	20.12	18.18	99.61
Reading achievement (2001)	45	79.84	4.85	67.25	88.59
Mathematics achievement (2001)	45	80.16	3.09	70.79	85.65
TASI expenditure per pupil	45	397.18	403.38	40.55	2,445.65
Days TASI offered	45	50.52	26.58	4.7	102.04

Student-Level Variables

- **After controlling for the effect of student-level characteristics (academic and social background), there was no positive relationship between days students spend in TASI (up to 189 days) and TAAS scores.**
- **A higher school attendance rate for a student was associated with higher TAAS reading and mathematics scores.**
- **Students in grade 8 had the highest adjusted TAAS scores, while those in grade 6 had the lowest.**

Table 3.31 shows that student-level predictors associated with higher TAAS reading scores include being female, economically advantaged, non-minority, repeating the current grade level, school attendance, and attending grade 8. Higher TAAS reading pretest scores were also strongly associated with higher posttest reading scores. For example, for cohort 2 TASI students, a unit increase in 2000 TAAS reading scores was associated with a 0.64 unit increase in 2001 TAAS reading scores. School attendance was also a significant predictor of TAAS reading and mathematics TLI scores. By way of example, in cohort 2, a 1% increase in the attendance rate resulted in a 0.22 TLI unit increase in mathematics posttest scores, net of other level 1 predictors. However, there was no significant relationship between TASI instructional days and TAAS reading TLI scores. This is consistent with other studies of after-school programs showing limited impact on student achievement (e.g., Dynarski et al., 2003).

Similar student-level predictors were associated with higher TAAS mathematics scores. These included being non-minority, attending grade 8, having a higher TAAS mathematics pretest score, and school attendance. As with the reading analyses, there was no relationship between the number of TASI instructional days and subsequent TAAS mathematics scores. For cohort 3, higher TAAS reading and mathematics scores were not associated with being female or economically advantaged.

District-Level Variables

- **After controlling for the effect of student characteristics (academic and social background) and district social and academic contexts, there was no significant relationship between TASI dollars per pupil and TAAS reading and mathematics scores.**

Contextual effects occur when the aggregate of a student-level characteristic is related to an outcome variable, even after controlling for the effect of the student-level characteristic. An example would be average social class of a school being related to achievement after controlling for individual students' social class (Raudenbush and Bryk, 2002). HLM facilitates this type of multi-level analysis by specifying separate student and district equations. Following this model, an examination of district-level variables in Table 3.31 shows that average TASI dollars spent per student did not have a significant effect on district reading or mathematics scores.

Table 3.31. HLM Analyses of TAAS Mathematics and Reading TLI Scores of Cohort 2 (2000-00) and Cohort 3 (2001-02) TASI Students

Conditional Model		Reading		Mathematics	
		Cohort 2	Cohort 3	Cohort 2	Cohort 3
Student Level Variables	**District Level Variables**	**Gamma Coefficient/ (*t*)**	**Gamma Coefficient/ (*t*)**	**Gamma Coefficient/ (*t*)**	**Gamma Coefficient/ (*t*)**
Intercept		85.77 (154.97**)	86.46 (216.54**)	81.46 (277.91**)	82.97 (293.56**)
	Economically disadvantaged context	-0.009 (0.47)	-0.008 (0.50)	-0.005 (0.48)	-0.017 (1.41)
	Achievement context	-0.05 (0.85)	0.14 (1.93)	0.018 (0.29)	0.136 (1.25)
	TASI per pupil expenditure	-0.0003 (0.72)	-0.0003 (0.42)	0.00001 (0.04)	.00001 (0.02)
	TASI program days	0.0098 (0.82)	-0.004 (0.41)	-0.006 (0.46)	-.009 (1.2)
In Grade 6		-7.35 (17.44**)	-4.88 (9.38**)	-2.87 (6.90**)	-1.84 (6.33**)
In Grade 7		-2.37 (5.58**)	-1.18 (2.98*)	-1.01 (4.07**)	-0.69 (2.45*)
Female		0.80 (3.78**)	0.26 (1.83)	0.57 (3.14*)	-0.17 (-1.45)
Minority status		-2.00 (5.34**)	-0.94 (4.64**)	-1.08 (4.40**)	-0.93 (5.94**)
Economically disadvantaged		-0.97 (3.76**)	-0.38 (1.85)	-0.66 (3.30**)	-0.29 (1.79)
Repeating current year		5.79 (5.22**)	4.44 (3.31**)	4.81 (6.06**)	4.45 (6.46**)
School attendance rate		0.21 (5.72**)	0.15 (6.31**)	0.22 (15.4**)	0.15 (11.32**)
TAAS pretest		0.64 (47.14**)	0.66 (55.30**)	0.62 (44.2**)	0.702 (54.02**)
Days participated in TASI		0.007 (1.22)	-0.002 (0.59)	0.004 (1.00)	0.002 (0.63)

Notes. In the student-level model, the intercept was specified as random and the independent variables were specified as fixed. *$p < .01$; **$p < .001$.

Association of Student-and District-Level Factors with Retention

Relationships between TASI student and district characteristics and retention status (a binary outcome, retained or not retained) were analyzed using a hierarchical generalized linear model (HGLM) with a Bernoulli sampling model, a log odds or logit link function, and level-1 (student) and level-2 (district) structural models identical to those in HLM. HGLM presents results for both unit-specific and population-average models. The unit-specific model holds constant school district attended, while the population-average model does not, but averages over all districts. Because the average log-odds of retention was found to vary significantly across districts, this variation should be controlled or held constant. Consequently, only unit-specific results will be presented and discussed below. (Note, however, that results are similar for both models.)

Included in separate HGLM analyses were students who participated in TASI in 2000-01 (cohort 2) and 2001-02 (cohort 3). Cohort 2 included 8,071 TASI students from 42 school districts, whereas cohort 3 included 11,779 students from 47 districts. These data were used to investigate the effect of TASI student and district characteristics on retention status (2001 retention status for cohort 2 and 2002 retention status for cohort 3). As previously defined, student characteristics included gender, economic status, prior retention, days participated in TASI, minority status, and grade group in the TASI participation year. School attendance in the year of TASI participation and the average of TAAS reading and mathematics TLI scores in the year of participation were also used as student-level predictors. District-level variables included the district TASI mean of the TAAS combined reading and mathematics score (achievement contextual effect), the district proportion of disadvantaged TASI students, and the district TASI per pupil expenditure for the appropriate cohort year (see Table 3.32).

Table 3.32. Descriptive Statistics for Student Retention Data

Variable Name	N	Mean	SD	Minimum	Maximum
Cohort 2 (2000-01) Student-Level Descriptive Statistics					
Grade 6	8,071	0.32	0.47	0	1
Grade 7	8,071	0.37	0.48	0	1
Gender	8,071	0.50	0.50	0	1
Minority	8,071	0.75	0.43	0	1
Economically disadvantaged	8,071	0.65	0.48	0	1
Prior retention	8,071	0.02	0.13	0	1
Retention 2001	8,071	0.03	0.16	0	1
School attendance	8,071	96.10	4.10	50.29	100.0
Combined 2000 TAAS score	8,071	79.67	11.05	14.50	96.0
Days participated in TASI	8,071	29.30	31.96	0	174.0
Cohort 2 (2000-01) District-Level Descriptive Statistics					
Economically disadvantaged	42	62.78	18.96	26.67	97.22
Reading and math achievement (2001)	42	79.01	3.27	71.63	84.92
TASI expenditure per pupil	42	727.52	652.54	42.87	3,580.68
Days TASI offered	42	50.36	29.14	0	117.75
Cohort 3 (2001-02) Student-Level Descriptive Statistics					
Grade 6	11,779	0.34	0.47	0	1
Grade 7	11,779	0.35	0.48	0	1
Gender	11,779	0.51	0.50	0	1
Minority	11,779	0.75	0.43	0	1
Economically disadvantaged	11,779	0.64	0.48	0	1
Prior retention	11,779	0.02	0.12	0	1
Retention 2001	11,779	0.02	0.14	0	1
School attendance	11,779	96.12	4.02	41.38	100.0
Combined 2000 TAAS score	11,779	82.25	10.70	29.50	96.0
Days participated in TASI	11,779	24.69	26.26	0	189.0
Cohort 3 (2001-02) District-Level Descriptive Statistics					
Economically disadvantaged	47	63.33	19.57	16.67	98.96
Reading and math achievement (2001)	47	80.97	3.81	71.54	87.08
TASI expenditure per pupil	47	405.33	398.71	450.55	2,445.65
Days TASI offered	47	49.81	26.39	5.18	101.84

Student-Level Variables

- **After controlling for the effect of student-level characteristics (academic and social background), for cohort 3 students, more instructional days in TASI were associated with a marginally decreased chance of retention.**
- **For students in both cohorts, an increase in a student's school attendance rate decreased the chances of retention.**

As one might expect, being male and economically disadvantaged were associated with higher odds[3] of retention (Table 3.33). Having higher TAAS scores, being female, and having been retained the year prior to TASI participation were also associated with lower odds of retention. More importantly, school attendance was related to lower retention. A 1% increase in the attendance rate (above the average attendance rate) corresponded to a 0.13 reduction in the log-odds of retention in cohort 2 and to a 1.00 reduction in cohort 3. These log-odds of retention corresponded to odds of 0.88 and 1.10, respectively. If, for example, there are two otherwise similar cohort 2 students but one has a 1% higher attendance rate, the odds of retention for that student are 0.88 times the odds for the student without the additional attendance. In other words, the student with the 1% higher attendance rate will have a smaller chance of being retained. This effect is much larger for cohort 3 students.

For cohort 2 students, there was no significant association between the number of days in the TASI program and retention rate. However, there was a slight association for cohort 3 students. Other factors being equal, for cohort 3 students, each additional day of instruction in TASI resulted in a -0.007 reduction in the log-odds of retention. This corresponds to odds of .99 and to a probability of .50. Consider the cohort 3 student who was in eighth grade, male, not economically disadvantaged, had no prior retention, and not minority. If this student also had average school attendance, average pre-TAAS scores, and attended a typical school, the probability this student would be retained is 0.0087. Attending TASI for 10 more days would reduce the retention probability to 0.0081.

District-Level Variables

- **After controlling for the effect of student-level characteristics (academic and social background) and district social and academic contexts, there was no significant relationship between TASI dollars per pupil and retention rates.**

The only contextual variable to show any influence on district retention (Table 3.33) was the one measuring the percent of TASI students classified as economically disadvantaged. However, its influence was not in the expected direction. For cohort 3, schools with a higher percentage of economically disadvantaged students have a lower rate of retention. There was no association found between TASI program length and average dollars spent per student and retention.

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[3] Odds are the probability that an event will occur divided by the probability that the event will not occur. If the weather forecast says that there is a 20% chance of rain, then there is an 80% chance that it will not rain, and the odds of rain are 0.20/0.80 or 0.25. If the forecast says that there is a 50% chance of rain, then there is also a 50% chance that it will not rain, and the odds of rain are 0.50/0.50 or 1.00. If the forecast says that there is an 80% chance of rain, then there is a 20% chance that it will not rain, and the odds of rain are 0.80/0.20 or 4.00.

Table 3.33. HGLM Analyses of Retention Status of Cohort 2 (2000-01) and Cohort 3 (2001-02) TASI Students

Conditional Model		Cohort 2	Cohort 3
Student Level Variables	**District Level Variables**	**Gamma Coefficient/ (*t*)**	**Gamma Coefficient/ (*t*)**
Intercept		-4.44 (14.20**)	-4.74 (16.76**)
	Economically disadvantaged context	-0.02 (1.91^{+})	-0.03 (2.82*)
	Achievement context	0.05 (0.74)	0.07 (1.34)
	TASI per pupil expenditure	-0.0001 (0.47)	-0.00005 (0.08)
	TASI program days	-0.003 (0.47)	-0.0059 (0.98)
In Grade 6		0.19 (0.91)	-0.12 (0.66)
In Grade 7		.53 (2.70*)	.25 (1.46)
Female		-0.63 (4.06**)	-0.38 (2.68*)
Minority status		-0.44 (2.14)	-0.13 (0.67)
Economically disadvantaged		0.73 (3.69**)	0.60 (3.21*)
Repeating current year		-1.41 (2.29*)	-2.01 (2.57*)
School attendance rate		-0.13 (10.20**)	-0.098 (8.88**)
TAAS pretest		-0.08 (12.83**)	-0.074 (14.04**)
Days participated in TASI		-0.002 (0.61)	-0.007 (2.10^{+})

Note. Student-level predictors were specified as fixed with error terms constrained to be 0. Intercepts varied randomly.

$^{+}$ $p < .05$; $*p < .01$; $**p < .001$.

CONCLUSIONS AND IMPLICATIONS

In 1999, the Texas Legislature created the Texas After-School Initiative. The program funds after-school programs targeting middle school students, ages 10 to 14, who are at risk of academic failure and/or at-risk of committing juvenile offenses. The purpose of this evaluation is to assess the effective use of TASI funds to create after-school programs supporting the academic success of targeted students in grades 6 through 8. This study includes 60 districts and 194 campuses receiving both original and continuation TASI funding. Analyses examine results for grant dollars used during four school years (1999-00, 2000-01, 2001-02, and 2002-03). Conclusions and implications relative to the study's research questions are summarized below.

What are the characteristics of districts and students receiving TASI grants?

- **Characteristics of districts.** Considering program goals, it was not surprising that TASI programs were more heavily concentrated in larger districts (more than 10,000 students). Smaller districts seldom had TASI programs. Compared to the state, TASI districts and campuses have larger proportions of Hispanic, LEP, and economically disadvantaged students, smaller proportions of White students, and nearly equal percentages of African Americans.
- **Characteristics of students.** During four program years (1999-00 to 2002-03), 101,771 unique students participated in the TASI program (based on an estimated count that adjusts for missing students). The number of students served in TASI programs increased during the four years of the grant from about 13,000 in spring 2000 to almost 32,000 in 2002-03. TASI participants included a nearly equal proportion of sixth, seventh, and eighth graders.

  More than three-fourths of TASI students are Hispanic (about 53%) and African American (22%) and about two-thirds are economically disadvantaged (59%). Even so, the majority of students served by TASI programs have never been retained in grade. Approximately 8% of TASI students had repeated one grade, and approximately 1% had multiple retentions. TASI programs targeted students at risk of failure—either those meeting the state Compensatory Education requirements or meeting other risk factors. Hispanic and African American students were more likely to be eligible for TASI services under Compensatory Education requirements, whereas White students were more likely to meet other risk factors or to have no at-risk characteristics.

How did TASI resources supplement existing educational programs?

- **Program characteristics.** TASI after-school programs were required to directly address the needs of students by incorporating three components: (a) an academic–based curriculum linked to the Texas Essential Knowledge and Skills (TEKS), (b) a character/citizenship education component, and (c) a plan for parental and/or mentor involvement. Overall, TASI districts dedicated the greatest percentage of after-school time to the academic-based component. For more than three-quarters of programs, 41% or more of time was spent on academics.

  TASI programs typically offered about four instructional days per week, with nearly two program hours each day. The mean number of instructional days varied across years from about 49 to 58. Although after-school programs used a variety of grouping configurations, programs most frequently relied on medium-sized group activities (7 to 19 students) for both academic-based and character/citizenship program components.

- **Academic component**. Instructional technology, as well as more traditional approaches, were commonly used in TASI academic components. *Lightspan* was the most commonly used program throughout the grant's duration. General use of technology in academic activities (such as word processing and Internet) was also prevalent. Time dedicated to technology, however, declined somewhat over the grant period. On the contrary, tutoring remained one of the most commonly used strategies throughout the four-year period.

- **Character education/citizenship component**. Districts used a combination of commercial programs (*Voyager*, *ROPES*, *Character Counts, etc.),* external supports (guest speakers, field trips, community service, etc.), and other activities (athletics, fine arts, etc.) as part of the TASI character education/citizenship component.
- **Parent and mentor component**. Traditional means of communicating with parents (meetings, mail, telephone) and involving parents (training, volunteering) were most commonly used in TASI programs. Parent involvement most commonly meant attending a parent night or serving as a helper. Mentors most often served as tutors or guest speakers.

What was the effect of grant resources on targeted students?

To gauge the effectiveness of the TASI program in improving student success, we examine TASI students' core-subject area course passing rates and discipline referrals. In addition, comparisons are made between program participants and a comparable group of non-served students for other measures, including attendance rates, performance on state-level assessments, and retention rates.

- **Core-subject course passing rates**. The majority of TASI students (84% to 89%) passed core content-area courses. Course passing rate were slightly lower for mathematics (84% to 86%). Students meeting state Compensatory Education requirements or having other risk factors had lower passing rates (up to 10 percentage points less than more advantaged peers).

- **Discipline referrals.** Discipline problems are an issue for some TASI students. Nearly one-fifth of students (17% to 20%) had four or more office referrals, and a small percentage of students were referred to alternative education programs (about 5%) or juvenile justice programs (less than 1%). Since disciplinary referrals remained relatively stable across program years, there appeared to be no association between TASI and the improvement of student discipline.
- **Attendance rates.** In general, TASI students' attendance rates did not improve over time. However, attendance rates for TASI students during the program year (about 96%) were consistently higher than rates for a comparison group of non-TASI students (about 95%). TASI students who are in grade for the first-time have higher attendance rates than students repeating a grade level for both TASI and non-TASI comparison groups. Although attendance rates for repeating TASI students declined over time, a slightly positive change was observed during the TASI program implementation year for the last three cohorts.
- **State-level assessments.** TASI students had lower TAAS passing rates for both reading and mathematics compared to non-TASI students, but the achievement gap between groups narrowed slightly for student cohort 1 to 3. Despite apparent progress, the achievement gap between TASI and non-TASI students increased in both reading and mathematics for cohort 4 students who completed the TAKS assessments. For the small number of students repeating their grade level, the TAAS passing rate gap was narrowed between TASI and non-TASI student cohorts. In fact, TASI students in cohort 3 passed TAAS reading at a higher rate than non-TASI students. Moreover, TASI students maintained their advantage over non-TASI students on the TAKS reading assessment and nearly equaled comparison-group students on TAKS mathematics.

  Grade-level results show that TASI students generally had lower TAAS passing rates for both reading and mathematics than non-TASI comparison group students across all grade levels (6, 7, and 8). Consistent with results for all students, the achievement gap between TASI and non-TASI students narrowed slightly for TAAS. TAKS results for cohort 4 students are less promising, especially for math. TAKS passing rates were lower than TAAS scores and the achievement gap between TASI and non-TASI students increased.

- **Retention.** For TASI students, retention rates declined across cohorts (3% to 2.2%), and in cohort 3, TASI students had slightly lower retention rates slightly lower than a comparison group of non-TASI students (2.2% compared to 2.5%). For the small number of students repeating their grade level, across-cohort trends show that TASI students had slightly lower retention rates (3%, 2.9%, 2.2%) than non-TASI students over time (2.5%, 3%, 2.5%). Although student retention varies by grade level, TASI students' retention rates declined across all cohorts for all grade levels. By cohort 3, seventh- and eighth-grade TASI students had lower retention rates than non-TASI students.

What program elements are associated with student outcomes?

To further explore the association between TASI student and district characteristics and TAAS reading and Mathematics TLI scores, researchers used hierarchical linear modeling (HLM). Separate HLM analyses were conducted using TASI participants in 2000-01 (cohort 2) and 2001-02 (cohort 3). Cohort 2 included 7,601 students in 42 school districts and cohort 3 included 11,172 students in 45 districts. These students participated in extended-day programs in their respective TASI year. Separate HLM analyses were also conducted for retention. Cohort 2 included 8,071 students in 42 districts and cohort 3 included 11,779 students in 47 districts.

Student-Level Factors and Outcomes

- After controlling for the effect of student-level characteristics (academic and social background), there was no positive relationship between the number of instructional days students spend in TASI (up to 189 days) and TAAS scores. This suggests that the academic component of the TASI program was not optimally effective in improving student academic performance. In contrast to achievement, *more* instructional days in TASI were associated with a marginally decreased chance of retention for cohort 2 students (2001-02). Outcomes for HLM analyses are consistent with findings for TASI and non-TASI comparison groups. TASI appears to have had little or no impact on achievement but may have been somewhat effective in reducing student retention.
- A TASI student's school attendance rate was a significant predictor of academic performance. Higher school attendance rates were associated with higher TAAS reading and mathematics scores. In addition, for otherwise similar students, an increase in the school attendance rate decreased the chances of retention. Clearly, a student's school attendance rate was a significant predictor of valued outcomes (achievement and promotion)—thus, efforts aimed at improving a student's day-to-day presence in school seems to have a greater probability of improving academic performance than participation in an after-school program.

District-Level Factors and Outcomes

- Consistent with findings for the Optional Extended Year Program (OEYP), there was no compelling evidence that increasing per-pupil TASI expenditures improved academic performance or reduced the probability of student retention. There was no significant relationship between TASI dollars per pupil and TAAS reading and mathematics scores. Likewise, there was no significant relationship between TASI dollars per pupil and retention rates. Yet again, evidence suggests that *how* educational dollars are used makes a difference. Resources must be invested in programs that have a research-based link to valued student outcomes. Simply adding more dollars for programs appears unlikely to achieve the desired effect.

What are the implications for addressing the needs of students at risk?

- **After-school programs, as they are currently designed, appear only marginally successful in improving the academic performance of the majority of student participants.** For students in their grade for the first time (the majority of TASI participants), program participation had no discernable relationship to improved school attendance rates and only a modest correlation with increased TAAS scores. Despite some TAAS gains in reading and mathematics, the majority of TASI students lost ground compared to their non-TASI counterparts on the TAKS assessments, especially in mathematics.
- **After-school programs may provide the greatest benefit for students who have been retained in grade.** There was a stronger relationship between TASI participation and both attendance and TAAS scores for students repeating in a grade level. A slightly positive change was observed for student attendance during the TASI program year. Moreover, for a small number of students repeating their grade level, the TAAS passing rate gap was narrowed between TASI and non-TASI students. Further, TASI students in cohort 4 who were repeating a grade maintained their passing rate advantage in TAKS reading over their non-TASI counterparts. However, for mathematics, both groups had extremely low passing rates.
- **Reducing student retention through participation in an after-school program does not necessarily translate into improved academic achievement.** There was some indication that retention rates were reduced for TASI participants across all categories of students. However, simply preventing student retention did not ensure an increase in knowledge and skills as measured by state assessments. Effective programs are those with a strong correlation between reduced student retention and improved academic outcomes.
- **There is a need for a closer examination of the cost-effectiveness of after-school programs.** Although we compiled a great deal of information on after-school programs, program effectiveness, and especially cost-effectiveness, remains uncertain. Some trends have been revealed, but a more in-depth examination of specific programs is needed in order to understand what programs work, for whom, and under what circumstances. One way to approach such a study would be to use the databases created for this research study to identify districts that had successful programs. Success would be defined through a "value-added" approach. HLM analyses could identify programs that, after controlling for student- and school-level characteristics, contribute to improved student academic achievement.

CHAPTER 4
NINTH GRADE SUCCESS INITIATIVE (NGSI)

INTRODUCTION

From 1999 to 2002, the state of Texas appropriated a total of $170 million for the Basic Skills Program for High School Students—also known as the Ninth Grade Success Initiative (NGSI)—to support school districts' efforts to help ninth graders stay in school and succeed academically. The goal of NGSI was to increase graduation rates in Texas public schools by reducing the number of students who were retained in or dropped out of the ninth grade.

In 1999, the 76th Texas Legislature appropriated the first installment of $85 million for the 2000-01 biennium for NGSI. The Texas Education Agency (TEA), via a competitive grant process, awarded NGSI grants to a total of 234 school districts and education consortiums in spring 2000. Nine more districts received funding beginning in the fall of 2000. In 2001, the 77th Texas Legislature appropriated another $85 million to continue the NGSI for the 2002-03 biennium. Renewal grants supported 226 of the original districts, all of which continued their NGSI activities for the 2001-02 and 2002-03 school years.

Funds went toward expanding or enhancing existing programs, or creating new programs to increase academic performance and attendance rates and reduce dropout rates. NGSI programs had to serve (a) ninth graders who had not earned—or were not likely to earn—sufficient credit to advance to tenth grade and who failed to meet minimum skill levels, or (b) eighth graders who were being promoted to ninth grade but were considered academically at risk. Programs had to emphasize basic skills in core curricular areas and provide targeted students with opportunities to build credits toward graduation. NGSI was expected to achieve four major objectives: (1) decrease the rate of retention in ninth grade, (2) reduce the number of ninth grade dropouts, (3) increase attendance rates in ninth grade, and (4) support successful performance on the state's assessments, including the exit-level Texas Assessment of Academic Skills (TAAS).

Organization of the Chapter

Sections to follow include a brief literature review on the ninth-grade problem and an overview of this study's methodology. In addition, NGSI program findings are presented for the following topics: (a) NGSI grantees and their students; (b) NGSI program activities; (c) student outcomes for course grades, attendance, state-level assessments, and retention; (d) association of student- and district-level factors with academic achievement; (e) association of student- and district-level factors with retention; and (f) conclusions and implications.

