

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

October 2004

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## **Research Funded by**

Texas Education Agency

## EXECUTIVE SUMMARY

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### Texas Study of Students at Risk

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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 of 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 rates 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.