

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

October 2004

## 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. Noncompetitive 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.