THE NINTH GRADE PROBLEM

Ninth graders in America's schools are at particular risk of failure. More students repeat the ninth grade than at any other time during their schooling career and this leads directly to an increase in later school dropouts (Barro & Kolstad, 1987). Texas has identified a set of characteristics related to grade retention among students. Students who are male, members of minority groups, limited English proficient, receiving special education services, or over-age for their grade are retained more often than other students (TEA, 1999). As Figure 4.1 illustrates, during the five years prior to the initiation of the NGSI programs, ninth-grade retention rates averaged 17.5%. In comparison, eighth-grade retention rates averaged 2.0% and tenth grade 7.7%. Nationally, the rate at which ninth graders fail to advance to 10th grade has tripled in the last 30 years, a trend particularly troublesome for students deemed "at-risk" since 60% will not graduate with their class (Green & Scott, 1995).

Explanations for the difficulty some students encounter in ninth grade focus variously on the role of the students' background (including weak mathematics and reading comprehension skills), teachers who lack the knowledge or instructional strategies required to instruct teenagers whose basic skills need improvement, or teachers who take a "sink or swim" approach with their students (Roderick & Camburn 1999; Balfanz, McPartland, & Shaw, 2002). Several researchers have found a negative association between school size and student achievement, with this result independent of school setting (rural or urban) and staff and student characteristics (Eberts, Kehoe, & Stone 1982; Fowler & Walberg, 1991). Other studies indicate that the middle-to-high school transition is at the root of academic distress in ninth grade. A new school environment presents stresses, particularly when several middle schools "feed" into a single high school (Schiller, 1999). Students enter a larger, more impersonal and complex school structure in which there is more competition and a greater orientation to grades and academic achievement (Eccles, Midgley, & Adler, 1984; Roderick & Camburn, 1999).

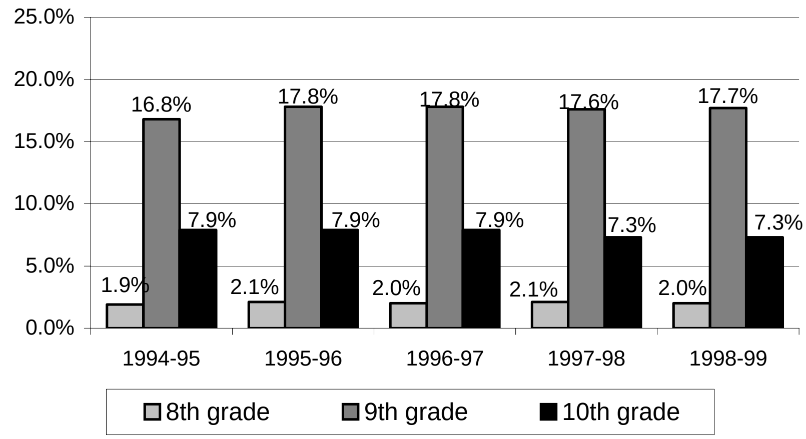

Figure 4.1. Texas retention rates for students in grades 8, 9, and 10 by year.
Source: Texas Education Agency, 1999.

Evidence from research offers potential solutions to the ninth-grade problem. Schools with a more extensive transition program had lower ninth-grade dropout and retention rates (Hertzog & Morgan, 1999). Results for a comprehensive school reform program, the Talent Development High Schools, also suggest that freshman failure is responsive to changes in school organization and curriculum (Letgers et al. 2002). Throughout the country, high schools are experimenting with a variety of strategies to address the ninth grade problem. The most successful results appear to include a combination of strategies, ongoing support for students throughout the ninth-grade year, and regular communication with and support from parents.

METHODOLOGY

This report relies on a combination of quantitative and qualitative data and methods as described below. Analyses include 226 school districts receiving both original and continuation NGSI funding. Districts received an original two-year grant for five semesters (spring 2000 through summer 2001) and a two-year continuation grant for six semesters (fall 2001 through summer 2003). NGSI funding and programming began at mid-semester in spring 2000, so program data for the term are excluded. Outcome data for students participating in this first semester, however, serve as a baseline to measure student gains.

Data Sources

The primary data sources include NGSI program and activity reports submitted by districts and student demographic and performance data collected from the TEA.

Program and activity reports. NGSI grant recipients were required to submit program and activity reports to the TEA after each semester in which they served targeted students. Across four program years (1999-00 through 2002-03), districts were asked to submit two reports after each of 11 semesters in which they served students. The program report requested district-level information, such as general program information, activities supporting credit recovery and basic skills, dissemination activities, staff participation and involvement, professional development, and district opinions regarding the most successful components. Districts also submitted activity reports with student-level data each semester. Activity reports provided information in six areas for each NGSI program participant: student demographic information, student eligibility, school attendance, retention and promotion, activities engaged in, and student performance. As with the program report, all information is self-reported. During the course of the 11 program terms, report format changes resulted in some data discontinuity.

Student demographic and performance data. Researchers gathered other student-level data from the Texas Public Education Information Management System (PEIMS) and the Texas Academic Excellence Indicator System (AEIS). Student-level data obtained from activity reports were matched to PEIMS and AEIS data to create a set of master databases. Elements in the databases included student demographic information such as ethnicity, gender, limited English proficiency (LEP) status, and grade level. Outcome data related to the TAAS, Texas Assessment of Knowledge and Skills (TAKS), attendance, and retention.

Limitations

Data accuracy. District compliance with reporting requirements varied throughout the initiative. For the first term (spring 2000), only two out of three districts submitted activity reports (Table 4.1). This was at least partially because the first semester was a start-up period, and many district programs either were not functioning or were not fully functioning. During the first full-implementation term (summer 2000), activity report submissions increased. Submission rates varied from 88% (spring 2001) to 59% (summer 2003). Submission rates for program reports ranged from 82% (fall 2000) to 36% (summer 2002).

Table 4.1. District Program and Activity Report Submission

	Program Reports (District Level)		Activity Reports (Student Level)	
	N	%	N	%
Regular Term				
Spring 2000			149	66
Fall 2000	185	82	166	73
Spring 2001	183	81	200	88
Fall 2001	149	66	175	77
Spring 2002	134	59	180	80
Fall 2002	91	40	173	77
Spring 2003	97	43	154	68
Summer Terms				
Summer 2000	159	70	174	77
Summer 2001	169	75	179	79
Summer 2002	81	36	136	60
Summer 2003	97	43	133	59

Note. N= 226 participating districts.

Varying report submission rates are problematic for two reasons. First, it is possible that the districts included in the analysis, by virtue of submitting reports, are not representative of all the districts funded under NGSI. Second, when comparing results from year to year, it is possible that differential response rates across terms lead to incorrect conclusions, as the districts are not the same from one term to the next. Table 4.2 examines district submissions across terms. Of the 226 original and continuing districts, only 18% submitted activity reports for all 11 terms, but 76% of the districts submitted reports for 7 or more of terms. This group of 172 districts forms the core NGSI group included in analyses—thus, results are most representative of these districts.

Table 4.2. Number of Student Activity Reports Submitted by Districts

Number of Reports Submitted	Number of Districts	Percent of Districts	Cumulative Percent
Eleven	41	18.1	18.1
Ten	33	14.6	32.7
Nine	33	14.6	47.3
Eight	39	17.3	64.6
Seven	27	11.9	76.5
Six	20	8.8	85.4
Five	11	4.9	90.3
Four	9	4.0	94.2
Three	7	3.1	97.3
Two	3	1.3	98.7
One	2	0.9	99.6
Never submitted a report	1	0.4	100.0
Total	**226**	**100.0**	

Estimating student participation. Student data for each term were combined to estimate the total number of unique students served during the four-year grant period (see Table 4.3). By replacing missing term data with a weighted district term average, the number of unique students served during four NGSI program years was estimated at 389,834 students. (See Appendix B for a full explanation.) The estimated number of students for each program year ranged from 45,867 (1999-00) to 121,364 (2001-02).

Table 4.3. Number of Students Served in NGSI by School Year

Year	Term	Duplicated Student Count: Activity Report N	Duplicated Student Count: Estimated N	Unique Student Count: Activity Report N	Unique Student Count: Estimated N
1999-2000	Spring 2000	16,134	32,535	25,532	45,867
	Summer 2000	13,558	19,508		
2000-2001	Fall 2000	47,354	59,580	78,640	104,516
	Spring 2001	61,951	70,922		
	Summer 2001	18,186	24,144		
2001-2002	Fall 2001	50,621	63,376	75,181	121,364
	Spring 2002	58,397	70,392		
	Summer 2002	13,412	27,171		
2002-2003	Fall 2002	52,400	65,897	79,558	118,087
	Spring 2003	55,836	73,847		
	Summer 2003	20,775	31,607		
Total		**408,624**	**538,979**	**258,911**	**389,834**

NGSI GRANTEES AND THEIR STUDENTS

This section presents findings on the characteristics of districts receiving NGSI grants as well as the characteristics of students participating in the NGSI.

Location of Districts Receiving Grants

➢ **The largest concentration of NGSI grantees was in ESC regions 1 (Edinburg) and 4 (Houston).**

The distribution of NGSI grantees corresponds roughly to Texas population centers, with densely populated regions (e.g., Education Service Center [ESC] 4, Houston and ESC 20, San Antonio), East Texas regions (ESC 6, Huntsville and ESC 7, Kilgore), and a Rio Grande Valley region (ESC 1, Edinburg) having large numbers of programs.

Table 4.4. NGSI Grantees by Education Service Center Region

ESC Region	ESC Location	Number of Grantees	Percent of Grantees	Statewide Distribution
1	Edinburg	24	10.6	4.1
2	Corpus Christi	10	4.4	3.9
3	Victoria	4	1.8	3.3
4	Houston	26	11.5	8.3
5	Beaumont	7	3.1	2.9
6	Huntsville	18	8.0	4.9
7	Kilgore	20	8.8	8.4
8	Mt. Pleasant	2	0.9	3.9
9	Wichita Falls	3	1.3	3.3
10	Richardson	16	6.2	9.2
11	Ft. Worth	14	6.2	7.2
12	Waco	16	7.1	7.0
13	Austin	17	7.5	5.8
14	Abilene	3	1.3	3.6
15	San Angelo	2	0.9	3.6
16	Amarillo	7	3.1	5.3
17	Lubbock	5	2.2	5.1
18	Midland	5	2.2	2.9
19	El Paso	8	3.5	1.3
20	San Antonio	19	8.4	6.0

Note. N = 226 NGSI districts.

Characteristics of Districts Receiving Grants

➢ **Although NGSI districts vary by size, more than half (58%) of grant recipients are *mid-size* to *very-large* districts.**

NGSI district size distributions differ from the state, in which a majority of districts have *very small* enrollments (60% with fewer than 1,000 students). In contrast, the majority of NGSI districts are mid-size (29%), large (16%), or very large (13%). (See Table 4.5.)

Table 4.5. NGSI Grantees by District Size Categories

District Size: Student Enrollment	Number of Districts	Percent of Districts	State Average
Very small: Fewer than 1,000	32	14.2	59.6
Small: 1,000 to 3,000	63	27.9	20.4
Mid-size: 3,001 to 10,000	66	29.2	12.9
Large: 10,001 to 25,000	36	15.9	3.8
Very large: More than 25,000	29	12.8	3.2

Source. TEA AEIS database 2002-03. N = 226 NGSI districts

- **High schools in NGSI districts have a slightly greater proportion of minority, limited English proficient, and economically disadvantaged students.**

Compared to the state, high schools in NGSI districts have slightly higher percentages of Hispanic and African American, limited English proficient, and economically disadvantaged students (Table 4.6).

Table 4.6. Student Demographics for NGSI Districts (Percent)

Student Demographics	High Schools in NGSI Districts	State High Schools
White	35.6	44.8
Hispanic	44.7	37.8
African American	15.9	14.0
Economically disadvantaged	43.5	38.5
Limited English proficient	8.3	6.6
Special education	12.0	12.3

Source. TEA AEIS database 2002-03.

Characteristics of Students Participating in NGSI

- **The number of students participating in NGSI program activities varied by year, with substantially fewer students served during the summer terms.**

In 2000-01, the first full program year, 210 districts reported participation by 70,680 students during regular terms (fall and spring). Adjusting this number for missing data, it is estimated that the actual number of student participants during the regular school year was 90,519 (see Table 4.7). The largest number of estimated students (106,325) participated during the last program year (2002-03). The number of students enrolled in summer school climbed steadily during the grant period.

Table 4.7. NGSI Program Participation

	Regular Terms				Summer Terms			
	Spring 2000	2000-01	2001-02	2002-03	2000	2001	2002	2003
Districts submitting a report	149	210	196	199	174	179	136	133
Number of students[a]	15,968	70,680	69,927	76,323	13,558	18,186	13,412	20,775
Number of students per program (mean)	108	336	357	383	78	102	99	156
Estimated student enrollment[b]	32,535	90,519	91,403	106,325	19,508	24,144	27,171	31,607

[a] Calculated as the number of unique students across the identified time period for which data are available.
[b] Estimated number of students served. See methodology in Appendix B.

- **The majority of students served in NGSI programs were ninth-grade students at-risk of not earning sufficient credits to advance to tenth grade.**

NGSI summer programs served an increasing percentage of ninth graders at risk of not earning sufficient credits to advance to the next grade level, while percentages of newly promoted ninth graders declined steadily across the summer terms (Table 4.8).

Table 4.8. Student Eligibility by Term (Percent)

	Regular Terms				Summer Terms			
	Spring 2000	2000-01	2001-02	2002-03	2000	2001	2002	2003
Newly promoted but lacking basic skills	--	--	--	--	32.7	19.0	10.2	8.6
At-risk of not earning sufficient credits	82.2	81.0	87.8	83.9	41.9	67.1	70.0	75.6
Did not earn sufficient credits for promotion	17.8	19.0	12.2	16.1	25.4	13.9	19.8	15.8

Note. Students could be classified as newly promoted only during the summer terms.

- **About three-fourths of NGSI students are Hispanic and African American.**

Across years, a consistently high percentage of Hispanic students participated in NGSI activities. In contrast, African American students participated at higher rates during the summer terms.

Table 4.9. Distribution of Student Race/Ethnicity by Semester and Student Eligibility (Percent)

	Regular Terms				Summer Terms			
	Spring 2000	2000-01	2001-02	2002-03	2000	2001	2002	2003
All NGSI Participants								
Hispanic	46.1	58.5	60.5	57.2	53.8	57.9	52.9	60.2
White	31.7	24.0	23.0	25.7	22.1	21.1	22.0	21.5
African American	22.2	15.7	15.1	15.4	23.1	19.7	23.7	16.9
Female	42.9	45.9	45.7	45.9	43.6	44.4	44.5	44.1
Male	57.1	54.1	54.3	54.1	56.4	55.6	55.5	55.9
At-risk of not earning sufficient credits								
Hispanic	45.4	57.9	61.2	57.1	55.8	58.6	55.1	59.9
White	34.1	25.5	22.7	26.0	23.5	20.2	24.2	22.2
African American	18.8	14.8	14.7	15.1	19.6	19.9	19.3	16.4
Female	43.5	47.2	46.2	46.6	43.8	43.9	43.8	44.0
Male	56.5	52.8	53.8	53.4	56.2	56.1	56.2	56.0
Did not earn sufficient credits for promotion								
Hispanic	51.5	60.3	62.2	63.2	56.8	58.1	54.8	65.2
White	22.6	17.3	19.1	20.4	18.7	16.9	15.0	15.7
African American	24.2	20.8	16.6	14.9	23.4	23.3	28.3	17.7
Female	39.2	40.4	41.1	40.1	39.3	40.9	41.4	42.6
Male	60.7	59.6	58.9	59.9	60.7	59.1	58.6	57.4
Newly promoted but lacking basic skills								
Hispanic	--	--	--	--	42.5	50.3	43.9	50.9
White	--	--	--	--	26.1	27.1	28.9	24.5
African American	--	--	--	--	30.4	20.7	26.1	22.7
Female	--	--	--	--	46.8	48.6	49.8	45.2
Male	--	--	--	--	53.2	51.4	50.2	54.8

Note. Students could be classified as newly promoted only during the summer semesters. Between 0.2% and 2.1% lacked ethnicity data and between 0.1% and 4.3% lacked gender data.

Ethnic distributions also varied by student eligibility categories, with smaller percentages of White students comprising the group of students who did not earn sufficient credits for promotion. Greater percentages of male students were NGSI participants, especially among students who did not earn sufficient credits for promotion (Table 4.9).

- **The majority of students served by NGSI programs were in the ninth grade for the first time (80% or more each term).**

As noted in Table 4.10, about 80% to 88% of NGSI participants were first-time ninth graders, and between 10% and 19% of students had repeated ninth grade at least once.

Table 4.10. Prior Student Retention in Grade 9 by Semester (Percent)

	Regular Terms				Summer Terms			
	Spring 2000	2000-01	2001-02	2002-03	2000	2001	2002	2003
First time in 9th	82.2	81.0	87.8	83.9	80.5	83.0	*	84.2
Second time in 9th	16.5	16.2	10.4	14.1	18.8	15.4	*	14.3
Third time in 9th	1.1	2.4	1.6	1.6	0.7	1.4	*	1.4
Fourth time in 9th	0.1	0.4	0.2	0.4	0.1	0.2	*	0.1

Note. Between 6.5% and 28.4% of students lacked prior grade 9 retention data.
*Data for Summer 2002 excluded due to data quality issues.

NGSI PROGRAM ACTIVITIES

Information on NGSI program activities come from two sources. First, each district completed program reports describing staff participation and involvement and indicating their approach to credit recovery and basic skill improvement by selecting from a list of methods (e.g., tutoring, instructional technology). Second, districts submitted activity reports identifying how each student accrued course credits (e.g., regular classroom instruction, credit accrual) and the kinds of activities experienced (e.g., tutoring, counseling).

Staff Participation and Involvement

- **On average, NGSI programs had larger staff, more volunteers, and higher student-to-teacher ratios for fall and spring semesters compared to summer terms.**

Teachers, instructional aides, and volunteers assisted in the implementation of NGSI activities each semester. Information on staff participation and involvement is displayed in Table 4.11. In fall and spring semesters, NGSI programs averaged approximately 10 to 15 teachers, whereas summer programs had only 7 to 10 teachers. Because NGSI programs served fewer students in summer terms, mean student-to-teacher ratios in the summer (10.2 to 13.0) were substantially lower compared to regular terms (23.2 to 27.4). Overall, programs averaged 6 to 9 paid teachers, 1 to 8 volunteer teachers, and 1 to 2 instructional aides each term.

Table 4.11. Staff Participation and Involvement, Average Number per Program

	Regular Terms			Summer Terms		
	2000-01	2001-02	Fall 2002	2000	2001	2002
Teachers						
All teachers	14.9	11.6	10.2	9.4	9.8	7.4
Paid teachers (full or partial)	7.0	6.8	6.4	7.4	9.1	7.3
Volunteer teachers	7.9	4.9	3.8	2.1	1.2	0.9
Student-to-teacher ratio	23.2	24.5	27.4	11.7	10.2	13.0
Instructional aides and volunteers						
Instructional aides	1.6	1.5	1.3	1.1	1.5	2.0
Volunteers per program	2.3	2.2	1.0	0.8	0.5	0.6

Note. The number of NGSI programs included in analyses varied by staff category.
Source: NGSI program reports.

Activities Supporting Credit Recovery and Basic Skills

NGSI programs reported the extent to which they used the following activities to serve ninth graders at risk academically:

- *Tutoring*—Additional help beyond regular classroom instruction;
- *Instructional technology*—The use of technology for the purpose of gaining course credit or basic skills;
- *Individual instruction*—One-on-one teaching and learning;
- *Group instruction*—Instruction in the regular classroom;
- *Counseling*—Services that help students match their interests with educational pursuits toward graduation;
- *Mentoring*—Role models working with students for the purpose of improving their academic, decision-making, and problem solving skills;
- *Teaming*—Grouping of students and teachers into smaller groups for the intent of enhanced instruction;
- *Trailer courses*—Courses offered during a semester that allow students to recover previous semester course credit;
- *Credit by exam*—Course credit through a comprehensive exam;
- *Open entry/exit courses*—Alternative means of learning and gaining class credit in non-sequential subjects through courses with flexible entry and exit opportunities;
- *Correspondence course*—Course credit through another learning institution; and
- *Distance learning*—Learning in which some materials and/or participants are not local.

➢ **NGSI programs typically used several activities to serve at-risk ninth graders. Tutoring, instructional technology, individual instruction, group instruction, and counseling were reported most often.**

As Table 4.12 indicates, during the regular terms, programs relied on tutoring most often, followed by instructional technology for basic skills remediation or credit accrual. Individual instruction, group instruction in the regular classroom, and counseling also were commonly used. In contrast, summer programs most frequently used group instruction in the regular classroom, instructional technology, and individual instruction. There appeared to be less emphasis on tutoring and counseling during summer terms; however, lower student-to-teacher ratios during summer terms may have allowed teachers more time for individualized student attention.

Table 4.12. NGSI Program Activities (Percent of Programs)

Activity	Regular Terms			Summer Terms		
	2000-01	2001-02	Fall 2002	2000	2001	2002
Tutoring	89.8❶	84.1❶	87.9❶	52.2❹	57.5❹	50.6❹
Instructional technology	78.0❷	74.6❷	74.7❷	66.7❷	66.3❷	66.7❷
Individual instruction	71.3❸	72.4❸	71.4❸	56.0❸	60.6❸	65.4❸
Group instruction	70.7❹	67.5❹	61.5❹	70.4❶	66.7❶	69.1❶
Counseling	68.2❺	65.7❺	61.5❹	47.8❺	51.3❺	46.9❺
Mentoring	47.2	47.4	45.1	29.6	28.7	33.3
Teaming	39.8	29.3	25.3	23.3	20.6	21.0
Trailer courses	25.7	19.8	20.9	35.8	25.0	22.2
Credit by exam	19.3	16.2	12.1	17.6	17.0	17.3
Open entry/open exit	24.4	20.9	22.0	18.9	26.4	19.8
Correspondence course	4.9	2.5	1.1	4.4	2.5	2.5
Distance learning	2.7	2.8	2.2	1.9	1.3	1.2

Note. Numeric symbols (e.g., ❶) indicate the most frequently identified activities by rank order.
Source: NGSI program reports.

Course Credit Accrual and Instructional Methods

Information from student-level activity reports described the coursework delivery method used for NGSI students. Students could accrue credit in four ways: regular classroom instruction, computer-aided credit accrual, trailer courses, and credit by exam (see Table 4.13). Some reports (specifically the first four and last two terms) also provided information on student participation in tutoring, counseling, teaming, and mentoring (see Table 4.14).

- **During the regular school year, students accrued course credit primarily through regular classroom instruction, but repeat ninth graders were more likely to accrue credit through computer–aided instruction.**

During the regular fall and spring terms, 61% to 90 % of first-time ninth graders at risk of not earning credits accrued credit via regular classroom instruction, compared to 43% to 66% of repeat ninth graders. Instead, 20% to 30% of repeat ninth graders accrued credit via computer-aided instruction. During summer terms, the proportion of first-time ninth graders accruing credit through computer-aided instruction increased substantially, such that participation rates were equivalent to repeat ninth graders. Across four grant years, reliance on computer-assisted credit accrual decreased during regular terms but increased in summer terms (Table 4.13).

Table 4.13. NGSI Course Credit Accrual Methods (Percent of Students)

	Regular Terms			Summer Terms		
	2000-01	2001-02	2002-03	2000	2001	2002
All NGSI Participants						
Regular classroom instruction	57.1	66.5	86.9	53.0	63.9	72.0
Computer-aided credit accrual	12.9	12.1	9.3	14.0	14.3	30.3
Trailer course	3.6	3.3	0.1	6.4	12.4	7.9
Credit by exam	0.7	2.2	0.3	4.4	2.4	1.5
At-risk of not earning sufficient credits						
Regular classroom instruction	61.0	72.0	90.1	49.0	68.1	68.7
Computer-aided credit accrual	10.8	11.0	5.8	23.8	14.7	31.4
Trailer course	3.9	3.3	0.0	7.5	16.1	10.8
Credit by exam	0.5	1.9	0.3	5.9	2.3	2.1
Did not earn sufficient credits for promotion						
Regular classroom instruction	43.4	47.5	66.3	48.6	57.4	79.3
Computer-aided credit accrual	20.8	20.4	30.6	14.2	16.7	33.0
Trailer course	2.9	6.7	0.7	6.3	18.2	2.6
Credit by exam	1.8	3.0	0.8	5.4	2.1	1.9
Newly promoted but lacking basic skills						
Regular classroom instruction	--	--	--	42.1	62.4	92.2
Computer-aided credit accrual	--	--	--	5.9	1.9	5.8
Trailer course	--	--	--	1.8	0.4	0.0
Credit by exam	--	--	--	2.6	2.6	0.1

Source: NGSI activity reports.

➢ **NGSI instructional methods changed during the course of the grant, with the use of tutoring decreasing and the use of counseling and mentoring increasing.**

Table 4.14 includes data for regular and summer terms (except for the 2001-02 school year). During spring 2000, more than half of the students participated in tutoring activities (55%), with a significantly lower proportion (9%) participating in counseling activities. By spring 2003, only 21% of NGSI participants attended tutoring while counseling participation remained high with a participation rate of 50%. The use of tutorials in summer programs also decreased whereas mentoring increased.

Table 4.14. NGSI Instructional Methods (Percent of Students)

Method	Regular Terms				Summer Terms			
	Spring 2000	2000-01	2001-02	Spring 2003	2000	2001	2002	2003
All NGSI Participants								
Tutoring	55.4	76.7	*	21.4	30.6	30.9	*	17.7
Counseling	9.5	60.1	*	49.8	29.6	27.7	*	32.7
Teaming	4.2	41.4	*	25.5	16.3	10.2	*	16.8
Smaller group instruction	21.2	49.8	*	*	45.2	34.0	*	*
Mentoring	5.5	39.5	*	19.5	13.6	17.6	*	24.6
At-risk of not earning sufficient credits								
Tutoring	57.5	75.1	*	22.6	33.7	27.1	*	18.6
Counseling	7.9	59.5	*	51.1	23.0	23.7	*	32.6
Teaming	3.2	43.6	*	26.8	13.9	5.1	*	15.9
Smaller group instruction	22.7	47.8	*	*	43.3	29.7	*	*
Mentoring	5.5	37.7	*	18.3	7.7	12.7	*	22.8
Did not earn sufficient credits for promotion								
Tutoring	46.2	76.5	*	14.6	28.3	30.8	*	14.4
Counseling	6.4	63.7	*	42.3	47.1	27.8	*	28.6
Teaming	7.2	31.9	*	18.5	11.7	5.8	*	14.0
Smaller group instruction	24.9	55.9	*	*	42.9	26.1	*	*
Mentoring	5.5	49.3	*	25.0	19.3	19.6	*	32.1
Newly promoted but lacking basic skills								
Tutoring	--	--	--	--	37.6	38.5	*	15.4
Counseling	--	--	--	--	31.7	39.0	*	37.0
Teaming	--	--	--	--	30.6	20.7	*	25.7
Smaller group instruction	--	--	--	--	54.1	48.8	*	*
Mentoring	--	--	--	--	23.6	28.9	*	26.4

Note. Students could be classified as newly promoted only during the summer semesters.
*Comparable activity codes were unavailable for 2001-02 and for some indicators during other terms.
Source: NGSI activity reports.

Successful Program Features

Districts also reported information on their NGSI programs' most successful features. Table 4.15 presents the most commonly reported successful program features included in NGSI evaluation reports submitted by 222 of 226 districts receiving continuation and original funding.

- **Technology-based instruction and learning emerged as the most consistently reported successful program feature. Although tutoring was cited as the most successful feature for regular terms, it was viewed less consistently as a successful feature of summer programs.**

Table 4.15. Successful Program Features (Percent of Programs)

Feature	Regular Terms			Summer Terms		
	2000-01	2001-02	Fall 2002	2000	2001	2002
Tutoring	31.5❶	25.8❶	36.8❶	5.9	15.8❷	4.5❹
Technology (self-paced programs, NovaNET, PLATO)	23.2❷	18.2❷	21.8❷	14.4❷	18.0❶	8.1❶
Technology (programs, software)	22.4❸	15.2❸	21.8❷	13.5❹	9.0❺	4.5❺
Class-size reduction	10.0	6.4	2.3	12.6❺	7.2	4.5❹
Credit recovery	13.8❹	6.4	10.3	24.8❶	7.2	2.3
Instructional approach	9.4	7.2	11.5❺	14.0❸	12.2❹	5.0❸
Teaming students and teachers	6.2	4.9	3.4	5.4	3.6	0.9
Scheduling (school within school, block, flexible)	7.4	4.2	9.2	2.7	6.3	6.3❷
Modified coursework*	9.1	5.7	2.3	10.4	5.9	4.5❹
Staff-support for program	11.8❺	4.9	11.5❺	4.5	4.5	3.2
Staff-additional positions	5.0	6.8	9.2	0.9	4.1	2.3
Staff-professional development	6.8	7.6❺	9.2	5.9	8.6	0.9
Individual student attention	10.3	2.7	4.6	6.3	8.6	4.5❹
Assessment strategies	8.2	5.7	5.7	4.5	1.8	2.3
Monitoring student progress	3.8	6.4	10.3	1.4	2.3	1.4
Mentoring program/HOSTS	7.4	4.9	5.7	3.2	4.1	1.4
Counseling	5.3	8.3❹	6.9	5.4	3.6	3.2
Parent support and involvement	8.5	7.2	4.6	4.5	5.4	3.6
Extended day, Saturday	2.6	6.4	13.8❹	1.4	3.6	0.0
Student skill development	3.8	1.1	3.4	5.0	2.3	2.3
Reading course or strategy	2.4	3.0	6.9	1.4	2.7	0.5
Individualized academic plan	1.2	1.5	0.0	0.0	2.3	0.9
Summer program	0.3	0.0	0.0	0.0	12.6❸	3.2
Provision of transportation	0.5	0.0	1.8	4.1	0.0	0.0
Incentives or rewards	1.2	2.3	4.6	0.5	2.3	0.5

Note. Numeric symbols (e.g., ❶) indicate the most frequently identified features by rank order.
Source: NGSI program reports.

The most frequently identified successful program features are described below.

Tutoring. Districts identified tutoring as one of the most successful NGSI program features during the regular terms. Respondents noted the effectiveness of tutorials—held before, during, and after school or on Saturdays—in helping students complete coursework, understand concepts, make-up work, do homework, and get one-on-one, individualized attention. Tutorials, according to reports, enhanced student achievement, improved grades, allowed credit recovery and accrual, and prevented credit losses.

Technology (self-paced). Districts identified the implementation of self-paced instructional technology as one of the top two most successful features of their programs. Respondents most often reported the implementation of PLATO and NovaNET software in labs for tutorials, credit recovery, or credit accrual. According to many, self-paced programs benefited students by diagnosing needs, individualizing instruction, meeting various learning styles, allowing a flexible pace, supporting the acquisition of credits to stay on grade level, and providing an alternative method to deliver instruction for students who had not been successful in traditional settings.

Technology (hardware, software, and programs). In addition to self-paced instructional programs, districts cited positive effects associated with the acquisition of educational technology hardware, software, and programs to support student learning. Districts noted beneficial features such as updated computers and computer labs, subject-specific labs (algebra, math, English), individual laptops, graphing calculators, educational programs (e.g., Accelerated Reader, Accelerated Math, River Deep, Computer Curriculum Corporation [CCC]), and computer applications (word processing, graphics). Programs reported positive impacts of technology on the individualization of instruction and improved content coverage. Technology also enhanced students' communication and technical skills, motivation to learn, and academic achievement.

Instructional approach. Although not widely cited during regular terms, districts identified the instructional approach as a "top five" most successful feature during summer terms. Districts described smaller classes; active hands-on activities allowing students to understand abstract concepts; small group, partner, and collaborative learning; student self-selection of reading materials or learning activities; mastery learning; and individualized instruction. In general, reduced student-to-teacher ratios in summer terms supported more learner-centered instructional approaches.

Class-size reduction, credit recovery, staff support for NGSI program, and individual student attention. Other successful NGSI program features that districts designated less consistently across terms include reduced class size allowing for more personalized instruction, opportunities for credit recovery, staff commitment and support for the NGSI program, and individualized student attention.

STUDENT OUTCOMES

This section presents findings on the effect of grant resources on targeted students. To the extent possible, researchers also examine associations between NGSI program elements and student outcomes. We first present results for student core-content course passing rates. Next, to estimate NGSI program impact, comparisons are made between NGSI and non-NGSI students on outcomes, including school attendance, performance on state-level assessments, and retention. Finally, the relationships between NGSI student-level and district-level variables and student academic achievement and grade-level retention are explored using complex statistical models.

Passing Rates for Core-Content Courses

NGSI programs reported on credit accrual and retrieval in courses typically taken during the ninth-grade year, such as English I, Algebra I, World Geography, Biology, and Integrated Physics and Chemistry (IPC). In addition, districts provided credit information on other courses offered to targeted ninth graders, such as Algebra II, Geometry, World History, U.S. History, and English II. The percentages of NGSI students passing courses are reported in Figures 4.2 and 4.3 Passing rates are disaggregated by student eligibility categories in Tables 4.16 through 4.20.

➢ **Course passing rates were relatively stable across NGSI grant terms, with about 70% of NGSI students passing Algebra I during regular terms and about three-fourths or more of students passing Biology, IPC, World Geography, and English I.**

As illustrated in Figure 4.2, NGSI students had lower passing rates for Algebra I compared to other core subject areas, with 72% or less students passing algebra during regular terms. Course passing rates for other core courses were comparable, with three-quarters or more of students passing required courses.

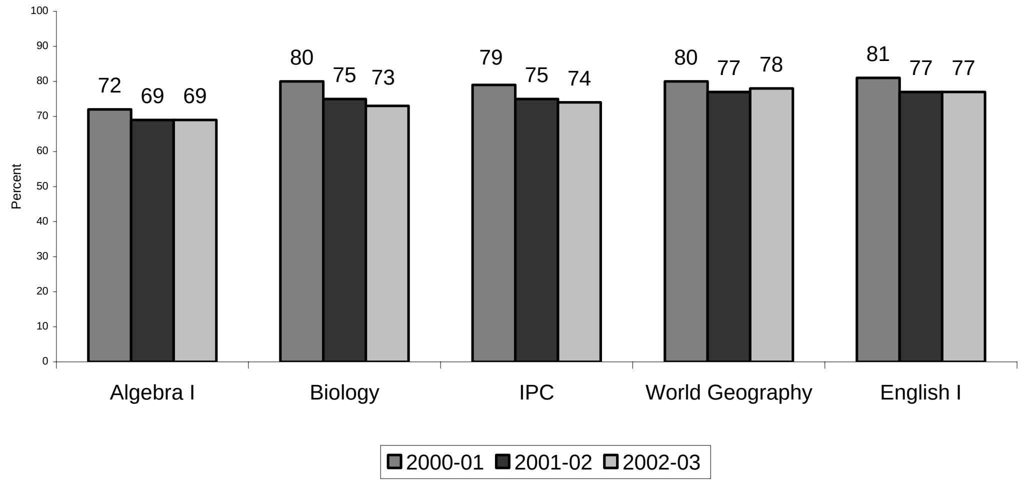

Figure 4.2. Percentage of NGSI participants passing core courses during regular terms.
Source: NGSI activity reports.

➢ **The vast majority of NGSI students who participated in summer terms passed core courses (about 80% to 95%); however, the number of students enrolled during the summer was far less than for regular terms.**

Figure 4.3 shows that NGSI students who participated during summer terms had notably higher passing rates for all core courses and passing rates were generally on an upward trend until summer 2003.

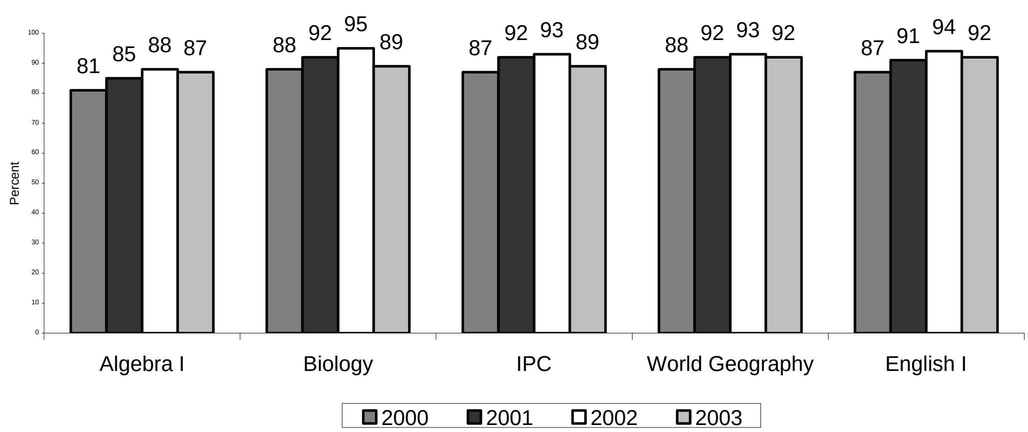

Figure 4.3. Percentage of NGSI participants passing core courses during summer terms.
Source: NGSI activity reports.

Mathematics

- **Students in ninth grade for the first time had higher passing rates for mathematics courses than students who did not earn sufficient credits for promotion.**
- **During the summer terms, course- passing rates for mathematics were the higher across all eligibility categories but few students participated.**

Students who did not earn enough credits for promotion had the lowest mathematics passing rates. In general, lower numbers of ninth graders enrolled in mathematics courses during summer terms, and participating students had passing rates 7 to 20 percentage points higher than ninth graders enrolled in regular terms (Table 4.16).

Table 4.16. Percentage of Students Passing Mathematics Courses

Term	Algebra I		Algebra II		Geometry	
	N	Pass	*N*	Pass	*N*	Pass
All NGSI participants						
2000-01	40,391	71.5	545	89.2	6,662	82.3
2001-02	36,957	69.3	328	78.4	6,328	80.1
2002-03	42,313	68.9	787	82.2	6,874	74.3
Summer 2000	3,407	81.0	110	86.5	163	88.0
Summer 2001	4,494	85.2	102	90.4	361	88.0
Summer 2002	3,853	88.3	53	96.4	294	92.5
Summer 2003	4273	87.3	100	83.0	393	88.3
At-risk of not earning sufficient credits						
2000-01	31,833	73.3	468	90.8	4,927	86.3
2001-02	31,189	70.9	260	83.1	4,842	83.9
2002-03	35,585	70.5	655	85.0	4,958	81.3
Summer 2000	1,428	85.6	81	87.8	131	89.4
Summer 2001	3,434	85.9	56	89.3	220	90.5
Summer 2002	3,041	89.5	45	97.8	151	93.2
Summer 2003	3,602	87.7	78	84.6	220	85.9
Did not earn sufficient credits for promotion						
2000-01	5,402	62.5	68	77.9	1,552	68.9
2001-02	2,613	58.2	40	47.5	922	59.3
2002-03	4,273	55.2	75	56.0	829	52.4
Summer 2000	672	69.3	2	*	11	91.7
Summer 2001	457	78.8	38	97.4	83	78.9
Summer 2002	590	84.0	8	*	137	91.4
Summer 2003	406	83.7	14	35.7	104	88.5

Note. Passing percentage based on number of courses taken. Columns may not sum because some students lack eligibility data.
*Passing percentages not reported for groups with less than ten students.
Source: NGSI activity reports.

Science

- **About three-fourths of NGSI students passed Biology and IPC during regular terms.**
- **Course participation rates were lower for summer terms, but course-passing rates were higher across all eligibility categories.**

Substantial numbers of NGSI students enrolled in either Biology or IPC courses during regular terms. Students not earning sufficient credits for promotion had lower passing rates than students at risk of not earning sufficient credits. Enrollment levels declined during summer terms, and students' science passing rates were 12 to 38 percentage points higher. In addition, the disparity between students at-risk of not earning credits and those repeating coursework was not apparent during summer terms (Table 4.17).

Table 4.17. Percentage of Students Passing Science Courses

Term	Biology		IPC	
	N	**Pass**	***N***	**Pass**
All NGSI participants				
2000-01	27,240	80.4	22,471	78.7
2001-02	22,772	75.1	15,027	75.2
2002-03	24,016	73.4	23,408	74.4
Summer 2000	532	87.5	650	87.0
Summer 2001	1,326	91.5	887	92.2
Summer 2002	705	95.1	1,061	93.2
Summer 2003	1,504	89.4	1,343	88.9
At-risk of not earning sufficient credits				
2000-01	21,870	82.5	17,286	80.8
2001-02	19,084	76.9	12,440	77.0
2002-03	20,134	76.0	19,064	77.8
Summer 2000	244	90.8	195	90.3
Summer 2001	894	93.1	591	92.6
Summer 2002	537	95.2	817	92.7
Summer 2003	1,238	88.9	1,135	88.3
Did not earn sufficient credits for promotion				
2000-01	4,111	67.6	3,725	70.7
2001-02	1,946	60.5	1,308	62.2
2002-03	2,762	56.9	2,846	55.0
Summer 2000	158	77.7	204	85.2
Summer 2001	205	89.8	132	93.7
Summer 2002	131	96.6	187	93.2
Summer 2003	192	91.1	154	92.9

Note. Passing percentage based on number of courses taken. Columns may not sum because some students lack eligibility data. IPC=Integrated Physics and Chemistry. *Source:* NGSI program reports.

Social Studies

- **Students participating in NGSI programs enrolled in World Geography courses more often than other social studies classes, with the majority of students passing (64% to 93%).**
- **Most NGSI students who completed social studies coursework during summer terms passed (80% to 98%).**

Regular term passing rates for the three social studies courses were considerably lower than summer term passing rates. Also during regular terms, ninth graders not earning sufficient credits for promotion generally had lower passing rates for social studies classes compared to other student groups.

Table 4.18. Percentage of Students Passing Social Studies Courses

Term	World Geography		World History		U.S. History	
	N	Pass	*N*	Pass	*N*	Pass
All NGSI participants						
2000-01	36,206	80.3	4,985	73.6	4,394	85.8
2001-02	27,389	76.6	4,729	75.0	869	70.4
2002-03	40,092	78.2	5,725	66.3	583	68.8
Summer 2000	942	88.2	146	81.6	283	82.1
Summer 2001	1,597	92.1	284	90.0	569	88.6
Summer 2002	1,634	93.2	231	90.7	62	97.1
Summer 2003	2213	91.9	274	90.5	57	98.2
At-risk of not earning sufficient credits						
2000-01	30,331	81.0	2,166	80.2	3,015	88.4
2001-02	23,639	77.3	3,442	80.9	430	71.4
2002-03	34,446	78.9	2,654	74.8	273	78.8
Summer 2000	344	91.8	87	86.8	116	86.7
Summer 2001	1,125	91.9	171	88.6	439	88.1
Summer 2002	1,251	93.2	124	90.6	40	90.9
Summer 2003	1,863	91.7	134	91.0	6	*
Did not earn sufficient credits for promotion						
2000-01	4,087	74.1	2,288	66.4	1,141	79.0
2001-02	1,617	66.9	1,048	56.5	355	71.8
2002-03	2,671	64.1	2,761	57.0	247	56.3
Summer 2000	244	83.2	30	66.7	120	70.2
Summer 2001	179	91.7	84	93.6	52	88.7
Summer 2002	247	92.8	92	90.4	21	100.0
Summer 2003	188	91.5	105	86.7	17	94.1

Note. Passing percentage based on number of courses taken. Columns may not sum because some students lack eligibility data. .
* Passing percentages not reported for groups with less than ten students.

English Language Arts

- **The majority of *NGSI* students enrolled in English I passed, with passing rates ranging from 77% to 94%.**
- **Students in ninth grade for the first time had higher passing rates than students who did not earn sufficient credits for promotion. Course participation rates were lower in the summer, but course-passing rates were higher across all eligibility categories.**

Although students' not earning sufficient credits for promotion had the lowest passing rates during the regular terms, rates were more equal across groups during summer terms. However, significantly lower numbers of ninth graders enrolled in English courses during summer terms, and participating students had passing rates 10 to 39 percentage points higher than ninth graders enrolled in regular terms (Table 4.19).

Table 4.19. Percentage of Students Passing English Language Arts Courses

NGSI Semester	English I		English II	
	N	Pass	*N*	Pass
All NGSI participants				
2000-01	38,927	80.7	3,738	70.4
2001-02	34,149	76.5	3,103	65.5
2002-03	39,801	77.2	3,949	61.7
Summer 2000	2,572	87.4	146	82.1
Summer 2001	3,703	91.3	255	89.7
Summer 2002	3,164	93.7	267	91.7
Summer 2003	3,753	91.5	259	91.9
At-risk of not earning sufficient credits				
2000-01	32,142	81.3	1,149	75.4
2001-02	29,106	77.5	1,543	69.9
2002-03	34,856	78.6	1,398	72.5
Summer 2000	978	93.3	64	92.8
Summer 2001	2,882	91.7	46	79.2
Summer 2002	2,456	94.3	84	98.9
Summer 2003	3,215	91.2	61	86.9
Did not earn sufficient credits for promotion				
2000-01	4,287	74.2	2,418	67.5
2001-02	2,138	68.7	1,216	60.9
2002-03	3,696	65.9	2,316	55.0
Summer 2000	767	74.9	29	65.6
Summer 2001	415	87.5	133	89.0
Summer 2002	558	91.7	175	88.7
Summer 2003	323	92.6	155	94.8

Note. Passing percentage based on number of courses taken. Columns may not sum because some students lack eligibility data.

Course Passing Rates for Newly Promoted Ninth Graders

- **Newly promoted ninth grade students who participated in summer coursework had high passing rates (89% to 98%); however, only a few students participated.**

Very few newly promoted ninth graders participated in summer course work for credit. Passing rates for participating students, however, were generally high, with the highest passing rates achieved in English I

Table 4.20. Percentage of Newly Promoted Ninth Graders Passing Courses

Term	Algebra I		Biology		Word Geography		English I	
	N	Pass	*N*	Pass	*N*	Pass	*N*	Pass
Summer 2000	214	88.5	28	100.0	118	91.5	101	98.1
Summer 2001	104	97.1	62	93.6	45	94.7	87	97.7
Summer 2002	56	88.5	6	*	53	98.2	39	97.7
Summer 2003	10	*	2	*	39	97.4	20	90.0

Note. Passing percentage based on number of courses taken. Columns may not sum because some students lack eligibility data. *Passing percentages not reported for groups with ten students or fewer. *Source:* NGSI activity reports.

Comparisons Between NGSI and Non-NGSI Students

Estimating the impact of a program intervention requires the measurement of student outcomes after program implementation and comparisons to outcomes students would have achieved in the absence of the intervention. Thus, a comparable group of non-served students is needed. The NGSI student-level database contained records for all ninth graders in each NGSI-supported district, both NGSI and non-NGSI served students. It is impossible to form a *true* comparison group because NGSI-served students (by grant mandate) included those repeating ninth grade or at risk of being retained; thus, students who did not receive services were less at risk. Although non-served students might include some *at-risk* students, the majority of students in the comparison group have fewer risk factors. With these limitations in mind, an imperfect but more comparable group of non-served students was created by restricting the comparison group to those students who were similar to the NGSI-served students on six dimensions: ethnicity, gender, economic disadvantage status (based on eligibility for free or reduced price lunch), limited English proficiency, whether or not they repeated ninth grade, and district attended.

The characteristics of NGSI and comparison students are given in Table 4.21. Of 28,366 students in cohort 1, half (14,183) are NGSI students and half are non-NGSI students. Groups have the same distribution for the matching variables. Cohort 2 includes a substantially greater number of students because more students were served in NGSI during this program year; however, student demographic characteristics are similar to cohort 1 except for a lower proportion of male students and a slightly greater proportion of students repeating ninth grade. The number of students decreases slightly for cohort 3 (to 56,532). The demographic characteristics are similar to the previous two cohorts, but the percentage of repeating ninth graders increases again.

Table 4.21. Characteristics of Comparison Groups for NGSI Outcome Analysis

	Cohort 1 (1999-00)		Cohort 2 (2000-01)		Cohort 3 (2001-02)		Cohort 4 (2002-03)	
	NGSI n=14,183	Non-NGSI n=14,183	NGSI n=31,272	Non-NGSI n=31,272	NGSI n=28,266	Non-NGSI n=28,266	NGSI n=28,061	Non-NGSI n=28,061
Gender								
Male	57.2	57.2	51.8	51.8	53.9	53.9	53.8	53.8
Female	42.8	42.8	48.2	48.2	46.1	46.1	46.2	46.2
Race/Ethnicity								
Hispanic	51.7	51.7	51.3	51.3	51.5	51.5	49.6	49.6
African American	19.5	19.5	17.8	17.8	18.3	18.3	16.7	16.7
White	27.4	27.4	29.0	29.0	28.7	28.7	31.6	31.6
Other/NA	1.4	1.4	1.8	1.8	1.5	1.5	2.0	2.0
Repeating 9th grade	9.4	9.4	11.4	11.4	12.5	12.5	9.3	9.3
Limited English proficient	10.2	10.2	8.6	8.6	8.9	8.9	7.0	7.0
Economically disadvantaged	53.6	53.6	51.8	51.8	54.5	54.5	50.8	50.8

Note. Cohort 1, N=28,366; Cohort 2, N=62,544; Cohort 3, N=56,532. Cohort 4, N=56,122.

Attendance Rates

Time-series analysis is employed to evaluate the NGSI program impact on student attendance rates. Five years of attendance data are available for cohort 1 students (1997 through 2002), five years for cohort 2 (1998 to 2003), four years for cohort 3 (1999 to 2003), and three years for cohort 4 (2001 to 2003). The analysis is restricted to matched students with valid data for all years. The number of students included in the analysis is given in Table 4.22. Of the 25,351 students in cohort 1, 23,577 are in the ninth grade for the first time and 1,774 are repeating ninth grade. Cohorts 2 and 3 include a greater number of students and an increasingly larger proportion of students repeating ninth grade. The proportion of students repeating ninth grade decreased for cohort 4.

Table 4.22. Number of Students Included in Analysis

		NGSI	Non-NGSI	Total
Cohort 1 (1999-00)	All Students	12,728	12,623	25,351
	First Time	11,801	11,776	23,577
	Repeating	927	847	1,774
Cohort 2 (2000-01)	All Students	30,370	30,225	60,595
	First Time	26,944	26,832	53,776
	Repeating	3,426	3,393	6,819
Cohort 3 (2001-02)	All Students	27,516	27,368	54,884
	First Time	24,106	23,996	48,102
	Repeating	3,410	3,372	6,782
Cohort 4 (2002-03)	All Students	26,311	26,068	52,379
	First Time	23,902	23,676	47,578
	Repeating	2,409	2,392	4,801

Attendance Rates for All NGSI Students

➢ **In general, NGSI students' attendance rates have not improved.**

Longitudinal attendance rate data for students in each of the four cohorts (see Table 4.23) show that compared to non-NGSI students, NGSI students have lower attendance rates for all years, although the general downward trend in attendance rates is similar for the two groups. Still, the gap between comparison groups grows wider each year. For example, for cohort 1 there is a 0.5 percentage-point gap in 1997-98, 0.6 in 1998-99, and 0.8 in 1999-00. Net changes over time for cohorts 1 and 2 are calculated as the difference in attendance rates two years prior to NGSI participation and two years after participation. For both cohorts, NGSI students had a greater decline in attendance rates than non-NGSI students (a 5.7 percentage point decline for cohort 1 and a 5.2 point decline for cohort 2). Although attendance data for fewer years are available for cohorts 3 and 4, trends are similar to other student cohorts. In general, participation in the NGSI program did not alter the downward pattern in high school students' attendance trends.

Table 4.23. Longitudinal Attendance Rates for All Students.

	Cohort 1 1999-00		Cohort 2 2000-01		Cohort 3 2001-02		Cohort 4 2002-03	
	NGSI Students	Non-NGSI Students	NGSI Students	Non-NGSI Students	NGSI Students	Non-NGSI Students	NGSI Students	Non-NGSI Students
1997-1998	95.5	96.0						
1998-1999	94.8	95.4	95.5	96.0				
1999-2000	94.1	94.9	95.1	95.7	95.5	95.8		
2000-2001	92.4	93.6	94.1	95.0	94.5	95.0	95.3	95.7
2001-2002	89.8	91.7	92.9	94.1	93.5	94.2	94.6	95.0
2002-2003			90.3	92.4	91.7	92.9	93.6	94.2
Change	**-5.7**	**-4.3**	**-5.2**	**-3.6**	**-3.8**	**-2.9**	**-1.7**	**-1.5**

Note. Shaded cells denote NGSI participation year.

Attendance Rates for First-Time and Repeat Ninth Graders

Student attendance rates, disaggregated by students in a grade for the first time and those who are repeating a grade level, are displayed in Figures 4.4 through 4.7 for the four student cohorts.

➢ **First-time ninth graders have substantially higher attendance rates than repeat ninth graders for both NGSI and non-NGSI comparison groups. NGSI first-time ninth graders, however, have lower attendance rates than their non-NGSI peers.**

Results in Figure 4.4 compare attendance trends for first-time and repeat ninth graders in cohort 1. The two uppermost graph lines represent first-time ninth graders and the two lower graph lines represent repeat ninth graders. The data for first-time ninth graders clearly shows, not only a decrease in attendance rates across time, but also a widening gap between NGSI and non-NGSI students. One expected outcome of the NGSI program is a positive change in attendance rates, which would be suggested if the gap between the two groups stayed the same or declined; however, this does not occur.

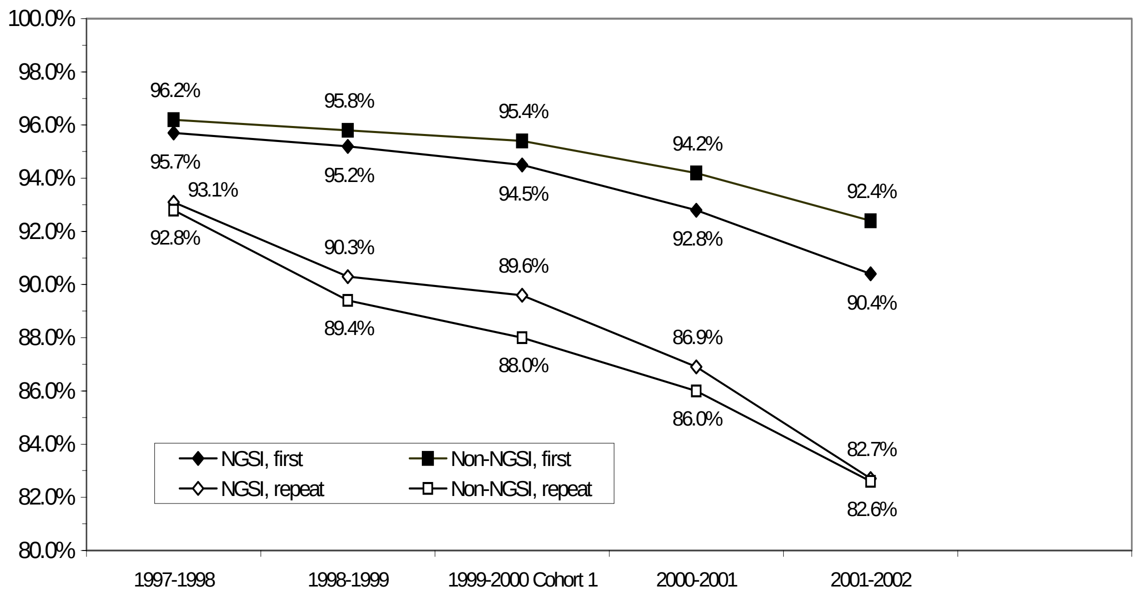

Figure 4.4. Attendance rates for cohort 1(1999-00), first-time and repeat ninth graders.

- **Attendance rates for repeat NGSI ninth graders (in cohort 1) surpassed non-NGSI comparison groups. Although attendance rates for repeat NGSI students declined across time, this change was reduced slightly during the NGSI program implementation year.**

Attendance rate trends for repeat ninth graders differ from those for first-time ninth graders. First, NGSI students have higher attendance rates across all years. Repeat NGSI and non-NGSI students have essentially the same attendance rates during the 1997-98 school year (93.1% and 92.8% respectively), and both groups experience a decline in attendance rates across time. However, unlike the gradual decline in attendance rates for non-NGSI students, NGSI students experienced a change in their long-term trend the year of the NGSI program. Looking at the graph line in Figure 4.4, the attendance rate decline is comparatively less steep for the NGSI program year. However, the change is not permanent and the following year (2000-2001), NGSI student attendance rates resumed their same downward trend, and by the last year data are available (2001-2002), NGSI students repeating ninth grade have comparable attendance rates to non-NGSI served students.

- **NGSI student attendance patterns for first-time and repeat ninth graders remained relatively consistent across program years.**

Students in cohort 2 exhibit the same patterns as seen for cohort 1 (Figure 4.5). First-time NGSI ninth graders also have lower attendance rates across time than non-NGSI students. However, the gap is slightly smaller and does not grow as large across time. Repeating NGSI ninth graders have higher attendance rates than non-NGSI students and the difference in attendance rate trends associated with NGSI participation is also seen for cohort 2 students, but to a much smaller extent.

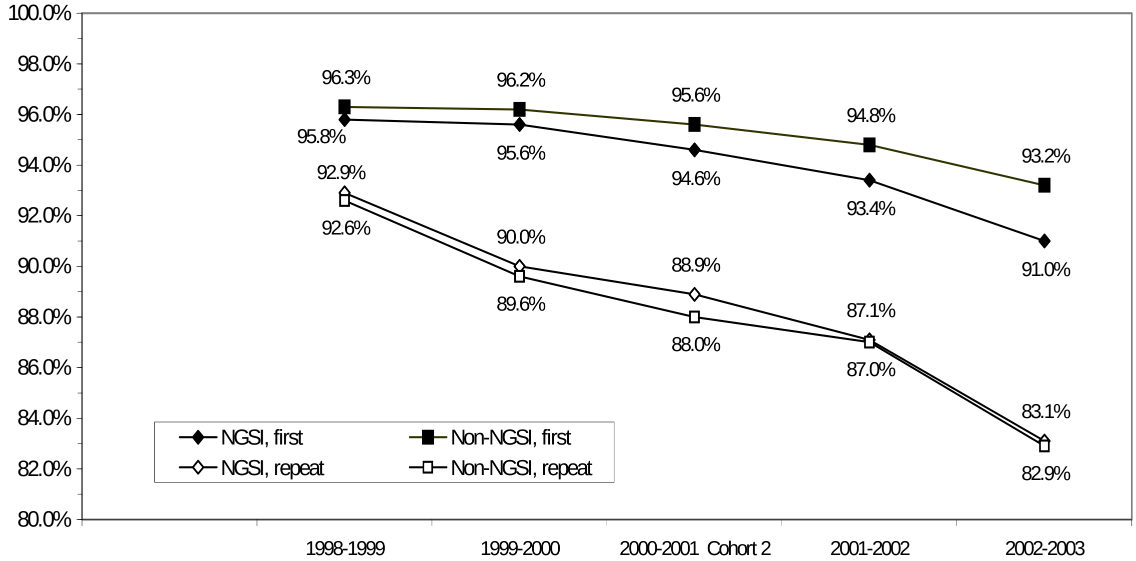

Figure 4.5. Attendance rates for cohort 2 (2000-01), first-time and repeat ninth graders.

First-time ninth graders in cohorts 3 and 4 have similar attendance patterns to cohorts 1 and 2. However, data are unavailable to track student attendance across time (see Figures 4.6 and 4.7).

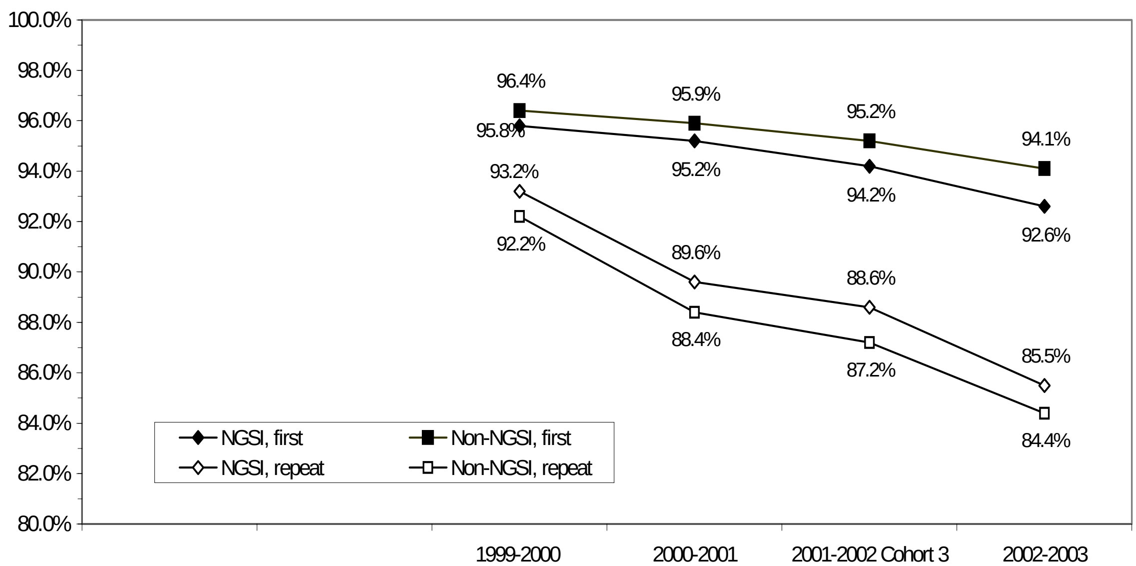

Figure 4.6. Attendance rates for cohort 3 (2001-02), first-time and repeat ninth graders.

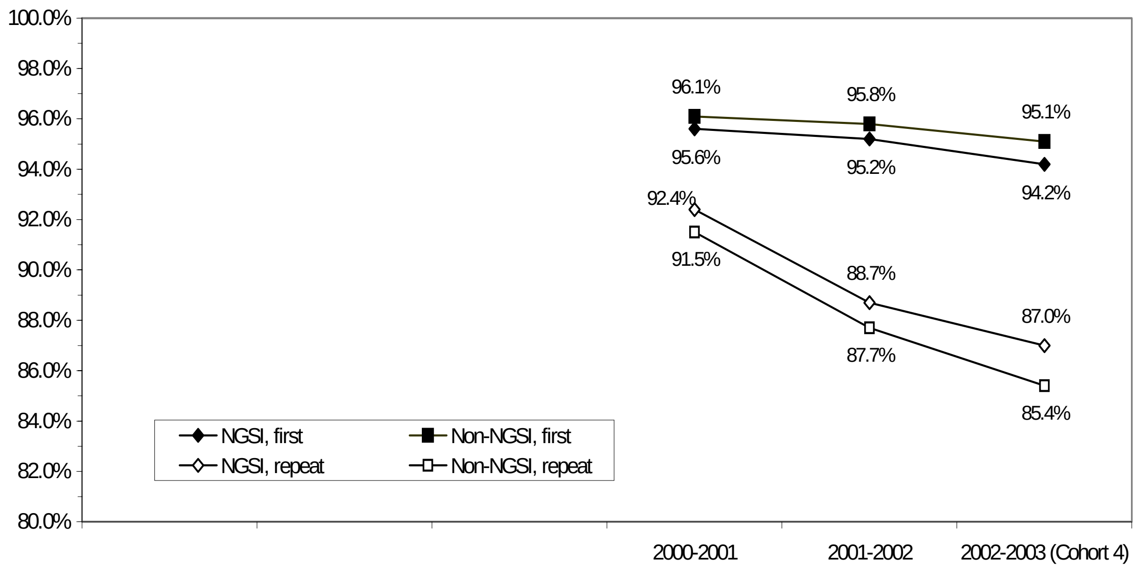

Figure 4.7. Attendance rates for cohort 4 (2002-03), first-time and repeat ninth graders.

State-Level Assessments

The NGSI was expected to increase student performance on state-level assessments. To evaluate the NGSI effect on student academic performance TAAS reading and mathematics scores, and TAKS English language arts and mathematics scores were merged with the student-level database. TAAS performance is measured by whether or not a student passed the math and reading subtests. Available scores include 8th grade TAAS, the year prior to NGSI participation, and 10th grade exit-level TAAS, the year after NGSI participation. The sample for cohorts 1 and 2 is restricted to students who were promoted to tenth grade and have either TAAS for both testing years.[1] The introduction of a new state assessment, TAKS, during the 2002-03 school year resulted in its use as an outcome measure for students in cohorts 3 and 4. Because TAKS and TAAS are not equivalent tests, the 8th grade TAAS scores are not shown for these two cohorts. The 10th grade TAKS assessment passing rates are given for cohort 3 students. Because the TAKS assessment, for the fist time, was administered to 9th graders in 2002-03, it afforded researchers the ability to use an outcome measured the same year as program participation for cohort 4 students.

First-Time Ninth Graders

- **NGSI students had lower TAAS passing rates for both reading and math compared to non-NGSI students, but the achievement gap between groups narrowed in reading. Despite encouraging results for TAAS, the achievement gap widened substantially for students in cohorts 3 and 4 who completed the TAKS.**

Of cohort 1 NGSI students in ninth grade for the first time, 83.2% passed TAAS reading as eighth graders, while 92.4% of non-NGSI students passed (an achievement gap of 9.2 percentage points). Two years later, 84.0% of NGSI students passed TAAS reading in the tenth grade, compared to 92.8% of non-NGSI students (an achievement gap of 8.8 percentage points). Although non-NGSI students outperformed NGSI students both years, the performance gap narrowed slightly (0.4 percentage points) (Table 4.24).

[1] Absent, ARD exempt, and LEP exempt student scores are not used.

For cohort 2, non-NGSI students also passed TAAS at a greater rate than NGSI students, however the achievement gap between the two groups continued to decrease. By the tenth grade, non-NGSI students were passing TAAS reading at a rate only 3.7 percentage points higher than NGSI students, which is half the eighth grade gap. The analysis is repeated for TAAS math. Large achievement gaps between NGSI and non-NGSI students also exist for cohort 1 and 2 students, with the achievement gap narrowing slightly more for cohort 2.

Despite encouraging results for TAAS, outcomes for cohort 3 students as measured by the new state assessment (Texas Assessment of Knowledge and Skills—TAKS) are less promising. Only two-thirds of NGSI students passed the TAKS 10th-grade reading (65%) and mathematics (63%) assessments. Moreover, the achievement gap between NGSI and non-NGSI students widened substantially, with a large achievement gap in reading (15.6 percentage points) and math (19.8 percentage points). Results for cohort 4 students who completed the 9th grade TAKS, however, show a smaller achievement gap in reading (7.8 percentage points), but the achievement gap in math remained high (17.7 points).

Table 4.24. TAAS and TAKS Passing Rates for First-Time Ninth Graders

		Reading			Math		
		NGSI Students	Non-NGSI Students	Achievement Gap	NGSI Students	Non-NGSI Students	Achievement Gap
Cohort 1 (1999-00) n=14,895	TAAS 8th	83.2	92.4	9.2	80.1	91.3	11.2
	TAAS 10th	84.0	92.8	8.8	81.8	92.6	10.8
Cohort 2 (2000-01) n=33,728	TAAS 8th	87.1	94.6	7.5	87.9	95.8	7.9
	TAAS 10th	93.9	97.6	3.7	89.7	96.3	6.6
Cohort 3 (2001-02) n=29,775	TAKS 10th	64.6	80.2	15.6	62.9	82.7	19.8
Cohort 4 (2002-03) n=33,690	TAKS 9th	84.5	92.3	7.8	62.7	80.4	17.7

Note. Students in cohort 3 completed the tenth-grade TAKS assessment in 2002-03 (the first administration year for the new assessment). Cohort 4 students completed the ninth-grade TAKS during the 2002-03 school year.

Repeat Ninth Graders

- **NGSI repeat ninth graders have similar TAAS and TAKS passing rates compared to non-NGSI students for both reading and mathematics, however, for both student groups, passing rates declined substantially for the new TAKS assessment.**

For repeat ninth graders, eighth-grade TAAS scores are from two years prior to NGSI participation. The percent of students passing TAAS for each group is given in Table 4.25. For cohort 1, the TAAS reading passing rates for NGSI and non-NGSI students were very similar. For the eighth grade TAAS reading, 55.2% of NGSI-served students and 56.3% of non-NGSI students passed, resulting in an achievement gap of only 1.1 percentage points. Three years later, this gap had increased slightly to 1.7 percentage points. The increasing achievement gap across time also is apparent for TAAS math passing rates.

Table 4.25. TAAS and TAKS Passing Rates for Repeat Ninth Graders

		Reading			Math		
		NGSI Students	Non-NGSI Students	Achievement Gap	NGSI Students	Non-NGSI Students	Achievement Gap
Cohort 1 (1999-00) n=666	TAAS 8th	55.2	56.3	1.1	46.9	50.5	3.6
	TAAS 10th	70.5	72.2	1.7	68.8	74.1	5.3
Cohort 2 (2000-01) n=1,495	TAAS 8th	68.1	72.7	4.6	64.0	66.2	2.2
	TAAS 10th	88.7	87.4	-1.3	79.2	77.3	-1.9
Cohort 3 (2001-02) n=365	TAKS 10th	49.4	57.8	8.4	39.3	42.2	2.9
Cohort 4 (2001-02) n=1,643	TAKS 9th	70.3	72.1	1.8	34.8	38.8	4.0

NGSI students in cohort 2 have a lower TAAS passing rate (4.6 percentage points) on eighth-grade reading than non-NGSI students. Three years later, however, these same NGSI students passed the tenth-grade TAAS at a slightly higher rate than non-NGSI students, eliminating the achievement gap. The same pattern is seen for TAAS mathematics. The 2.2 percentage point achievement gap for eighth-grade TAAS passing rates is eliminated by tenth grade, when NGSI students pass TAAS math at a slightly higher rate than non-NGSI students.

For both student groups, passing rates declined substantially for the new TAKS assessment compared to results for the TAAS. Across cohorts 3 and 4, passing rates for NGSI and non-NGSI students are similar for both reading and math, except the tenth-grade TAKS reading passing rate for NGSI students in cohort 3 was 8.4 percentage points lower than non-NGSI students. For cohort 4 students, the difference was only 1.8 percentage points.

Retention Rates

- **Although NGSI student retention rates remain high, evidence for four program years reveals that NGSI retention rates have decreased more than rates for non-NGSI students.**

The primary goal of the NGSI program is to reduce the number of students retained in the ninth grade. To determine if this occurs, we examine retention rates for all students in the four cohorts, including first-time ninth graders and repeat ninth graders. As Table 4.26 shows, 29.5% of the 1999-00 NGSI students were retained in ninth grade, compared to 18.3% for non-NGSI students. Students in the following three years had progressively lower retention rates. First-time NGSI ninth graders in 1999-00 had a 29.0% retention rate, compared to 16.7% for non-NGSI served students. Students repeating ninth grade had a much higher retention rate, for both NGSI and non-NGSI students, and the rates were comparable across comparison groups.

Across all years and student groups, NGSI students had higher retention rates than non-NGSI students, except for repeating ninth-graders in 2001-02 and 2002-03, who actually had a slightly lower retention rate than the comparison group (19.7% compared to 23.4% in 2001-02). Across time, NGSI students experienced greater declines in their retention rates, for all groups. Examining the difference in retention rates from 1999-00 to 2002-03, NGSI students decreased their retention rate 7.7 percentage points, compared to a 3.3 point reduction for non-NGSI students. First-time and repeat ninth graders experienced similar declines, although the difference was smaller for the repeat ninth graders because their retention rate increased in 2002-03.

Table 4.26. Retention Rates of Ninth Grade Students

		NGSI Students		Non-NGSI Students	
		Number of Students	Percent Retained	Number of Students	Percent Retained
All students	1999-00	14,183	29.5	14,183	18.3
	2000-01	31,272	24.5	31,272	15.6
	2001-02	28,266	23.3	28,266	15.0
	2002-03	28,061	21.8	28,061	15.0
First-time Ninth	1999-00	12,848	29.0	12,848	16.7
	2000-01	27,714	23.6	27,714	13.7
	2001-02	24,725	23.8	24,725	13.8
	2002-03	25,461	21.4	25,461	13.6
Repeating Ninth	1999-00	1,335	33.5	1,335	33.7
	2000-01	3,558	31.3	3,558	30.9
	2001-02	3,541	19.7	3,541	23.4
	2002-03	2,600	26.6	2,600	28.7
Reduction in retention[a]	All students	--	-7.7	--	-3.3
	First-time 9th	--	-7.6	--	-3.1
	Repeating 9th	--	-6.9	--	-5.0

[a] Difference between 1999-00 and 2002-03.

Retention by Socioeconomic Status

- **First-time ninth graders had greater declines in retention rates than non-NGSI students; the retention rate declines were similar for economically disadvantaged and advantaged students.**

Table 4.27 presents retention rates for first-time ninth graders by economic disadvantage status. Across all program years, economically disadvantaged NGSI students had a higher retention rate than non-economically disadvantaged students. From 1999-00 to 2002-03, the retention rate for economically disadvantaged NGSI students declined from 34.0% to 26.9% - a reduction of 7.1 percentage points. During this same time period, the retention rate for non-NGSI students who were economically disadvantaged declined 2.7 percentage points, from 22.7% to 20.0%. Non-economically disadvantaged NGSI students in 2002-03 experienced an 11.0 percentage point decline in retention rates from students in 1999-00, a decrease is larger than the decline experienced by non-NGSI students and for economically disadvantaged NGSI students.

Table 4.27. Retention Rates for First-Time Ninth Graders, by Economic Indicators

		NGSI Students		Non-NGSI Students	
		Number of Students	Percent Retained	Number of Students	Percent Retained
Economically disadvantaged	1999-00	6,771	34.0	6,771	22.7
	2000-01	14,108	28.1	14,108	18.7
	2001-02	13,227	27.8	13,227	19.2
	2002-03	12,730	26.9	12,730	20.0
Non-economically disadvantaged	1999-00	6,077	23.5	6,077	10.0
	2000-01	13,606	19.0	13,606	8.5
	2001-02	11,498	19.3	11,498	7.6
	2002-03	12,731	15.9	12,731	7.3
Reduction in retention[a]	Economically disadvantaged	--	-7.1	--	-2.7
	Non-economically disadvantaged	--	-7.6	--	-2.7

[a] Difference between 1999-00 and 2002-03.

- **Retention rates for both economically advantaged and disadvantaged NGSI students who were repeating ninth grade decreased across time; however, NGSI non-economically disadvantaged students had a larger reduction compared to their non-NGSI peers.**

Table 4.28 presents retention rates for repeat ninth graders by economic disadvantage status. Generally, NGSI students had lower retention rates than non-NGSI students. While retention rates declined for both groups across years, there was a greater decline for non-economically disadvantaged NGSI students. Across four program years, economically disadvantaged NGSI and non-NGSI students experienced similar reductions in retention rates (6.2 and 6.8 percentage points, respectively). On the contrary, non-economically disadvantaged NGSI students reduced their retention rates by 8.1 percentage points, a substantial difference from the 1.9 percentage point reduction for non-NGSI students.

Table 4.28. Retention Rates for Students Repeating Ninth Grade, by Economic Indicators

		NGSI Students		Non-NGSI Students	
		Number of Students	Percent Retained	Number of Students	Percent Retained
Economically disadvantaged	1999-00	827	33.4	827	36.3
	2000-01	2,090	31.9	2,090	31.3
	2001-02	2,192	20.2	2,192	23.9
	2002-03	1,534	27.2	1,534	29.5
Non-economically disadvantaged	1999-00	508	33.7	508	29.5
	2000-01	1,468	30.4	1,468	30.3
	2001-02	1,349	18.8	1,349	22.8
	2002-03	1,066	25.6	1,066	27.6
Reduction in retention[a]	Economically disadvantaged	--	-6.2	--	-6.8
	Non-economically disadvantaged	--	-8.1	--	-1.9

[a] Difference between 1999-00 and 2002-03.

Retention by Ethnicity

- **Although Hispanic and African American students served in NGSI programs had the highest retention rates, these students also had the greatest reductions in retentions across program years.**

Ninth grade retention rates, disaggregated by ethnicity, are presented in Table 4.29 for NGSI and non-NGSI students. Hispanic and African American NGSI students had the highest retention rates, although rates did decline across time. Between 1999-00 and 2000-03, the retention rate decreased 7.7 percentage points for Hispanic students (from 33.0% to 25.3%) and 9.4 percentage points for African American students (33.9% to 24.5%).

Retention rates for non-NGSI students are lower than comparable NGSI groups. Similar to NGSI students, the highest retention rates in 1999-00 are for Hispanic and African American students. However, unlike the NGSI served students, the rate of change across time is quite small for most ethnic groups, with the largest decline being 4.1 percentage points for Hispanic students.

Table 4.29. Retention Rates of All Ninth Graders, by Ethnicity

		NGSI Students		Non-NGSI Students	
		Number of Students	Percent Retained	Number of Students	Percent Retained
Hispanic	1999-00	7,326	33.0	7,326	23.0
	2000-01	16,055	27.3	16,055	19.3
	2001-02	14,557	26.2	14,557	18.0
	2002-03	13,930	25.3	13,930	18.9
African American	1999-00	2,769	33.9	2,769	21.3
	2000-01	5,579	28.8	5,579	20.0
	2001-02	5,164	25.3	5,164	20.2
	2002-03	4,695	24.5	4,695	20.6
White	1999-00	3,891	20.1	3,891	7.8
	2000-01	9,076	17.7	9,076	7.0
	2001-02	8,112	17.4	8,112	7.0
	2002-03	8,878	15.6	8,878	6.6
Reduction in retention[a]	Hispanic	--	-7.7	--	-4.1
	African Am.	--	-9.4	--	-0.7
	White	--	-4.5	--	-1.2

[a] Difference between 1999-00 and 2002-03.

Association of Student- and District-Level Factors with Academic Achievement

The relationships between NGSI student and district characteristics and reading and mathematics scores on state-level assessments were explored using hierarchical linear modeling (HLM). HLM was the preferred analytical method because, in most cases, students within school districts resemble each other due to selection processes and common backgrounds. Thus, measures of students (i.e., TAAS/TAKS scores) from the same school district are not independent, meaning that they show a greater correlation than do measures of students from different districts. Not only does HLM make no assumption about independence, it estimates the degree to which measures are dependent, and it uses this estimate in the calculation of the precision with which treatment effects are estimated.

Separate HLM analyses were conducted using NGSI participants in 2000-01 (cohort 2) and 2001-02 (cohort 3). Cohort 2 included 21,565 students from 143 school districts, and cohort 3 included 13,110 students in 86 districts. These students participated in funded programs in their respective NGSI year, constituted at least 10 students in the school district, and had achievement scores from the year prior to NGSI participation (2000 for cohort 2 and 2001 for cohort 3) and the year after NGSI participation (2002 for cohort 2 and 2003 for cohort 3). These students were used to investigate the effect of NGSI student and district characteristics on TAAS reading and mathematics TLI scores (cohort 2) and TAKS English language arts (ELA) and mathematics percentile scores (cohort 3).

The specific student- and district-level variables along with their descriptive statistics are reported in Table 4.30. Student-level variables included gender (1 if female, 0 if male), economic status (1 if disadvantaged, 0 if not), prior retention (1 if retained the year prior to NGSI, 0 if not), school attendance (average rate for NGSI participation year), TAAS reading and mathematics TLI pretest scores,[2] days participated in NGSI, and minority status (1 minority, 0 if white).

District-level variables included the district NGSI mean TAAS pretest score (achievement contextual effect), the district proportion of disadvantaged NGSI students (economically disadvantaged contextual effect), the district per-pupil NGSI expenditure for that year, and the average number of days NGSI programs were offered.

[2] TAAS pretest scores are from the prior school year (2000 for cohort 2 or 2001 for cohort 3) except for students repeating ninth grade. Because TAAS was not given in the ninth grade, repeat ninth graders last took a TAAS exam two years earlier, in eighth grade. Therefore, TAAS pretest scores for repeat ninth graders in cohort 2 are from 1999 and scores for cohort 3 are from 2000.

Table 4.30. Descriptive Statistics for TAAS/TAKS Reading and Mathematics

Variable Name	N	Mean	SD	Minimum	Maximum
Cohort 2 (2000-01) Student-Level Descriptive Statistics					
Gender	21,565	0.49	0.50	0	1
Minority	21,565	0.71	0.45	0	1
Economically disadvantaged	21,565	0.49	0.50	0	1
Prior retention	21,565	0.06	0.23	0	1
School attendance	21,565	96.00	4.12	38.60	100.00
TAAS reading (prior)	21,565	87.77	12.16	11.00	99.00
TAAS reading 2002	21,565	85.95	9.68	5.00	97.00
TAAS mathematics (prior)	21,565	79.97	9.23	7.00	92.00
TAAS mathematics 2002	21,565	80.71	8.43	20.00	92.00
Days participated in NGSI	21,565	92.94	59.48	0	179.00
Cohort 2 (2000-01) District-Level Descriptive Statistics					
Economically disadvantaged	143	53.72	21.40	10.77	98.36
Reading and math achievement (prior)	143	77.39	4.96	60.92	89.30
NGSI expenditure per pupil	143	624.12	1,136.44	56.00	12,702.00
Days NGSI offered	143	88.30	40.93	4.59	175.15
Cohort 3 (2001-02) Student-Level Descriptive Statistics					
Gender	13,110	0.50	0.50	0	1
Minority	13,110	0.78	0.41	0	1
Economically disadvantaged	13,110	0.62	0.49	0	1
Prior retention	13,110	0.03	0.18	0	1
School attendance	13,110	95.51	4.49	21.05	100.00
TAAS reading (prior)	13,110	83.86	11.92	11.00	99.00
TAKS ELA 2003	13,110	35.35	25.54	0.00	99.99
TAAS mathematics (prior)	13,110	80.30	8.49	8.00	92.00
TAKS mathematics 2003	13,110	36.13	25.22	0.07	99.77
Days participated in NGSI	13,110	149.76	49.71	0	179.0
Cohort 3 (2001-02) District-Level Descriptive Statistics					
Economically disadvantaged	86	57.73	21.20	11.68	100.0
Reading and math achievement (prior)	86	80.02	4.95	65.36	90.00
NGSI expenditure per pupil	86	429.93	395.55	56.00	3059.00

Student-Level Variables

- **After controlling for the effect of student-level characteristics (academic and social background), there was no positive relationship between the number of days students spend in NGSI and their achievement scores.**
- **A student's school attendance rate was positively associated with both reading and mathematics achievement.**

Table 4.31 shows that student-level predictors associated with higher reading/ELA scores include being economically advantaged, female, and non-minority. Higher TAAS reading pretest scores were also strongly associated with higher posttest scores for TAAS reading and TAKS ELA. For example, for cohort 2 NGSI students, a unit increase in 2000 TAAS reading scores was associated with a 0.50 unit increase in 2001 TAAS reading scores. School attendance was also a significant predictor of reading and ELA achievement. By way of example, a 1% increase in attendance rate resulted in a 0.90 unit increase in 2001 TAAS reading posttest scores, net of other student-level predictors.

A negative relationship existed between NGSI instructional days and TAAS reading TLI scores in cohort 2. This relationship might be reasonable if poorly performing students received more days of instruction than better performing students. For cohort 3 students, there was no significant relationship between the number of NGSI instructional days that students participated and TAKS scores for ELA.

Similar student-level predictors also were associated with higher TAAS/TAKS mathematics scores, though female students had lower mathematics scores than male students. As with the reading analyses, a negative relationship existed between the number of days students participated in NGSI and TAAS mathematics scores for cohort 2 students. For cohort 3 students, there was no significant relationship between NGSI instructional days and TAKS mathematics scores.

Table 4.31. HLM Analyses of TAAS Reading and Mathematics TLI Scores for Cohort 2 (2000-00) and TAKS ELA and Mathematics Percentile Scores for Cohort 3 (2001-02) NGSI Students

Conditional Model		**Reading / ELA**		**Mathematics**	
		Cohort 2	**Cohort 3**	**Cohort 2**	**Cohort 3**
Student Level Variables	**District Level Variables**	**Gamma Coefficient/ (*t*)**	**Gamma Coefficient/ (*t*)**	**Gamma Coefficient/ (*t*)**	**Gamma Coefficient/ (*t*)**
Intercept		86.93 (334.36**)	35.23 (22.22**)	82.07 (317.38**)	38.03 (29.43**)
	Economically disadvantaged context	0.005 (0.55)	0.03 (0.87)	0.012 (1.53)	0.03 (1.32)
	Achievement context	0.05 (1.10)	0.11 (0.81)	0.058 (1.33)	0.78 (0.63)
	NGSI per-pupil expenditure	0.0001 (1.86)	0.001 (1.16)	0.0001 (1.39)	-0.002 (0.89)
	NGSI program days	0.013 (3.49**)	n/a	0.020 (5.48**)	n/a
Female		-0.18 (1.84)	6.19 (13.01**)	-0.63 (5.60**)	-0.48 (1.72)
Minority status		-1.13 (8.01**)	-3.31 (2.68*)	-1.05 (5.73**)	-4.82 (4.04*)
Economically disadvantaged		-0.77 (6.08**)	-2.59 (4.48**)	-0.37 (3.14*)	-2.42 (6.37**)
Repeating current year		0.26 (0.67)	-3.54 (1.97)	0.49 (1.34)	-5.66 (2.72*)
School attendance rate		0.90 (5.45**)	0.53 (7.47**)	0.12 (11.65**)	0.75 (10.76**)
TAAS pretest		0.50 (58.11**)	1.06 (33.62**)	0.62 (44.85**)	1.51 (21.16**)
Days participated in NGSI		-0.007 (3.67**)	-0.01 (1.38)	-0.01 (9.59**)	0.003 (0.47)

Notes. In the student-level model, the intercept was specified as random and the independent variables were specified as fixed. The number of NGSI program days was unavailable for cohort 3 (“n/a”).

**p* < .01; ***p* < .001.

District-Level Variables

- **There was a slightly positive association between the average number of NGSI program days offered and academic achievement for TAAS reading and math.**
- **There was no significant relationship between NGSI dollars per pupil and TAAS/TAKS scores**.

Contextual effects occur when the aggregate of a student-level characteristic is related to an outcome variable, even after controlling for the effect of the student-level characteristic. An example would be average social class of a school being related to achievement after controlling for individual students' social class (Raudenbush & Bryk, 2002). HLM facilitates this type of multi-level analysis by specifying separate student and district equations. Following this model, Table 4.31 shows that there was a slightly positive association between the average number of NGSI program days offered and subsequent TAAS reading and mathematics scores (a variable for NGSI program days was unavailable for cohort 3). Conversely, the average NGSI dollars spent per student did not have a significant effect on district reading/ELA or mathematics scores.

Association of Student-and District-Level Factors with Retention

Relationships between NGSI student and district characteristics and retention status (a binary outcome, retained or not retained) were analyzed using a hierarchical generalized linear model (HGLM) with a Bernoulli sampling model, a log odds or logit link function, and level-1 (student) and level-2 (district) structural models identical to those in HLM. HGLM presents results for both unit-specific and population-average models. The unit-specific model holds constant school district attended, while the population-average model does not, but averages over all districts. Because the average log-odds of retention was found to vary significantly across districts this variation should be controlled or held constant. Consequently, only unit-specific results will be presented and discussed below. (Note, however, that results are similar for both models.).

Included in separate HGLM analyses were students who participated in NGSI in 2000-01 (cohort 2) and 2001-02 (cohort 3). Cohort 2 included 30,284 NGSI students from 146 school districts, whereas cohort 3 included 18,033 students from 90 school districts. These data were used to investigate the effect of NGSI student and district characteristics on retention status (2001 retention status for cohort 2 and 2002 retention status for cohort 3). See Table 4.32.

As previously defined, student characteristics included gender, economic status, prior retention, days participated in NGSI, and minority status. School attendance in the year of NGSI participation and the average of the TAAS reading and mathematics TLI scores in the prior year of participation were also used as student-level predictors.

District-level variables included the district NGSI mean of the TAAS combined reading and mathematics score (achievement contextual effect), the district proportion of disadvantaged NGSI students, and the district NGSI per pupil expenditure for the appropriate cohort year.

Table 4.32. Descriptive Statistics for Student Retention

Variable Name	N	Mean	SD	Minimum	Maximum
Cohort 2 (2000-01) Student-Level Descriptive Statistics					
Gender	30,284	0.48	0.50	0	1
Minority	30,284	0.73	0.44	0	1
Economically disadvantaged	30,284	0.51	0.50	0	1
Prior retention	30,284	0.10	0.30	0	1
Retention 2001	30,284	0.20	0.40	0	1
School attendance	30,284	94.04	7.43	11.63	100.0
Combined prior TAAS score	30,284	79.76	11.18	9.00	95.50
Days participated in NGSI	30,284	90.77	58.73	0	179.00
Cohort 2 (2000-01) District-Level Descriptive Statistics					
Economically disadvantaged	146	53.99	21.46	10.77	98.36
Reading and math achievement (prior)	146	77.35	4.92	60.92	86.30
NGSI expenditure per pupil	146	628.14	1,127.56	56.00	12,702.00
Days NGSI offered	146	88.24	40.71	4.59	175.15
Cohort 3 (2001-02) Student-Level Descriptive Statistics					
Gender	18,033	0.48	0.50	0	1
Minority	18,033	0.80	0.40	0	1
Economically disadvantaged	18,033	0.64	0.48	0	1
Prior retention	18,033	0.10	0.30	0	1
Retention 2001	18,033	0.19	0.39	0	1
School attendance	18,033	93.66	7.16	17.02	100.00
Combined prior TAAS score	18,033	80.19	10.43	9.50	95.50
Days participated in NGSI	18,033	147.04	49.51	0	179.00
Cohort 3 (2001-02) District-Level Descriptive Statistics					
Economically disadvantaged	90	58.70	21.38	11.68	100.00
Reading and math achievement (prior)	90	78.70	5.84	44.00	90.06
NGSI expenditure per pupil	90	456.39	435.14	56.00	3059.00

Student-Level Variables

- **After controlling for the effect of student-level variables (academic and social background), *more* instructional days in NGSI were associated with a decreased chance of retention for both student cohorts.**
- **For otherwise similar students, an increase in a student's school attendance rate decreased the chance of retention.**

For both student cohorts, almost all student-level variables exerted a statistically significant effect on the probability of a student being retained (see Table 4.33). Being female, failing to be promoted the previous school year, and high TAAS pretest scores were all associated with a lower probability of being retained. More instructional days in NGSI also decreased the chances of retention. An increase in a student's school attendance rate was also associated with a reduced chance of being retained. As one might expect, being non-White or economically disadvantaged was associated with a higher probability of retention.

Based on the HGLM analysis to predict retention, the probability that the average student in cohort 2 was retained at the end of ninth grade is 12.4% and for cohort 3 students, 9.6%.[3] The addition of 20 NGSI service days decreases the predicted probability of cohort 2 student retention to 12.0% and the probability for cohort 3 to 8.8%. In comparison, a 1% change in a student's school attendance rate would decrease the predicted probability of retention for cohort 2 students to 10.9% and cohort 3 to 8.4%.

Table 4.33. HGLM Analyses of Retention Status for Cohort 2 (2000-01) and Cohort 3 (2001-02) NGSI Students

Conditional Model		Cohort 2	Cohort 3
Student Level Variables	**District Level Variables**	**Gamma Coefficient/ (*t*)**	**Gamma Coefficient/ (*t*)**
Intercept		-1.64 (16.33**)	-1.18 (6.49**)
	Economically disadvantaged context	-0.003 (0.69)	0.002 (0.28)
	Achievement context	-0.05 (2.60*)	-0.04 (1.45)
	NGSI per pupil expenditure	-0.0004 (2.41*)	-0.0008 (2.23*)
	NGSI program days	0.002 (0.82)	
Female		-0.44 (12.67**)	-0.56 (12.41**)
Minority status		0.19 (3.85**)	0.14 (1.87**)
Economically disadvantaged		0.12 (2.88*)	0.20 (3.67*)
Repeating current year		-1.19 (18.84**)	-1.64 (19.10**)
School attendance rate		-0.15 (50.44**)	-0.15 (38.33**)
TAAS pretest		-0.05 (33.07**)	-0.06 (26.28**)
Days participated in NGSI		-0.002 (3.40**)	-0.005 (4.78**)

Note. Student-level predictors were specified as fixed with error terms constrained to be 0. Intercepts varied randomly.
**p* < .01; ***p* < .001.

[3] Probabilities were calculated using the function: $p = e^{\{\beta x\}} / (1 + e^{\{\beta x\}})$ where $e^{\{\beta x\}}$ is first calculated by using all coefficients in Table 4.32 and coding all variables at the mean. All continuous variables without a true zero were grand mean centered and thus their mean is zero.

District-Level Variables

- **After controlling for the effect of student characteristics (academic and social background) and district social and academic contexts, higher NGSI per-pupil expenditures was associated with reduced student retention.**
- **For cohort 2 students, having higher achieving classmates was associated with a reduced chance of retention.**

District-level contextual variables were less likely to exert a significant effect. For both student cohorts, being in a school that expended relatively greater amounts of money per student was associated with a lower probability of retention. For cohort 2 students, being in a school with higher achieving students was associated with a lower probability of retention. Although variables were found to be statistically significant, they still accounted for only a moderate change in the probability of someone being retained. Using cohort 2 as an example, adding $100 to district NGSI per-pupil expenditure would result in a 0.4 percentage point decrease in the predicted probability of being retained. The larger impact is seen for students from high achieving schools. Students attending a school with achievement scores one standard deviation above the norm have a 2.8 percentage point decrease in the predicted probability of being retained.

CONCLUSIONS AND IMPLICATIONS

From 1999 to 2002, the state of Texas appropriated a total of $170 million for the Basic Skills Program for High School Students—also known as the Ninth Grade Success Initiative (NGSI)—to support school districts' efforts to help ninth graders stay in school and succeed academically. The goal of NGSI was to increase graduation rates in Texas public schools by reducing the number of students who were retained in or dropped out of the ninth grade. Funds went toward expanding or enhancing existing programs, or creating new programs to increase academic performance and attendance rates and reduce dropout rates for ninth graders who had not earned—or were unlikely to earn—sufficient credit to advance to tenth grade or eighth graders who were promoted but considered academically at risk. The purpose of this study was to assess the effective use of grant funds by 226 school districts receiving both original and continuation NGSI funding during four school years (1999-00 through 2002-03). Conclusions and implications relative to the study's research questions are summarized below.

What are the characteristics of districts and students receiving NGSI grants?

- **Characteristics of districts.** NGSI district size distributions differ from the state overall, in which the majority of districts have *very small* enrollments (fewer than 1,000 students). More than half (58%) of NGSI grant recipients were *mid-size* to *very-large* districts (3,001 to more than 25,000 students). Compared to the state, high schools in NGSI districts also had a slightly greater proportion of minority, limited English proficient, and economically disadvantaged students.

- **Characteristics of students.** During four program years (1999-00 to 2002-03), 389,834 unique students participated in the NGSI program (based on an estimated count that adjusts for missing data). The number of NGSI students participating in program activities varied by year, increasing from 32,535 (spring 2000) to 106,325 (2002-03). Substantially fewer students participated during summer terms, but enrollments climbed steadily during the grant period (from 19,508 to 31,607).

  The majority of NGSI students (80% or more during regular terms) were ninth-grade students at-risk of not earning sufficient credits to advance to tenth grade. About three-fourths of NGSI students were Hispanic (about 56%) and African American (about 17% during regular terms and 20% during summer). The majority of students served by NGSI programs were in the ninth grade for the first time (80% or more each term). The percentages of newly promoted ninth graders served in NGSI declined across summer terms (from about 33% to 9%).

How did grant resources supplement existing educational programs?

- **Program characteristics.** On average, NGSI programs had larger staff, more volunteers, and higher student-to-teacher ratios for fall and spring semesters compared to summer terms. However, since NGSI programs served fewer students in summer terms, mean student-to-teacher ratios in the summer (10.2 to 13.0) were substantially lower than regular terms (23.2 to 27.4).
- **Activities supporting credit recovery and basic skills.** NGSI programs typically used several activities to serve at-risk ninth graders. Tutoring, instructional technology, individual instruction, group instruction, and counseling were reported most often. The diversity of approaches reported for programs makes it difficult to assess effective practice.
- **Course credit accrual and instructional methods.** During the regular school year, students accrued course credit primarily through regular classroom instruction, but repeat ninth graders were more likely to accrue credit through computer–aided instruction (e.g., PLATO or NovaNET self-

paced learning systems). NGSI instructional methods changed during the course of the grant, with the use of tutoring decreasing and the use of counseling and mentoring increasing.

- **Successful program features.** Technology-based instruction and learning emerged as the most consistently reported successful program feature. According to many, self-paced programs such as PLATO and NovaNET benefited students by individualizing instruction, meeting various learning styles, allowing a flexible pace, supporting the acquisition of credits to stay on grade level, and providing an alternative to traditional educational settings. Although tutoring was cited as the most successful feature for regular terms, it was viewed less consistently as a successful feature of summer programs. This is probably because lower student-to-teacher ratios in the summer reduced the need for tutorials.

What is the effect of grant resources on targeted students?

- **Core-content courses.** Passing rates for core subject-area courses remained relatively stable across NGSI grant terms, with about 70% of NGSI students passing Algebra I during regular terms and about three-fourths or more of students passing Biology, Integrated Physics and Chemistry (IPC), World Geography, and English I. Course passing rates increased for summer terms, with the majority of NGSI students who participated in summer terms passing core courses (about 80% to 95%). However, the number of students enrolled in summer terms decreased substantially.

  As might be expected, students in ninth grade for the first time had higher passing rates for core-subject courses than students who did not earn sufficient credits for promotion. Newly promoted ninth grade students who participated in summer coursework also had high passing rates (89% to 98%); however, only a few students participated.

- **Attendance.** In general, NGSI students' attendance rates did not improve across grant terms. For both NGSI and a comparison group of non-NGSI students, first-time ninth graders had substantially higher attendance rates (about 92% to 96%) than repeat ninth graders (about 83% to 93%).

  NGSI first-time ninth graders had slightly lower attendance rates than their non-NGSI peers (about 0.5 to 2.0 percentage points). Attendance rates for repeat NGSI ninth graders, however, were typically near or surpassed non-NGSI comparison groups. Although attendance rates for both first-time and repeat NGSI students declined across time, this change was reduced slightly during the NGSI program implementation year for students repeating ninth grade.

- **State-level assessments.** NGSI students had lower TAAS passing rates for both reading and math compared to non-NGSI students, but the achievement gap between groups narrowed (to 3.7 points in reading and 6.6 points in math). Despite encouraging results for TAAS, the achievement gap widened substantially for students in cohorts 3 and 4 who completed the TAKS (to about 18 percentage points for math). NGSI repeat ninth graders had similar TAAS and TAKS passing rates compared to non-NGSI students for both reading and mathematics. However, for both student groups, passing rates declined substantially for TAKS reading (70% and 72%) and math (35% and 39%).

- **Retention rates.** Although NGSI student retention rates remain high (21.8% in 2002-03), evidence for four program years reveals that NGSI retention rates have decreased more than rates for non-NGSI students (-7.7 points compared to -3.3). First-time ninth graders had greater declines in retention rates than non-NGSI students (-7.6 points compared to -3.1). Retention rate declines were similar for economically disadvantaged and advantaged students.

  Although Hispanic and African American students served in NGSI programs had the highest retention rates (25% in 2002-03), these students also had the greatest reductions in retentions across program years (-7.7 and -9.4 points, respectively for Hispanic and African American students).

What program elements are associated with student outcomes?

To further explore the association between NGSI student and district characteristics and TAAS reading and mathematics TLI scores and TAKS English language arts and mathematics percentile rank scores, researchers used hierarchical linear modeling (HLM). Separate HLM analyses were conducted using NGSI participants in 2000-01 (cohort 2) and 2001-02 (cohort 3). Cohort 2 included 21,565 students from 143 districts, while cohort 3 included 13,110 students from 86 districts. These students participated in NGSI programs in their respective districts. Separate HLM analyses were also conducted for retention. The numbers of students and districts available for analyses included 30,284 students in 146 districts for cohort 2 and 18,033 students in 90 districts for cohort 3.

Student-Level Variables and Outcomes

- After controlling for the effect of student-level characteristics (academic and social background), there was no positive relationship between the number of days students participated in NGSI and achievement scores on TAAS/TAKS reading/ELA or mathematics. In fact, a negative relationship existed between days and TAAS achievement. This relationship might be reasonable if poorly performing students received more days of instruction. In contrast to outcomes for student achievement, *more* instructional days in NGSI were associated with a slightly decreased probability of retention for student in both cohorts (2000-01, 2001-02).
- Ninth graders' school attendance was an important predictor of academic performance. For otherwise similar students, a student's school attendance rate was positively associated with both TAAS/TAKS reading/ELA and mathematics achievement. Moreover, for both student cohorts an increase in a student's school attendance rate was associated with a decreased chance of retention.
- After controlling for student-level characteristics, NGSI students' academic achievement varied significantly by district. This suggests that some districts and schools were more successful in meeting the needs of ninth graders.

District-Level Variables and Outcomes

- Based on NGSI program information available for cohort 2 students, there was a slightly positive association between the number of NGSI program days offered and TAAS reading and math scores. Thus, districts that made a larger number of days available for the program had greater success in improving student achievement.
- Similar to findings for the Optional Extended Year program and Texas After School Initiative, there was no significant relationship between NGSI dollars per pupil and student achievement. However, for NGSI, higher per-pupil expenditures were associated with reduced student.
- For students in cohort 2, having higher achieving classmates was associated with a slightly reduced chance of retention.

What are the implications for addressing the needs of students at risk?

- **Few districts designed programs for newly promoted ninth graders who lacked minimum skills for successful course completion.** The majority of students served by NGSI programs were in the ninth grade for the first time (80% or more each term). The percentages of newly promoted ninth graders served in NGSI declined across summer terms (from about 33% to 9%). Even though NGSI funds could be used to proactively address the needs of eighth graders before high school enrollment, this approach was seldom used.

- **African American students were more likely to be enrolled in summer school programs, which typically helped students to recover credits for failed courses, rather than program interventions during regular school terms.** Student enrollment trends for NGSI terms revealed differing enrollment patterns by ethnic groups. In particular, trends for African American students showed the percentage of students in NGSI programs increased during summer terms. This suggests that interventions for African American students focused more often on remediation of academic failure rather than proactive efforts to improve success.
- **Evidence from district NGSI reports shed little light on the identification of effective programs for students at risk.** NGSI programs essentially remain a "black box." The TEA attempted to collect a great deal of information on the nature of NGSI instructional programs through program and activity reports. However, the instructional and learning focus of programs remains unclear because the majority of districts reported using multiple approaches. For example, during regular terms, high percentages of districts reported that their program featured activities such as tutoring (about 85%), instructional technology (about 75%), individual instruction (about 70%), and instruction in the regular classroom (about 65%). It is impossible to determine the effectiveness of a program when students are apparently receiving multiple interventions.
- **Students repeating ninth-grade coursework were more likely to accrue credit through self-paced computer-aided instruction. However, there is little evidence to support program effectiveness.** Districts invested a substantial proportion of NGSI grant resources in instructional technology. In particular, many districts reported the implementation of PLATO or NovaNET self-paced instructional systems in labs for tutorials, credit recovery, or credit accrual. Findings show that ninth graders who did not earn sufficient credits for promotion were more likely than first-time ninth graders to utilize such programs for coursework. According to district reports, self-paced programs were highly successful in individualizing instruction, supporting the acquisition of credits, providing an alternative means to deliver instruction, and so forth. Despite positive perceptions, little is known about the effectiveness of self-paced programs that are being widely used to address the needs of at-risk students. Available evidence suggests that such programs may reduce student retention but the impact on student achievement is suspect.
- **Improving performance in core-subject area coursework is critical to the success of at-risk students.** One important indicator of ninth-grade success would be improved passing rates in core-subject areas. However, findings for the three full grant implementation years show that NGSI had no positive effect on ninth graders' course passing rates for Algebra I, Biology, IPC, World Geography, or English I. About 70% or less of students passed Algebra I each year and about three-fourths of ninth graders passed other courses. Such low passing rates mean that about 25% to 30% of NGSI ninth graders remain at risk of not being promoted to tenth grade. Algebra I is a major obstacle for many students, with nearly 30% of first-time and 40% of repeat ninth graders failing algebra. Clearly, meeting the needs of at risk students will require the improvement of student performance in core courses.
- **Poor school attendance continues to jeopardize the academic success of students at risk.** A key goal of the NGSI program was the improvement of student attendance. Results show, however, that NGSI had no positive, sustained effect on ninth graders' school attendance. More importantly, attendance rates for both first-time and repeat ninth graders decline as they progress to higher grade levels. Although there was a slight improvement in the attendance rate for repeat ninth graders during the NGSI year, gains were not sustained into the next school year. Findings regarding attendance are particularly important because school attendance emerges as a significant predictor of student academic achievement and reduced chances of retention. Future initiatives supporting students at risk should directly address strategies to increase high school attendance.

- **Modest accomplishments for the NGSI suggest that the $170 million invested in the initiative did not achieve program goals for students at risk.** Overall findings for the NGSI suggest that, as a whole, the program was somewhat effective in reducing ninth-grade retention rates but fell short of accomplishing other important goals such as improved attendance and increased academic achievement on state-level assessments. Tracking reductions in student dropout was beyond the scope of this study. Although we did not conduct a thorough study of cost effectiveness, analyses revealed no significant associations between NGSI per-pupil expenditures and the academic achievement of students at risk. Per-pupil expenditures were associated with a slightly reduced probability of student retention, but the effect may not justify the cost.

CHAPTER 5
CASE STUDIES OF INITIATIVES SUPPORTING NINTH GRADERS' SUCCESS

Researchers conducted case studies of Ninth Grade Success Initiative (NGSI) grants to gain a greater understanding of issues facing large numbers of at-risk students, many of whom, despite potentially receiving services as early as kindergarten, still reach ninth grade unprepared to succeed academically in high school. Many of these students end up repeating ninth-grade coursework or dropping out of school. Case studies focused on NGSI projects and the broader high school contexts in which they operated. Researchers conducted intensive studies in 11 of 226 districts that received NGSI funding between 1999-2000 and 2002-03. In addition to NGSI funds, districts also benefited from Optional Extended Year program (OEYP) formula-based allocations, Texas After School Initiative (TASI) grants, or both.

Case Studies of NGSI Grantees

Case studies give an in-depth look at district- and campus-level activities supporting students in at-risk situations, grant-funded activities sustained over time, and best practices in projects. Researchers were guided by four overarching research questions:

- How was the NGSI program implemented and what was the effect of grant resources on targeted students,
- How did grant initiatives intersect with the broader ninth-grade context,
- How did the educational environment in high schools support grant goals for students at risk, and
- What are the implications for addressing the needs of students at risk?

Site Selection

Case studies include 10 single district grantees and one consortium (representing two districts). Site selection for case studies was a multi-stage process. Researchers selected districts that implemented programs of sufficient scope to have a potentially measurable impact on a significant number of students. We reviewed activity/progress reports submitted by 226 NGSI grantees receiving both original and continuation funds to create a database with key indicators (e.g., budget allocations, targeted populations, grant focus, etc.). This list was narrowed by including only districts that had (a) more than 50 percent economically disadvantaged students, (b) implemented a program targeting more than 25 students and at least 20 percent of the ninth-grade population, (c) a grant allocation in excess of $50,000 per year, and (d) a beginning ninth-grade retention rate above 10 percent. Districts with missing data on relevant variables were eliminated. From the resulting list of 57 districts, researchers in consultation with TEA staff members chose 11 districts, with careful consideration given to diversity. Thus, selected districts represent diverse regions of the state, varied demographic and grant characteristics, and distinctive program aspects considered worthy of investigation (See details in Appendix D.)

Data Collection Methods

Teams of two to three researchers conducted site visits to each of the 11 case-study sites. Site visits included structured interviews, focus groups, surveys, and classroom observations designed to collect information about the primary research questions. During visits, researchers also observed NGSI-supported activities and collected relevant materials and documents.

Interviews. A total of 47 interviews involved targeted district and campus staff, including the project director, principal, onsite project coordinator, a lab facilitator, and other staff depending on the characteristics of the program implemented.

Focus groups. Researchers conducted 26 teacher focus groups involving 124 teachers at 16 high schools. Focus groups consisted of teachers involved with the NGSI program and other randomly selected ninth-grade teachers. We also conducted 36 student focus groups with 202 ninth- and tenth-grade students. At each school, at least one focus group consisted of students who had participated in NGSI activities in either the current or previous year, and one focus group included ninth graders in at-risk situations.

Surveys. Teachers providing instruction to ninth graders were asked to complete a questionnaire soliciting their opinions on the high school environment. Out of 563 surveys distributed, 283 were returned (50 percent response rate). Of these, 124 teachers completed questionnaires during focus groups, and 159 returned them by mail. The 202 students participating in focus groups also completed a brief questionnaire assessing their views on the school environment and plans for the future.

Observations. Across all campuses, researchers observed in 92 classrooms, including 81 regular classrooms and 11 computer laboratories. This sample of core-subject area classrooms was selected through a review of at-risk students' course schedules in each school and included 21 observations in English/language arts classes, 21 in Algebra I, 16 in social studies, and 23 in science.

A conceptual framework, formulated through a review of program objectives and recent research literature on recommended improvements in the nation's high schools (e.g., American Youth Policy Forum, 2000; High Schools that Work—Frome, 2001; NASSP, 1996/2003) provided the framework for the study. The complete cross-site report –*The Texas Study of Students at Risk: Case Studies of Initiatives Supporting Ninth Graders Success*—is available at www.tcer.org. See the full report for a complete methodological description.

Organization of the Chapter

Conclusions and implications drawn from the complete report are presented below. Findings are organized around four areas guiding the evaluation:

- The NGSI program and existing best practices,
- Evidence on the effect of grant resources on students,
- Support for at-risk students within the school context and educational environment, and
- Recommendations for grant awards and management.

How was the NGSI program implemented and what best practices exist?

Programs for Newly Promoted Ninth Graders

- **Few districts offered programs for newly promoted ninth graders who lacked minimum skills for successful course completion.**
- **Educators believed newly promoted ninth graders who participated in summer programs benefited from reduced class size, active learning, bonding with teachers, and high school orientation.**
- **Even though educators viewed summer algebra camps and programs as worthwhile and effective, few students participated and most programs were discontinued.**

Research shows that students' motivation to learn is at the heart of successful learning (American Psychological Association, 1993). Although most students begin with an excitement for learning, enthusiasm declines as they progress from elementary to high school for various reasons (e.g., learning opportunities, interactions with teachers and peers, expectations about ability) (Weinstein, 2000). Proactive efforts to ensure student success (and enhance beliefs about competence) can help foster student engagement in learning, and therefore achievement (National Research Council & Institute of Medicine, 2004). Although NGSI grant recipients could design programs to meet the needs of recently promoted eighth graders, such efforts generally were limited in scope and often discontinued, apparently due to a lack of student interest and participation.

Statewide data confirmed this trend at case study sites (see Table 4.8). The percentage of newly promoted ninth graders participating in summer programs decreased across grant terms (from 33 percent in 2000 to 9 percent in 2003). Declining emphasis on early intervention is troubling because nearly all educators believed programs such as algebra camps benefited students. To better understand the potential of programs for newly promoted ninth graders, further research is needed to identify effective programs, determine why many students in at-risk situations fail to participate, and understand why districts and high schools seldom direct grant funds toward preventive programs.

Programs for First-Time and Repeat Ninth Graders

In contrast to the dearth of programs for *newly promoted* ninth graders, districts invested the bulk of NGSI resources in services for ninth graders who were *at-risk of not earning* sufficient credit or had *not earned* sufficient credit to advance to grade 10. Grant initiatives discussed below center on computer-assisted instruction, extended-day and extended-year programs, and whole-school improvement (restructuring, core-subject enhancement, and professional development).

Computer-Assisted Instruction

Most districts invested a substantial proportion of NGSI funds in technology for computer-assisted instruction. Instructional technology for students considered at risk most frequently included comprehensive programs supporting self-paced credit recovery or skill remediation. A few districts purchased programs that provided comprehensive algebra coursework programs or supplemental instruction in core-subject areas.

Self-Paced Credit Recovery Labs

- **Staffing of self-paced credit recovery labs for at-risk students most often involved one certified teacher who managed student coursework in several core-subject areas.**
- **One very large district took a more comprehensive approach to student credit recovery by establishing Learning Labs with computer- and text-based assignments, instructional support, and social services.**
- **Almost all educators and students believed self-paced courseware benefited students by offering alternative means for credit recovery, but student learning outcomes for comprehensive services were most promising.**
- **Concerns with self-paced learning programs include software quality, TEKS and TAKS alignment, student attendance, recruitment of effective teachers, and whether earned credits reflect content mastery.**

Districts, especially those with large-to-very large enrollments, most often established computer labs for credit recovery using self-paced computer-assisted instruction (PLATO or NovaNET). Self-paced credit recovery labs typically involved one certified teacher who managed student coursework. In contrast, one very large district established a Learning Lab in each high school, each staffed with four content-area teachers, a counselor, and a student liaison (paraprofessional). Students completed a combination of computer-assisted and other assignments (e.g., writing, problem solving). As a whole, this credit recovery model seemed to enhance the prospects of at-risk students for successful learning. Although nearly all educators believed self-paced courseware promoted credit recovery, educators and students more often credited the learning lab model with outcomes such as improved student self-image and confidence, reading and writing skills, and self-control and personal responsibility acquired through self-directed work. District outcomes verify the model's effectiveness through improved attendance, reduced retention, and the continuation of labs with local funds.

Computer-Assisted Algebra Coursework

- **Most educators viewed the *I CAN Learn* and *Cognitive Tutor* programs positively, believing they helped ensure curricular consistency and improved student algebra performance.**

Two districts implemented comprehensive algebra coursework. One district invested in *I CAN Learn*, a lab-based computerized algebra curriculum, while another district purchased a program that combined computer- and text-based assignments (*Cognitive Tutor)*. Most educators viewed both programs positively, believing they helped to ensure curricular consistency and improve student performance. End-of-course examination results for algebra confirm educators' opinions. Students in all participating high schools show strong gains, but those completing both computer- and text-based algebra assignments (*Cognitive Tutor)* had higher end-of-course passing rates. Some at-risk students voiced discontent with strictly computer-based algebra, preferring written work and teacher explanations instead. Overall, a combination of computer- and text-based learning appeared most effective in supporting students' understanding of algebra. Based on findings for computer-assisted instruction (both self-paced credit recovery and comprehensive coursework), Box 6.1 offers ideas for practices that appear to support effective computer-assisted coursework.

Box 5.1. Best Practice: Comprehensive Computer-Assisted Coursework

- Provide adequate teacher support for each core-subject area
- Provide professional development and ongoing teacher support
- Ensure that courseware aligns with TEKS and TAKS objectives
- Provide a combination of computer-assisted and other assignments
- Use performance-based assessments in addition to computer-generated tests to determine content mastery
- Provide counseling and support services for at-risk students along with self-paced credit recovery coursework
- Keep regular classroom teachers well informed about the program
- Ensure continuity between regular course expectations and computer-assisted coursework

Supplemental Computer-Assisted Instruction

- **Some students believe computer-assisted instruction improved learning through clear directions, examples, and help with understanding the basics.**
- **Limited access to supplemental instruction in computer labs and uneven program implementation diminishes the potential impact on student achievement.**

One district invested in two *CompassLearning* labs (English and algebra) to provide supplemental individualized instruction for at-risk students. Although many students spent up to 45 minutes per week working on computer-assisted lessons in the labs, the impact on student achievement was uncertain. Teachers were typically positive about the software, and some students noted learning advantages. Still, uneven teacher commitment to program implementation and students' limited amount of time in labs to complete programs with extensive objectives diminished the prospects for a significant impact on achievement.

In lieu of supplemental instruction in computer labs, high schools should consider distributing computers and software into classrooms to promote stronger connections between class and computer-based instruction. This would support individualized assistance through a combination of computer-based and small-group instruction, as well as diagnostic and prescriptive instruction. For example, when one district used NGSI funds for computers and courseware in science classrooms, students reportedly benefited from online tutorials, learning from virtual experiments, remediating failed benchmark objectives, and preventing course failure.

Extended-Day Programs

- **A few districts funded extended-day programs with tutorials or credit recovery opportunities for ninth graders.**
- **Students who took advantage of extended-day tutorials apparently benefited, but student participation was a major obstacle.**
- **Most students at risk are unlikely to attend extended-day tutorials voluntarily.**

Virtually all high schools provide extended-day programs of some kind, but five districts used NGSI funds for programs primarily focused on after-school tutorials. Districts configured their extended-day programs in varied ways: programs prepared students to recover failed coursework through credit by examination, teachers provided voluntary tutorials after school, or tutorials were available in labs. As a whole, both educators and students generally agreed that students who took advantage of extended-day tutorials benefited through recovered credits, promotion, and staying with their peers. Students typically appreciated the one-on-one attention from teachers.

Two districts had greater success in attracting students. In one instance, by offering extended learning time to complete computer-assisted work in algebra labs, and in another case, enlisting parental support for mandatory attendance. Overall, when student attendance was voluntary in extended-day programs, poor attendance was the norm. Barriers to participation included sparse access to transportation, poor program organization, and students who failed to see benefits. Ongoing problems with after-school programs led in some cases to discontinuation after funding ended.

Educators noted similar problems with non-NGSI funded after-school programs. Although regarded as helpful, most at-risk students did not attend tutorials unless required to do so. Examples of successful extended-day programs (either NGSI-funded or non-funded) were rare. Better participation, however, was associated with programs that were well organized and scheduled, obtained parent consent and support, used alternative instructional approaches (e.g., computer-assisted learning), and provided transportation.

Extended-Year Programs (Summer School)

- **Nearly all districts used NGSI funds to provide credit recovery opportunities for ninth graders through summer programs.**
- **Summer programs varied by duration, daily schedule, earnable credits, course delivery method, and core-subject availability.**
- **Summer programs reportedly allowed some students to recover credits, avoid retention, and remain with their peers in tenth grade.**
- **Districts face challenges getting ninth graders to attend summer school, ensuring regular attendance, setting high expectations for student work and behavior, and helping students prepare for subsequent coursework.**

Almost all grants studied used NGSI funds to implement summer schools or extended-year credit recovery programs for ninth graders (first-time, repeat, or both). Many districts combined local and grant resources to support programs. Districts often enhanced their summer programs by adding NGSI-funded instructional resources, such as self-paced courseware. Nearly all educators cited student credit recovery and reduced retention as summer school advantages. They also thought that keeping at-risk students on-grade level with their peers helped them stay in school. Smaller classes, individualized attention in summer school, and interactive, interesting, and engaging lessons aided in student success.

The voluntary nature of summer programs, however, narrows the population of students who attend and benefit. Educators point to attendance and discipline policies that eliminate disruptive or unmotivated students, but efforts to create a more positive learning environment also mean that many at-risk students who are unmotivated or have behavioral problems fail to receive much-needed academic support. Educators also are challenged to ensure that students who accrue credits in summer school actually acquire the knowledge and skills necessary to succeed in later coursework.

Similar to summer programs for newly promoted ninth graders, evidence from this study is insufficient to show how well summer schools work. However, a Southern Regional Education Board study challenges states that are serious about reducing student retention through summer school to establish clear standards for quality, program length, and scheduling of classes, and to evaluate rigorously both teaching strategies and student achievement (Denton, 2002).

Whole-School Improvement

Districts seldom used NGSI grants as an opportunity to overhaul their high schools' approach to serving students at risk. However, in light of growing consensus on the need to help students cope in large, impersonal high schools, a few undertook organizational restructuring to modify instruction and services for ninth graders (by creating a *school-within-a-school*). Similarly, only a limited number of districts invested in core-subject course improvement or used teacher professional development to enhance classroom practice.

School-Within-a-School

- **In two districts, *schools-within-a school* provided a means to create smaller and more supportive environments in high schools.**
- **Ninth-grade teams reportedly strengthened student and teacher support, improved parent communication, and increased focus on student progress.**
- **Some educators believe ninth graders are carrying forward organizational habits and responsible behaviors developed in the school-within-a-school.**

Some districts established schools-within-a-school (ninth-grade teams within large high schools) to improve academic achievement among students in at-risk situations. In one very large district, eight high schools created horizontal ninth-grade teams, but a new superintendent replaced them in the second grant year with vertical teams connecting groups of teachers and students in grades 9-12. Thus, this discussion centers on another high school that redesigned its ninth-grade program and continues to implement the model today with Title I funds.

To ease students' transition to high school, first-time ninth graders occupied one area of the school for most core-subject classes. Teaching teams, including an English, math, science, and social studies teacher, used a shared conference period to discuss student needs and parent communication. Team members, including an assistant principal and counselor, contacted parents of failing students to get support for academic improvement. Ongoing professional development also helped teachers implement teaming, understand the unique need of students in at-risk situations, and acquire content-specific instructional strategies.

Educators said teaming kept the focus on student success and accountability, and housing students in one area increased student visibility. Educators reported a dramatic change in students attending class, coming to class prepared, and attending tutorials. The high school also made strides in reducing the retention rate (from 17 to 10.5 percent) and improving academics (e.g., Algebra I End-of-Course passing rates improved from 9 to 33 percent). Information in Box 5.2 summarizes important practices when creating a school-within-a-school.

Box 5.2. Best Practice: School-Within-a-School

- Relocate ninth-grade classes to one area
- Provide professional development and ongoing support for teachers
- Focus professional development on content-specific instructional strategies
- Provide two conference periods: one for personal planning and one for teaming
- Include an assistant principal and counselor as team members
- Use planning meetings to discuss student progress and needs
- Communicate with parents regarding student progress and gain support
- Recognize student accomplishments

Core-Subject Course Enhancement

➢ **Although core-subject course enhancement occurred infrequently through NGSI grants, educators believe initiatives improved instruction and learning.**

Grants focused on enhancing core-subject area instruction in regular classes were rare. Two districts used computer-assisted instruction to enhance Algebra I coursework for ninth graders. Ninth graders received algebra instruction via self-paced, computer-assisted instruction in *I CAN Learn* labs in one district. One high school in another district implemented *Cognitive Tutor*, with ninth graders working on cooperative problem-solving activities in classrooms and completing other lessons in a lab setting. Although researchers do not endorse any particular computer-assisted program, the steps taken to improve Algebra I instruction in one high school (as detailed in Box 5.3) are worth mentioning.

Box 5.3. Best Practice: Enhancing Algebra Coursework

- Adopt a program for all algebra classes (e.g., *Cognitive Tutor* with text-based cooperative problem solving activities and computer-assisted instruction)
- Assign a master teacher with release time to provide oversight and mentoring
- Provide professional development for teachers on the program
- Align the program with district curriculum and ensure alignment across all classes
- Assign all math teachers to at least one section of Algebra I
- Increase class time for algebra
- Hold weekly teacher sessions focused on instructional practices
- Have a master teacher model instructional strategies
- Conduct classroom observations to monitor instructional practices
- Remove ineffective teachers from algebra classes

Professional Development

➢ **Professional development was used in only a few districts as a means to improve teaching and learning in core-subject area classrooms.**

Many districts used NGSI funds to provide brief training sessions or workshops for teachers, especially on the uses of particular software programs, but few districts made intensive or sustained professional development for teachers a priority. Districts that attempted to improve learning in core-subject courses usually invested in classroom resources and training for teachers. In particular, teacher development was a critical component supporting the successful implementation of integrated curriculum classes, the school-within-a school concept, and computer-assisted algebra coursework. Findings reported in a subsequent section on the educational environment suggest a need for greater grant investments in teacher professional development.

What was the effect of grant resources on targeted students?

- **Although research design and confounding factors made causal inferences about NGSI effects impossible, data trends across the grant period reveal some increases in student attendance, decreases in retention rates, and improved algebra performance.**
- **Despite improvements, student attendance rates are generally less than 95% (NCLB test-participation standard), nearly one-fifth of ninth graders are not promoted, and fewer than half of ninth graders typically passed end-of-course algebra exams.**

Table 5.1 reports attendance, retention, and Algebra I End-of-Course examination data for NGSI ninth graders by their school district and visited high school. In addition to data for 2001-02, two-year gains are reported (1999-00 to 2001-02). To better understand data, district NGSI gain scores are compared to state averages. Specifically, *district retention decreases* that exceeded the state two-year decrease are noted in bold, and *district Algebra I End-of-Course examination gains* that exceeded the state gain are also noted in bold. As a whole, the majority of NGSI districts and high schools visited had increases in student attendance. In addition, 8 of 12 districts had retention rate decreases that exceeded the state average decreases (-0.8) and 5 of 8 districts had 2002 retention rates below the state average (16.9 percent).

Algebra I End-of-Course exams did not compare as favorably with the state average gain. Of 12 comparisons, 6 NGSI districts had larger gains than the state (+13.9 percentage points). Three participating districts—Amarillo, Galena Park, and Aldine—exceeded state benchmarks on both retention and algebra indicators. In general, student performance within individual high schools varied across districts with multiple campuses.

Based on these data, it is impossible to conclude that NGSI was a success or a failure. In particular, comparisons with state averages are between dissimilar groups. Systematic differences almost certainly exist between NGSI students and state comparison groups. NGSI students were selected for program participation based on their academic needs. Students in the state comparison group were not. Even comparisons between visited campuses and district NGSI averages are suspect. Systematic differences may exist between NGSI students from campus to campus within a district. Thus, any observed changes may be due to the NGSI program (or the program at a specific campus), or the changes may be due to preexisting academic and motivational differences between the comparison groups and NGSI students. Thus, systematic differences make it difficult to prove whether NGSI was effective or not.

Table 5.1. NGSI Outcome Variables for Ninth Graders

District/Recipient	Attendance Rate 2001-02	Change 1999-00 to 2001-02	Retention Rate 2001-02	Change 1999-00 to 2001-02[a]	Algebra EOC 2001-02	Change 1999-00 to 2001-02[b]
Crockett High School	94.2	+0.1	8.6	**-11.3**	16.8	-8.2
Los Fresnos High School	94.3	+2.3	18.8	+0.8	38.9	-2.6
Marshall High School	95.8	+2.3	15.8	**-7.0**	28.1	+9.0
San-Felipe-Del Rio CISD	93.7	-1.5	9.9	**-2.0**	31.5	+2.5
Freshman School	95.0	+4.5	8.8	-1.0	29.7	+1.1
High School	95.2	+15.8	33.3	-2.6	4.6	-0.5
Amarillo ISD	91.8	+2.0	12.8	**-2.2**	58.0	**+23.9**
Caprock High School	91.0	+1.9	10.5	-6.5	33.1	+24.5
Beaumont ISD	91.0	+0.1	26.4	**-2.9**	41.8	+4.8
Ozen High School	92.8	+3.1	20.3	-5.0	10.0	-13.3
Galena Park ISD	93.5	-0.1	12.8	**-3.4**	57.8	**+27.0**
North Shore High School	93.8	+1.6	14.0	+0.7	48.2	+22.8
Aldine ISD	93.8	+0.5	15.0	**-6.6**	74.2	**+17.0**
Nimiz Ninth Grade	95.0	+3.3	11.7	-6.8	86.1	+13.0
Nimiz High School	90.0	+4.7	35.8	+10.1	37.5	+7.5
Fort Worth ISD	89.7	-0.2	26.8	+0.8	44.5	**+21.1**
Carter Riverside	91.5	+1.5	17.5	-12.9	28.4	+16.1
Tremble Technical	93.6	+5.6	5.7	-2.8	50.9	+42.9
San Antonio ISD	91.5	+0.1	17.6	**-3.5**	46.4	+12.6
Lanier High School	91.2	+3.3	21.1	-3.9	38.2	+24.8
Jefferson High School	92.1	+2.5	14.5	-3.7	51.2	+19.3
Ysleta ISD	93.9	0.0	16.5	0.0	57.1	**+15.2**
Del Valle High School	94.8	+1.1	16.9	+2.9	73.6	+26.3
Socorro ISD	94.8	+1.0	20.8	+3.2	46.3	**+17.8**
Socorro High School	94.7	-0.1	16.9	-9.8	40.3	+17.1
State Average	--	--	16.9	-0.8	57.8	+13.9

Note. State attendance data for ninth graders are unavailable. Bold indicates district change is greater than state average. District and state Algebra I EOC exam averages includes all students taking the exam, primarily 8th and 9th graders.

How does the high school context and educational environment support students who are at risk?

Each grant program operates within the broader campus and school district as a whole—therefore, to better understand student performance, researchers examined not only the NGSI program but also the school context experienced by ninth graders at risk of failure. Areas of interest arose from a review of recent research and publications offering recommendations for improvements in the nation's high schools. Topics relating more broadly to the high school context included standards and expectations, structure and organization, opportunities for extra academic assistance, and guidance and counseling services. Researchers also gathered information on the high school environment and the nature of teaching and learning.

Standards and Expectations

- **In nearly all high schools visited, the Recommended High School Program is currently the default curriculum.**
- **Many districts have established more rigorous promotion standards to ensure that ninth graders are prepared for the Texas Assessment of Knowledge and Skills (TAKS).**

Since the 77th Texas Legislature made the Recommended High School Program the default curriculum for the senior class of 2008, researchers gathered information on progress toward the adoption of higher standards. Texas high schools undoubtedly are endorsing more rigorous academic standards. Ninth graders in 11 of 12 districts visited initially are enrolled in the Recommended Program, and the Minimum Plan only is considered as a last option to facilitate graduation. The advent of statewide testing in ninth grade also has led high schools to toughen student promotion standards. Many high schools now require students to complete six credits rather than five to advance to tenth grade, and some require students to complete core-subject area courses as well.

Even though higher academic standards provide a basis for high school improvement, unintended consequences exist. In particular, when at-risk students fail and must repeat courses to accrue needed credits, their educational options begin to narrow. Both educators and students report that some students must cut back on electives or extracurricular activities such as sports or fine arts to retake classes or dedicate extended time to coursework. Thus, higher standards can have detrimental effects that may further disengage students from school and learning. The present challenge for high schools is to help ninth graders succeed in core-subject courses the first time enrolled.

Structure and Organization

- **Although most high schools retain the traditional grades 9-12 structure, some have created smaller, more supportive units within the high school.**
- **Scheduling approaches vary widely, but high schools appear to be shifting from block schedules (90-minute periods) to traditional, single-period schedules (50-minute periods).**
- **A few high schools modified their schedules to give extended learning time to ninth graders considered at-risk of academic failure, primarily in algebra and English.**

Many proponents of high school reform believe the manner in which high schools organize and use time affects the quality of teaching and learning. Recent research has focused on the benefits of creating smaller schools or smaller units within large comprehensive high schools (Harvey & Housman, 2004; Vander Ark, 2004).

Researchers for this study found a few high schools experimenting with organizational structures as a way to bolster student achievement. However, the majority of Texas high schools visited still have traditional grades 9-12 structures and large student enrollments. Restructuring in these schools more often involves changed course schedules, time allocations, or staffing arrangements rather than new school configurations. For example, many high schools are abandoning block scheduling and returning to the traditional, single-period daily schedule, with students attending 7 or 8 classes each day throughout the school year.

Changes appear to be driven by a belief that teachers need daily contact with at-risk students to prepare them to succeed on the TAKS. Some also think that block schedules with 90-minute periods have not produced the active, meaningful learning experiences or student success originally envisioned. Others feel that struggling students cannot maintain their focus in 90-minute periods or cope with the alternate-day schedules.

A few exceptions exist to the traditional high school grade configuration. Two of 12 districts studied created *ninth-grade schools* with students housed in a separate building near an affiliated senior high school. This configuration reportedly benefits ninth graders by easing crowding (about 800-900 students per school), reducing discipline problems, and creating an environment that allows maximum attention to students' academic and emotional needs. Large high schools in other districts were re-designed as *schools-within-a-school* to provide a more supportive environment within schools typically enrolling about 2,000 students. One district recently implemented vertical teams (teams of grades 9-12 students, teachers, and support staff); however, not enough meeting time for teachers affected the envisioned collaboration. High schools in another district had greater success implementing horizontal teams (teams of ninth-grade teachers, students, and staff).

Overall, educators who successfully reconfigured large high schools into smaller, supportive units cited benefits such as eased student transitions to high school, strengthened communication among teachers, individualized attention for students, and a greater focus on student needs. Despite positive perceptions, researchers warn that the evidenced benefits of small schools, such as higher achievement, may not necessarily be generalized to schools-within-a-school (Howley, 2002). In particular, one may not expect to see the same effects unless the school-within-a school concept is implemented exactly as designed. In summarizing the current status of small schools, Harvey and Housman (2004) report that, "While scientific evidence supporting the efficacy of small schools is not yet available, many practitioners find that interacting on a smaller scale makes it possible to reach and support all students in personalized ways".

Teaming and Collaboration

- **Teachers believe high schools have clear goals and priorities, much cooperative effort, and a strong focus on student achievement, but they are less positive about their involvement in decision making and the enforcement of rules for student behavior.**
- **In many high schools where departments are organized by subject area, teachers report few interdisciplinary meetings or meetings with peers for instructional planning.**
- **Smaller high school units (school-within-a-school, ninth-grade center) seemed to promote better teacher collaboration.**

Multiple sources of evidence suggest that high school teachers have limited opportunities for interdisciplinary collaboration due to complex course schedules, a lack of shared conference periods, and the school organization into subject-area departments. Discussions in formal meetings, according to teachers, frequently center on student test scores, interim exams, TAKS content, and test preparation.

Many high school teachers rely on informal interactions with other teachers before or after school, during lunch, or between classes to discuss student problems or instructional issues. Teachers also express concerns about their involvement in decision-making in the high school. Teachers' limited role in developing NGSI grant proposals certainly substantiates their view. However, high school teachers working in a ninth-grade school or as part of a school-within-a school team with dedicated planning time report more discussions about student problems and needs and greater opportunities for collaboration and professional development.

Extra Academic Assistance

- **All sites visited offer extra academic assistance to students considered at risk, but some take a more structured approach.**
- **Although educators and student participants believe tutorials are helpful, most at-risk students do not attend unless they are required.**
- **Barriers to participation in tutorials include transportation issues, lack of motivation, scheduling difficulties, after-school conflicts, and perceived benefits.**

While the NGSI offered one means of extra academic assistance for struggling students, many districts and campuses implemented other programs as well. All high schools offer tutorials for at-risk students, with tutoring typically scheduled before, during, or after school or on Saturdays. Academic assistance frequently helps students prepare for the state assessment (TAKS), complete assignments, or make-up assignments or excessive absences. In about half of the districts visited, tutorials are arranged informally between students and teachers.

Other districts take a more structured approach and require students who have failing grades or who fail benchmark assessments to attend. In general, although both educators and students believe tutorials are helpful, student participation is a major problem in all districts. Many at-risk ninth graders said they seldom or never attend tutorials unless they are required. Of those who do participate, most indicated that they do not attend on a regular basis.

The challenges in providing tutorials for at-risk students outside of regular school hours are similar to those cited previously for extended-day and summer programs. Students who have the greatest need are least likely to participate. Although a number of legitimate factors impede participation (e.g., transportation, jobs, family responsibilities), many educators attribute poor attendance to students' *lack of motivation*. One teacher voiced a commonly held opinion: students who attend are "the ones that want to learn."

Students' perspectives offer insight into their motives. Some ninth graders do not view tutorials as opportunities for real academic improvement, feeling that brief tutorials do not help them understand material that was incomprehensible in class. Instead, students more often viewed tutorials as a way to make-up failed assignments or remove zero grades on assignments due to absences. Further, the inability of students to see long-term consequences usually meant that they waited until after failing a grading period or course to seek assistance. Overall evidence suggests that, although helpful, extra academic assistance outside of regular school hours will not be enough to help many at-risk students meet rigorous academic standards. Learning opportunities during the regular school day must be strengthened as well.

Guidance and Counseling

- **Guidance and counseling services for students in at-risk situations are limited in many high schools by counselor-to-student ratios that exceed recommended standards.**
- **Contact between at-risk ninth graders' and counselors is limited primarily to the selection of courses or programs; older students are more likely to receive information about jobs and careers, or how to improve academic work.**
- **Ninth graders' interactions with counselors on high school plans occur most often in groups rather than individually.**
- **Most students in at-risk situations report limited contact with counselors regarding higher education and career options, but access varies across districts and schools.**
- **Students in at-risk situations generally have lofty educational aspirations that tend to diminish as students grow older.**

The important link between student motivation to learn and school achievement is well established. Substantial evidence also shows that the school context can affect students' beliefs about their competence and control, values and goals, and consequently, academic engagement (Institute of Medicine & National Research Council, 2004). In the school setting, access to guidance and counseling can help at-risk students establish personal goals and see how their current efforts in school yield future educational and career benefits. In light of the importance of educational goal setting, the 78th Texas Legislature mandated the development of personal graduation plans for middle and high school students in at-risk situations.

Texas high schools and counselors clearly are trying to provide services for at-risk students. Even so, the counselor-to-student ratios in high schools visited (ranging between 1:243 and 1:535) leave limited time for personal attention. More often, counselor support focused on helping ninth graders select courses or high school programs. Planning, according to many, usually occurred in group sessions during spring visits to middle schools, with counselors helping students pre-register for high school, learn about course requirements, identify career goals, and complete a coursework plan. When asked specifically about their high school plan, however, most ninth graders answered vaguely.

Information on jobs, careers, and higher education is conveyed through various means, such as counselors, career counselors, *Career Connections* courses, or the GEAR UP program. Despite efforts, most ninth graders said they had not discussed careers or educational opportunities with their counselor. Still, many students seemed interested and excited about the possibility of post-secondary education and careers, almost all aspired to attend college or a vocational school, and many expected to graduate.

Access to counseling services for at-risk students increases with age. Older students, who are more likely to fail and repeat ninth-grade courses, were more likely to report contact with counselors to get information on jobs or careers, for academic improvement, and to discuss things studied in class. Unfortunately, by the time counseling and guidance becomes more readily available, students' lack of academic success appears to have diminished their hopes to participate and succeed in higher education.

All of this speaks to the need for early intervention to help struggling students see possibilities for the future *before* they fail. Certainly, high school counselors cannot shoulder the full responsibility for guiding the many high school students who need help understanding their high school plan and how success in school relates to later opportunities in life. Some believe a promising strategy is to diffuse guidance and counseling responsibilities among school staff, including teachers. Trained professionals such as counselors could serve as resources for staff and provide direct services for students and families with serious problems. Through this model, every student and family would have a school staff member as an adult advocate (National Research Council & National Institute of Medicine, 2004).

Teachers and Teaching

Qualifications and Assignments

- **Ninth-grade teachers are fairly experienced, but a substantial proportion comes to teaching through non-traditional certification.**

Survey results for ninth-grade teachers in the high schools visited revealed that 40 percent had joined the profession through alternative or post-bachelor certification programs. Although recruiting teachers through alternative means can be an effective way to fill critical vacancies, it also increases the need for a strong professional development program to build pedagogical knowledge among teachers who did not attend a standard teacher-preparation program.

In several districts, educators raised concerns about whether the assignment of new and inexperienced teachers to ninth-grade courses undermines instructional quality and consistency—thus, compounding students' learning problems. The inherent difficulties of teaching ninth graders (like large classes and immature students) appear to be contributing factors to class assignments. Several administrators said teachers view assignments to teach upper classmen and advanced classes as rewards for seniority. To address this issue, a few high schools report proactive efforts to assign more accomplished teachers for ninth graders. For example, some administrators assigned all language arts or mathematics teachers to at least one section of English I or Algebra I.

Professional Development

- **High school teachers have access to professional development on a range of topics, with training delivered more often through workshops or a series of training sessions.**

Although professional development was not a strong focus for NGSI grants, teachers reportedly participated in many workshops and training sessions relevant to ninth graders' needs. Both administrators and teachers frequently noted that high school teachers are encouraged to use active learning strategies, differentiated instruction, and intellectually challenging activities. Although professional development delivery varied, teachers most often said they attended workshops or training sessions throughout the year. Educators seldom reported follow up to monitor implementation of instructional strategies.

Perceptions of Effective Instruction

- **High school teachers' beliefs about teaching practices vary widely, with some advocating learner-centered approaches and others favoring traditional methods.**
- **Students who are at risk say *good teachers* provide clear explanations, encourage active and meaningful learning, make class interesting, establish personal relationships, use small-group activities, and offer individual help.**

As a whole, teachers and students express similar views on certain instructional practices that effectively promote learning (see Box 5.4). Both groups advocate active and meaningful learning experiences, varied (or interesting) instructional approaches, and positive interpersonal relationships. Interestingly, many of these qualities are consistent with research on engaging adolescent learners (e.g., Lambert & McCombs, 2000).

Still, important differences also emerge. Many at-risk student say they learn and remember more from teachers who make the subject matter understandable by explaining step-by-step, simplifying, using different terminology, and persisting until students understand. Students also are more likely than teachers to cite benefits gained by working with their peers in small groups and receiving individual assistance from the teacher.

Box 5.4. Effective Instructional Practices

Teacher Perceptions	Student Perceptions
• Use hands-on activities	• Provide clear explanations
• Provide relevant, real-life experiences	• Encourage active and meaningful learning
• Use varied instructional approaches	• Make class interesting
• Hold students accountable	• Establish personal relationships
• Provide constant reinforcement	• Use small-group activities
• Build personal relationships	• Offer individual assistance

Note. Order reflects most frequently cited teacher and student perceptions from high to low.
Source: Focus groups involving 124 teachers and 202 students.

Although high school teachers agree on some instructional practices, they differ on others. A number of teachers advocate learner-centered approaches, but others believe traditional, teacher-directed instruction works best. In particular, some teachers felt that activities such as small-group instruction are not successful with at-risk students who are largely unmotivated learners. In some cases, teachers question whether active learning strategies will prepare students who lack the basic skills to do well on the TAKS. Several teachers believe that holding students more accountable for attendance, homework, grades, and discipline is the key to improving learning outcomes.

The most noteworthy aspect of teachers' views on instructional practices is the difference between *expressed opinions* (regarding the need for hands-on activities, relevant experiences, and varied instructional approaches) and *observed practices* (mainly teacher-centered classrooms).

Teachers' Classroom Practices

- **High school classrooms are organized most often for whole-class instruction followed by students working independently. Students seldom work collaboratively with peers.**
- **Teachers spend the greatest proportion of class time providing whole-class instruction and monitoring students as they work independently on assignments.**
- **Teachers seldom ask mentally challenging questions or questions that help at-risk students see the relevance of subject matter to their lives.**
- **Since teachers have little access to technology in classrooms, it is seldom used to support instruction and learning.**

Researchers conducted observations in 81 core subject-area classrooms in high schools. Interestingly, comparisons between observational findings for this study and results from a landmark study conducted by Goodlad in the 1980s (*A Place Called School*, 1984) show that not much has changed in high schools. High school teachers tend to teach one way—primarily whole-class lectures.

Most teachers in this study organized their class for whole-class instruction, with student desks commonly arranged in rows facing the teacher. Following teacher-led lectures, explanations, or demonstrations, teachers usually walked around the room monitoring students as they worked independently. Teachers sometimes stopped briefly to answer a question or assist a student having difficulty with an assignment, but they rarely provided sustained individualized instruction.

During whole-group discussions, teachers mainly relied on brief question and answer exchanges to establish students' grasp of factual information. Questions posed by teachers seldom required students to explain concepts in their own words or to justify their ideas verbally. Rarely were questions used to help students connect concepts being studied in the lesson to real world applications or to other subject areas. Only 1 in 10 teachers used technology for lessons; those who did made PowerPoint presentations or used visuals to support whole-class lessons.

Instructional practices observed in high schools are inconsistent with current research on how students learn or with known methods for engaging students. Research shows that teachers must build on their students' preexisting knowledge, provide opportunities for them to become *good thinkers* (e.g., notice patterns, generate arguments and explanations, and draw analogies), and help students organize information to facilitate retrieval and application in other contexts. Teachers also must help students examine their own thinking and monitor their own understanding (i.e., teach *metacognition*) (Bransford, Brown, & Cocking, 2003).

Although no one universally accepted instructional method exists, learner-centered environments create opportunities for active, meaningful, relevant, and intellectually challenging experiences that promote student engagement and achievement. (National Research Council & Institute of Medicine, 2004).

Students and Learning

Opportunities to Learn

- **Students at risk spend the greatest part of their time listening to teacher presentations or independently completing short-answer activities or worksheets.**
- **Students rarely use technology in classrooms to support content-area learning.**

The problem with teacher-centered classrooms is the effect on students. Students in the core-subject area classrooms observed spent nearly half of their time as listeners rather than active learners. Following teacher-led presentations, students usually worked alone to complete a worksheet or a short-answer exercise. Students seldom worked collaboratively with other students to share their thinking or discuss ideas. Further, students rarely used technology to support learning because computers in high school are usually located in labs rather than classrooms.

One-on-one teacher assistance typically was brief and usually in response to difficulty with an assignment. Thus, teachers had little time to understand student thinking processes or the knowledge and skills they brought to the lesson. In general, teachers expect little of at-risk students intellectually. Students seldom engaged in challenging activities promoting the kinds of thinking needed to meet state content standards (e.g., analysis, synthesis, problem solving, application, elaborative communication) or to prepare them for more advanced coursework.

Overall, observed practices and learning opportunities in high school classrooms raise questions about teachers' understanding of students as learners, especially research-based conceptions. Observed practices also are inconsistent with learner-centered principles as advocated for Texas schools, assessed through the Professional Development and Appraisal System (PDAS), and shown to be effective for learners through a vast body of research (e.g., Bransford, Brown, & Cocking, 2000; Lambert & McCombs, 2000). Professional development for high school teachers should focus on building an understanding of students as learners, as well as the implementation of content-specific instructional strategies that are linked to student achievement.

Perceptions of Students as Learners

- **Educators believe ninth graders' academic performance is affected by inadequate learning strategies and skills, immaturity and irresponsibility, lack of academic preparation, lack of motivation, and poor attendance.**

Teachers' perceptions of at-risk students as learners may partially explain their instructional approaches. Many teachers believe ninth graders come to high school with insufficient content knowledge and inadequate learning strategies and skills to succeed academically. Thus, many teachers who believe students are disorganized, unmotivated, and lack self-discipline, think students will not learn unless the teacher maintains control of classroom activities. Disruptive students also may play a role in why some teachers do not use small-group activities. Nearly half of at-risk students indicate that disruptions by other students interfere with their learning.

Evidence from various sources points to at-risk students' disengagement from high school and learning. Poor attendance, lack of motivation, disruptive behavior, irresponsibility regarding homework and grades are all symptoms of larger problems. Findings throughout this study point to such issues as:

- Boring and repetitive instruction in core subject-area classrooms that fails to engage students intellectually;
- Limited use of technology in core-content classrooms to support engaged learning;
- Expectations to attend after-school or Saturday tutorials when in-school time is not used to the greatest advantage;
- Repeated course failure, which narrows educational choices and opportunities for enriched learning experiences; and
- Poor access to counseling and advisement to help students set goals and see how current investments in learning yield future benefits.

Although high schools cannot control all of the factors that influence engaged learning, high school educators more often attribute the poor performance of at-risk students to socioeconomic and personal deficiencies or to inadequate preparation in middle schools. In contrast, the high school context and classroom experiences are seldom mentioned as important influences on student engagement, motivation to learn, and achievement.

Transition from Middle-to-High-School

- **Differences in school size and organization, grading systems, educational philosophy, teacher characteristics, and academic expectations make the transition from middle-to-high-school difficult for ninth graders.**
- **Inadequate academic preparation, increased freedom coupled with immaturity, home-life situations, and apathy makes high school challenging for many ninth graders.**

Both educators and students offer insights into difficulties experienced by ninth graders in transitioning to high school (see Box 5.5).

Box 5.5. Ninth Graders' Challenges in Transitioning to High School

Middle-to-High School Differences	Student-Related Issues
• School size and organizational features	• Inadequate academic preparation
• Grading and credit system	• Increased freedom coupled with immaturity
• Educational philosophy	• Home life situation and poverty
• Teacher characteristics	• Apathy/lack of effort
• Academic expectations	

Note. Order reflects most frequently cited challenges from high to low.
Source: Interviews involving high school administrators and directors (n=47) and focus groups with teachers (n=124) and students (n=202).

The redesign of middle schools into smaller and more supportive learning environments (e.g., *Turning Points*, 2000) has made the passage from middle schools to large, impersonal high schools even more difficult for students. Middle schools and high schools differ in size and structure, teachers have different instructional styles and attitudes, and grading systems also are vastly different.

In general, high school administrators and teachers expect ninth graders to arrive with near-grade level content knowledge, adequate learning strategies, and the skills to work independently. Educators also expect students to listen and learn from lectures, and to take responsibility for completing homework outside of class. Students who do not meet expectations have difficulty doing well in high school. Overall, communication between middle- and high-school educators should be strengthened to resolve misunderstandings arising from the juncture of two very different educational philosophies. Organizational and instructional inconsistencies make the middle-to-high school transition difficult, especially for students in at-risk situations. Although vertical teaming has been touted as one way to achieve greater cohesion between school levels, little evidence emerged to suggest that strong lines of communication exist. Although it is up to each district to determine how to address issues that affect at-risk students, recommendations on high school reform offered by school administrators, researchers, policymakers, and the business community are worthy of consideration (e.g., Harvey & Houseman, 2004; NASSP, 2004).

What are the implications for grant awards and management?

Grant recipients generally praised TEA's facilitation of the NGSI grant process. Recommendations concerning grant management typically related to the timing of grant awards and funding. Many grantees appreciated TEA efforts to streamline the evaluation process in later grant terms. In a few instances, educators found the guidelines for allowable fund uses confusing. Findings to follow relate more specifically to overall improvement of grant development, implementation, monitoring, and sustainability.

Grant Development

- **Grant applications should put greater emphasis on identifying problems, determining the root causes, and articulating how the project will alleviate those problems.**

While most sites made use of student achievement, attendance, and retention data as outcome measures for grant development, most did not have well-developed processes for assessing school needs in a systematic way. Specifically, reporting on trends in student achievement alone does not help to identify factors that facilitate or hamper student learning. Grant developers from schools, with the assistance of districts, should consult with various stakeholders (especially teachers), examine various forms of data, and attempt to sort out root causes for difficulties. Once causes are identified, attention can be turned to addressing them through the grant. Improving teaching and learning in schools might be accomplished more effectively if schools choose from rigorously researched and well-documented reform designs that provide networks of support for implementation (Slavin & Fashola, 1998).

Grant programs should also have a clear focus, with a clearly organized explanation of how program components connect to interim and long-term outcomes. Individual NGSI award components often were implemented as discrete, disconnected activities. Schools and districts should be encouraged to think in terms of cause and effect with each component serving a unique and critical role in the overall program. This means ensuring that stakeholders understand the improvement effort, adequate initial and ongoing planning occur, and dedicated oversight for the award exists.

- **Grant applications should be informed by the thinking of various stakeholders.**

NGSI grant development primarily involved campus and district administrators. While administrative perspectives are critical, input from faculty, staff, and even parents and students can lead to a better-informed set of solutions, and to increased buy-in.

- **Grant programs for students at risk should be aligned with curricular and learning expectations in regular classrooms.**

Several NGSI schools established arguably separate or dual curricula for at-risk students. If the purpose of providing services to students in at-risk situations is to move them to a new status of "at promise," those students need access to the same curricula and high level of learning expectations that others receive. Several studies have demonstrated the harmful effects of tracking for low-performing students (Oakes, 1985; Wheelock, 1992).

In developing guidelines for grants, policymakers and agency staff should consider how allowable activities influence the theory and pedagogy behind student learning experiences. As an example, the language in the *Request for Application, Ninth Grade Success Initiative* (November, 1999) says, "Grant funds from the NGSI may be used to (a) create new programs, (b) enhance existing programs, or (c) expand existing programs" (p. 6).

While this is relatively general language, references to "programs" suggest that the solution to the educational needs of ninth graders lies in some "magical" program rather than more broad-based school improvement. For example, many districts responded to the proposal by purchasing self-paced computer-assisted programs for credit recovery. Credit recovery programs (both computer- and classroom-based) often created a separate set of learning experiences and expectations for at-risk students, tracking struggling students into classes with other low achievers.

- **Grants aimed at improving learning and academic performance of at-risk students must include substantial investments in professional development, especially for classroom teachers.**

Most of the schools studied did not focus on professional development. Without guidance and information, few educators can effectively improve their schools and student learning. In particular, school personnel need to have access to learning strategies appropriate to the intended goals of their improvement efforts (NSDC, 2001). Educators also must be able to apply knowledge about human learning and change, which only can happen with a deep content knowledge of research-based instructional strategies. For instance, it appears that high school personnel are unfamiliar with strategies to integrate technology fully into the curriculum.

Teachers also need content-specific professional development and ongoing support to improve instruction and learning in core-subject area classrooms, especially algebra. At the same time, educators must not operate under the assumption that all staff development leads to positive outcomes or that more staff development is better (Guskey, 1998). Currently, much is known about the kind of professional development that changes teacher practice, which can serve as a guide for grant development (Hawley & Valli, 1999; Wisconsin Center for Education Research, 2003).

- **Grant applicants should have access to research-based information on effective instruction and school improvement.**

In many cases, it appears that school staff members are under-prepared to plan effective school improvement. Grant developers need to access the abundant research on educational change and reform strategies. According to Moffett (2000), "We know enough to act," and "we cannot afford to ignore the research." Currently, a wealth of information is available to guide reforms that support student learning and school improvement. The state also may consider sharing evaluations of programs and improvement initiatives to help guide decisions about applicability to certain contexts.

Grant Implementation

- **Grants should require or strongly encourage the addition of dedicated program leaders.**

Schools with dedicated program management at both the district and campus level appeared to have the greatest success implementing and continuing their grants. This was especially true in larger districts. Full implementation of any grant depends on consistent leadership at the school level. Principals, who often are designated campus leaders, frequently have too many responsibilities to provide close oversight for grants. Likewise, teachers who have no release time cannot oversee grant activities adequately. When large districts receive grants involving multiple campuses, dedicated oversight is needed both at the central administrative and campus levels to ensure consistent communication. In general, districts that receive grants should use a combination of local and grant resources to ensure strong support for implementation.

- **Major program changes made during the grant should require TEA approval.**

Several schools made substantial changes to their initiatives during implementation. In some cases, entire components were dropped. While mid-course adjustments in school improvement efforts often are needed to address changes in policy or demographic context, frequent changes do not allow time for impact, and they make measurement of success impossible. In many cases, the implemented NGSI program bore little resemblance to the program described in the grant proposal. TEA should require grant awardees to go through a formal review process for program modifications.

Grant Monitoring

- **Legislators should fund external evaluations at the same time that grant programs are approved or reauthorized.**

Historically, many state-level evaluations of grant programs are conducted after programs have been implemented. Though findings are informative, this post-hoc approach precludes the use of more rigorous scientific methods for evaluations (i.e., experimental or quasi-experimental designs) that allow valid inferences on program effects. In the future, legislators should consider funding external evaluations as programs are approved or reauthorized. This way, research organizations can provide unbiased information on program effectiveness in order to guide agency and legislative decision-making on educational programs.

- **Districts and campuses receiving grants must be held accountable for TEA reporting requirements and implementation fidelity.**

Several sites failed to meet TEA reporting requirements. Without accurate and timely data, TEA and evaluators cannot stay abreast of each award school's implementation progress, and thus cannot attest to its effectiveness. Several sites also made substantial changes to their implementation plans, making comparison of outcome to input difficult, if not impossible. NGSI program changes more often reflected expediency and opinion rather than systematic decision-making about program effectiveness. With mid-course changes, it is difficult to gauge effectiveness or monitor change in outcomes.

- **Grant awardees should have access to external technical support, assistance, and formative evaluation.**

It appears that several awardees did not maintain alliances with potential external assistance providers. Assistance providers can help the school implement effective, research-based strategies and bridge the gaps among schools, districts, and the state. While expertise often is available within schools and districts, technical assistance by external providers broadens the pool of knowledge from which schools and districts can draw.

Grant Sustainability

- **Districts should have a contingency plan to address changes in grant leadership.**

Staff and administrator turnover undermined consistent grant implementation and frequently led to program changes. Further, it appears that leadership and staffing changes may have had the greatest negative impact on the implementation and continuation of NGSI programs. When major grant staffing changes occur, districts should submit a revised plan to show how grant activities will be sustained under new project leaders. In particular, site-based decisions should not be allowed to override grant obligations and agreements without prior approval from the TEA.

- **Grant awardees should create a context that increases the likelihood of program success.**

Broad-based input into grant planning and development, thorough program planning, campus administrative support, and teacher "buy in" all were associated with successful grant implementation. More widespread support for grant development and implementation will help to alleviate the void left when key project leaders leave a school or district. Each grant should create a web of support for implementation and sustainability.

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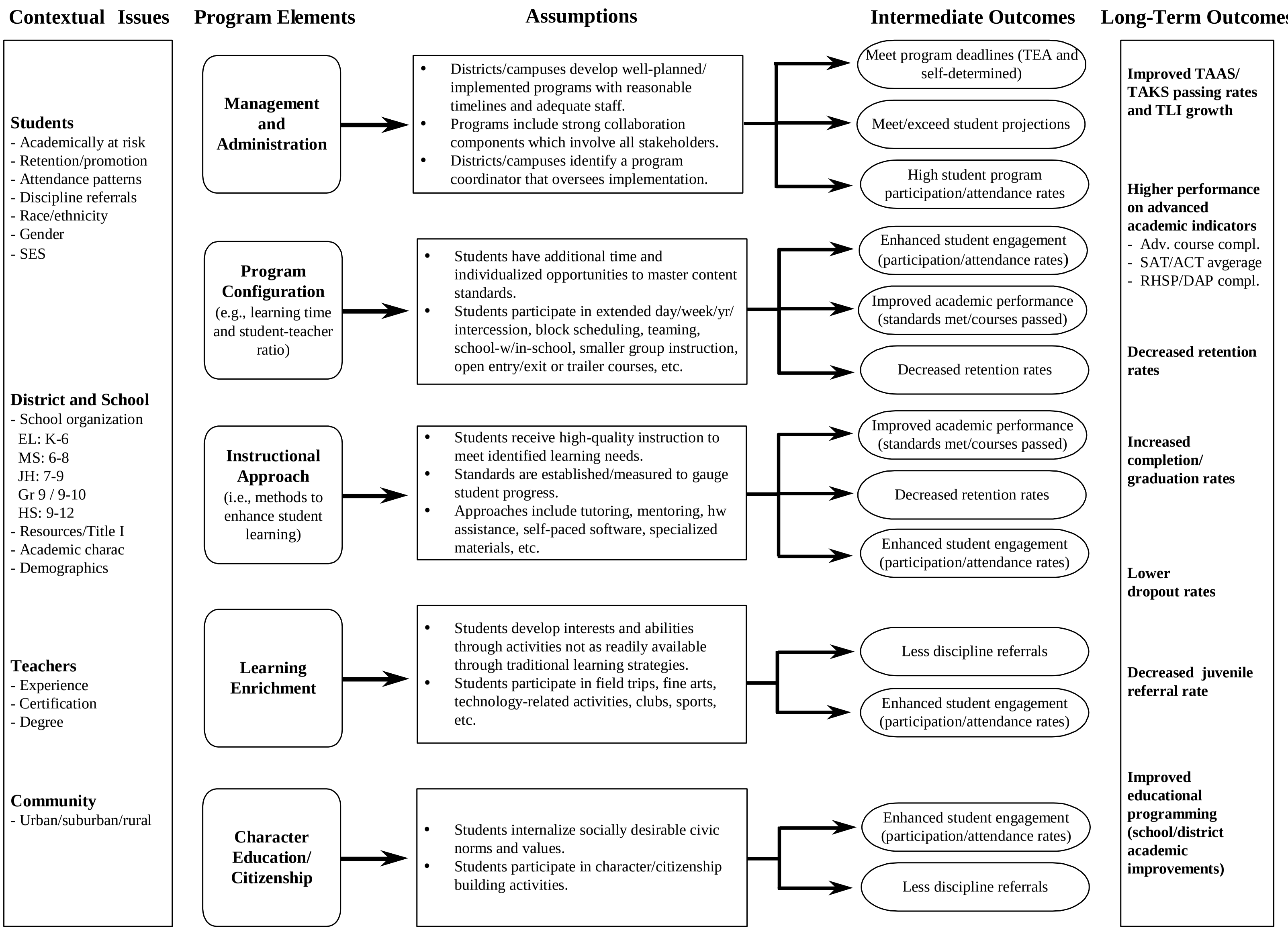
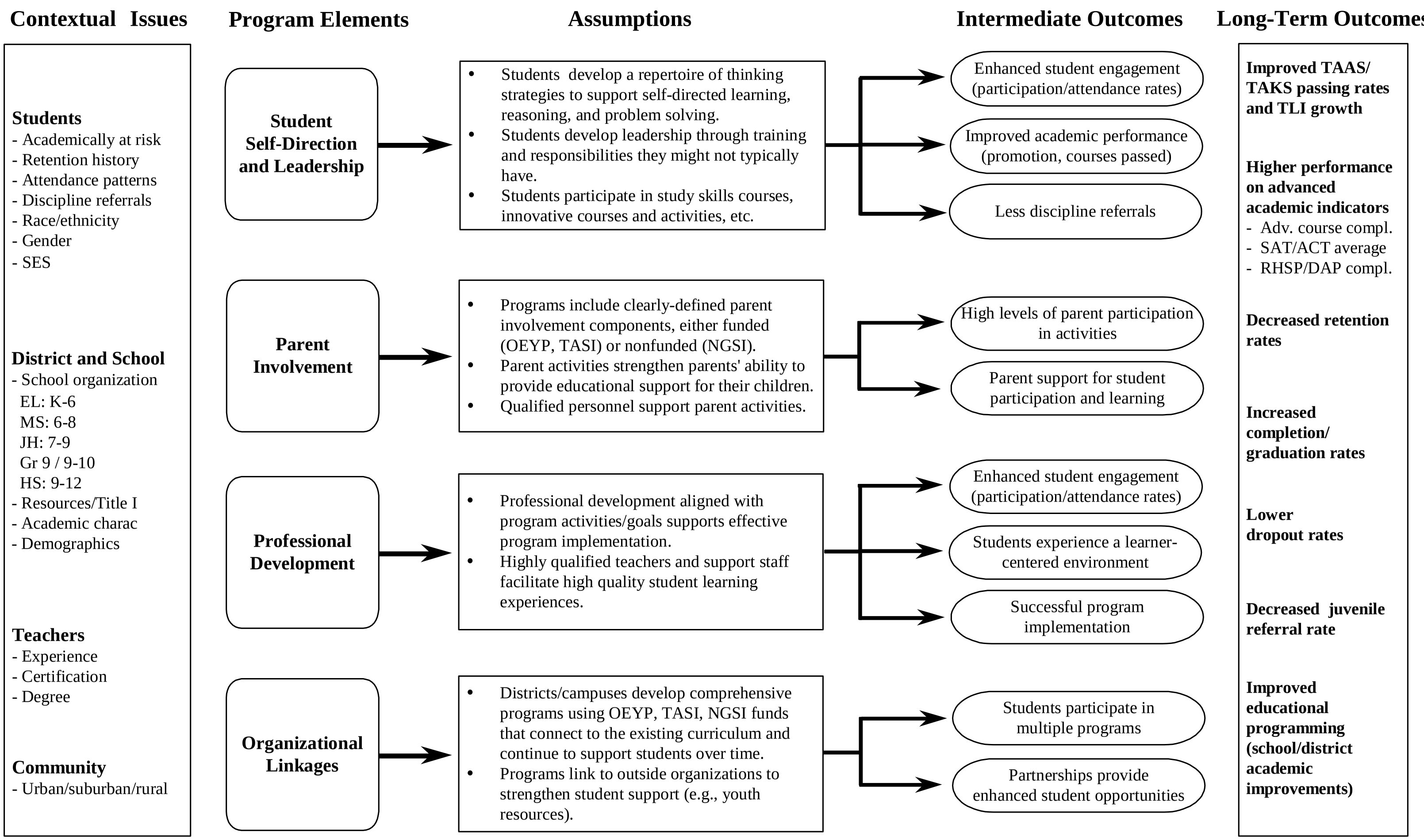
Appendix A

Theory of Change Model for the NGSI/TASI/OEYP Evaluation

Theory of Change Model
Ninth Grade Success Initiative (NGSI), Texas After School Initiative (TASI), Optional Extended Year Program (OEYP)



Theory of Change Model
Ninth Grade Success Initiative (NGSI), Texas After School Initiative (TASI), Optional Extended Year Program (OEYP)



Appendix B

Estimating TASI and NGSI Student Participation

Estimating TASI Student Participation

1) The total number of students reported by each district for each term was calculated.

2) Missing term data were replaced with a student estimate based on the following algorithm:
   a The average number of students per term reported by each district was calculated by adding all term data and dividing by the number of reported terms.
   b Missing data was replaced with a weighted district term average.
   c The weight was calculated based on information submitted by those districts reporting all seven terms (18 districts). A proportion of students by term was calculated. The average number of students per term was 5,701. The proportion of students in Term 1 to this average was .64 – indicating that fewer students were served in Term 1 compared to the average. A similar proportion was calculated for each term (T1 - .64, T2 - .97, T3 - .78, T4 – 1.06, T5 – 1.11, T6 – 1.18, T7 - 1.26.
   d Weighted district average = (district student average for all reported terms) * (term proportion). For example; if district A had an average student term count of 200 and had data missing for terms 1, 4, and 7 the missing data was computed thus:
      - term1 data = (200) (.64) = 128 students
      - term4 data = (200) (1.06) = 212 students
      - term7 data = (200) (1.26) = 252 students

3) Student records from each term were matched to create one set of students for each year, leaving only those students with a valid student ID code in the dataset. Percent of students with valid ID's ranged from 89% to 97%. These data were then merged to calculate the number of unique students served each year. To extrapolate from known unique students to number if all data were submitted and all data were accurate, the following algorithm was used:
   a The number of known unique students was adjusted based on the match rate to include students without accurate data. For example, the number of unique students in year two (15,173) was divided by the average valid data rate for the two terms (.923+.930)/2 = .926 to calculate number of unique students if all data had been used.
      - 15,173/ .926 = 16,385
   b The number of unique students if all data were accurate was then multiplied by the proportional difference between reported and reported plus missing students.
      - term extrapolated / term reported = proportion of all to reported
      - TERM 2: 17,462 / 11,142 = 1.57
      - TERM 3: 16,230 / 11,207 = 1.45
      - TERM 2 (1.57) + TERM 3 (1.45) divided by 2 = 1.51

   YEAR 2 unique students with 100% match (16,385) multiplies by proportion (1.51) = extrapolated unique students (24,742)

Estimating NGSI Student Participation

1) The total number of students reported by each district for each term was calculated.

2) Missing term data was replaced with a student estimate based on the following algorithm:
   a The average number of students per term reported by each district was calculated by adding all term data and dividing by the number of reported terms.
   b Missing data was replaced with a weighted district term average.
   c The weight was calculated based on information submitted by those districts reporting all seven terms (41 districts). A proportion of students by term was calculated. The average number of students per term was 5,313. The proportion of students in Term 1 to this average was .75 – indicating that fewer students were served in Term 1 compared to the average. A similar proportion was calculated for each term (T1 - .75, T2 - .49, T3 - 1.12, T4 – 1.24, T5 – .55, T6 – 1.19, T7 - 1.38, T8 - .60, T9 – 1.30, T10 – 1.56, T11 - .83.
   d Weighted district average = (district student average for all reported terms) * (term proportion). For example; if district A had an average student term count of 200 and had data missing for terms 1, 4, and 7 the missing data was computed thus:
      - term1 data = (200) (.75) = 150 students
      - term4 data = (200) (1.24) = 248 students
      - term7 data = (200) (1.38) = 276 students

3) Student records from each term were matched to create one set of students for each year, leaving only those students with a valid student id code in the dataset. Percent of students with valid ID's ranged from 89% to 97%. This data was then merged to calculate the number of unique students served each year. To extrapolate from known unique students to number if all data were submitted and all data was accurate the following algorithm was used:
   a The number of known unique students was adjusted based on the match rate to include students without accurate data. For example, the number of unique students in year two (78,640) was divided by the average valid data rate for the three terms (.961+ .912 + .926)/3 = .933 to calculate number of unique students if all data had been used.
      - 78,640/ .933 = 84,287
   b The number of unique students if all data were accurate was then multiplied by the proportional difference between reported and reported plus missing students.
      - term extrapolated / term reported = proportion of all to reported
      - TERM 3: 59580/ 47354 = 1.26
      - TERM 4: 70922 / 61951 = 1.14
      - TERM 5: 24144 / 18186 = 1.33
      - TERM 3 (1.26) + TERM 4 (1.14) + TERM 5 (1.33) divided by 3 = 1.24

   YEAR 2 unique students with 100% match (84,287) multiplies by proportion (1.24) = extrapolated unique students (104,516)

Appendix C

TAAS Reading and Mathematics Passing Rates by Grade

Table C.1. TAAS Reading and Mathematics Passing Rates, First-Time Students

Cohort/ Test Category		Reading			Mathematics		
		TASI Students	Non-TASI Students	Achievement Gap	TASI Students	Non-TASI Students	Achievement Gap
Cohort 1 N=11,578	Pretest	67.9%	79.5%	11.7	71.5%	82.7%	11.2
	Posttest	72.7%	82.2%	9.5	76.0%	84.5%	8.5
	Diff.			-2.2			-2.7
Cohort 2 N=18,394	Pretest	74.2%	82.9%	8.7	80.7%	87.1%	6.4
	Posttest	80.4%	85.8%	5.5	83.6%	87.6%	4.0
	Diff.			-3.2			-2.4
Cohort 3 N=26,134	Pretest	80.2%	85.5%	5.3	86.9%	90.4%	3.5
	Posttest	85.5%	88.8%	3.3	88.1%	90.4%	2.3
	Diff.			-2.0			-1.2
Cohort 4 N=32,210	Pretest[a]	--	--	--	--	--	--
	Posttest	78.3%	82.7%	4.4	60.6%	67.6%	7.0

[a]The state first administered the TAKS assessment in 2002-03; thus, pretests are unavailable for TAKS.

Table C.2. TAAS Reading and Mathematics Passing Rates, Grade 6

Cohort/ Test Category		Reading			Mathematics		
		TASI Students	Non-TASI Students	Achievement Gap	TASI Students	Non-TASI Students	Achievement Gap
Cohort 1 N=3,742	Pretest	71.8%	81.5%	9.6	77.7%	86.4%	8.7
	Posttest	72.8%	80.5%	7.7	76.1%	83.1%	7.0
	Diff.			-1.9			-1.7
Cohort 2 N=5,710	Pretest	76.6%	87.6%	11.0	84.6%	91.3%	6.7
	Posttest	72.6%	82.2%	9.6	81.5%	87.7%	6.2
	Diff.			-1.4			-0.5
Cohort 3 N=8,640	Pretest	82.8%	88.6%	5.8	91.2%	94.2%	3.0
	Posttest	79.6%	85.3%	5.7	88.4%	90.7%	2.3
	Diff.			-0.1			-0.7
Cohort 4 N=32,210	Pretest[a]	--	--	--	--	--	--
	Posttest	73.0%	80.0%	7.0	62.1%	72.1%	10.0

[a]The state first administered the TAKS assessment in 2002-03; thus, pretests are unavailable for TAKS.

Table C.3. TAAS Reading and Mathematics Passing Rates, Grade 7

Cohort/ Test Category		Reading			Mathematics		
		TASI Students	Non-TASI Students	Achievement Gap	TASI Students	Non-TASI Students	Achievement Gap
Cohort 1 N=4,458	Pretest	64.0%	79.5%	15.5	68.8%	81.6%	12.8
	Posttest	68.5%	80.3%	11.8	74.4%	84.6%	10.2
	Diff.			-3.7			-2.6
Cohort 2 N=6,942	Pretest	72.8%	80.1%	7.4	77.8%	84.1%	6.3
	Posttest	81.8%	84.9%	3.1	82.1%	85.4%	3.3
	Diff.			-4.3			-3.0
Cohort 3 N=9,228	Pretest	74.8%	81.5%	6.7	84.8%	88.6%	3.8
	Posttest	85.5%	88.5%	3.0	86.8%	89.0%	2.2
	Diff.			-3.7			-1.6
Cohort 4 N=32,210	Pretest[a]	--	--	--	--	--	--
	Posttest	79.5%	83.0%	3.5	59.9%	66.9%	7.0

[a]The state first administered the TAKS assessment in 2002-03; thus, pretests are unavailable for TAKS.

Table C.4. TAAS Reading and Mathematics Passing Rates, Grade 8

Cohort/ Test Category		Reading			Mathematics		
		TASI Students	Non-TASI Students	Achievement Gap	TASI Students	Non-TASI Students	Achievement Gap
Cohort 1 N=3,492	Pretest	67.2%	76.3%	9.2	66.8%	78.4%	11.6
	Posttest	77.4%	85.9%	8.5	77.1%	84.8%	7.7
	Diff.			-0.7			-4.0
Cohort 2 N=5,930	Pretest	72.5%	80.4%	7.9	79.3%	85.5%	8.7
	Posttest	85.5%	90.0%	4.5	87.0%	89.6%	5.5
	Diff.			-3.4			-3.2
Cohort 3 N=8,532	Pretest	82.5%	85.5%	3.0	83.6%	87.6%	4.0
	Posttest	91.3%	91.9%	0.7	88.7%	91.2%	2.4
	Diff.			-2.3			-1.6
Cohort 4 N=32,210	Pretest[a]	--	--	--	--	--	--
	Posttest	81.9%	84.2%	2.3	60.1%	64.1%	4.0

[a]The state first administered the TAKS assessment in 2002-03; thus, pretests are unavailable for TAKS.

Appendix D

Case Study Site Selection Indicators

TableD .1. Case Study Site Selection Indicators

	Small to Mid-Size Districts (Less than 10,000 Students)				Large Districts (10,000 to 24,999 Students)			Very Large Districts (25,000 Students or More)			
	Crockett	Los Fresnos	Marshall	San Felipe	Amarillo	Beaumont	Galena Park	Aldine	Fort Worth	San Antonio	Ysleta/ Socorro
ESC Region	6	1	7	15	16	5	4	4	11	20	19
Size											
Total students	1,692	7,230	6,004	10,294	29,166	20,585	19,986	55,263	80,989	57,076	76,587
Ninth graders	141	617	585	789	2,482	2,050	1,634	4,253	7,121	4,969	6,992
High schools	1	1	1	2[a]	4	3	3[a]	8[a]	13	8	10
Demographics											
Hispanic	14.2%	92.8%	14.0%	88.3%	36.8%	10.2%	64.5%	56.3%	50.2%	86.5%	90.6%
African American	56.3%	0.3%	42.6%	1.4%	10.7%	63.8%	21.4%	33.4%	29.0%	9.4%	1.9%
Economically Disadvantaged	71.7%	84.7%	57.3%	75.4%	57.4%	61.7%	66.8%	74.2%	64.3%	90.4%	76.3%
Grant Characteristics											
Total award	$175K	$525K	$350K	$395K	$875K	$525K	$393K	$5.2 mil	$5.0 mil	$6.6 mil	$7.0 mil
Total program participants	245[b]	1,241	742	1,051[b]	4,088[b]	2,150	1,925	5,840	36,108	31,116	29,839[b]
Grants received	NGSI/ OEYP	NGSI/ OEYP	All	NGSI/ OEYP	All	All	All	NGSI/ OEYP	All	All	All
Program Components											
Credit recovery	X	X	X	X	X	X	X	X	X	X	X
Summer school											
Credit recovery	X	X	X	X	X		X	X	X	X	X
Programs for 8th						X	X	X	X		
Technology (CAI)	X	X	X	X			X	X	X	X	X
Tutorials			X		X		X		X		X
After-school program	X		X		X	X	X		X		X
Reduce class size			X		X			X			X
Restructuring			X		X			X	X	X	X
Reconfiguration			X	X				X			X
Professional develop.											
CAI				X				X	X	X	X
Other			X		X				X		X

Note. CAI=Computer-Assisted Instruction (i.e., PLATO Learning, NovaNET, CompassLearning, and Cognitive Tutor). Restructuring (i.e., teaming, school-within-a-school). Reconfiguration (i.e., reconfigured coursework, such as extended learning time, innovation instructional approach).

[a]District has a separate school for ninth graders.

[b]Due to missing data, numbers under-represent total participants.