

Are NCLB Tutoring Programs Making a Difference?

A Study of Supplemental Education Services in Metro-Nashville Public Schools

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The focus of this research brief is Supplemental Educational Services (SES) in Metro-Nashville Public Schools (MNPS). The purpose is to provide a summary of key findings from a comprehensive evaluation conducted collaboratively by Metro-Nashville Public Schools, Peabody College of Vanderbilt University, and the RAND Corporation.

Introduction

The SES provision of NCLB is designed to enhance the academic achievement of low-income students in low-performing Title I schools. SES are free tutoring services offered outside of normal school hours by various organizations including for-profit, non-profit, community, school district, and college/university tutoring programs.² Tutoring is delivered one-on-one, in group settings, or online, with students receiving instruction in either reading, mathematics, or both subjects. Students are eligible to enroll if they qualify for free- or reduced-lunch and attend a school that has failed to make adequate yearly progress for at least three consecutive years (i.e., School Improvement 2 status or beyond).

Although the knowledge base around SES is growing, many important outcomes have not been adequately examined, or there have been studies in a limited number of settings. MNPS therefore partnered with researchers from Peabody College of Vanderbilt University and the RAND Corporation to better understand:

- The characteristics of the SES marketplace and the state-approved providers offering SES in MNPS.
- The trends in the number of schools required to offer SES in MNPS.
- The enrollment and attendance patterns of students eligible to participate.

The purpose of this research brief is to provide a summary of the principle takeaways from the project. The research brief begins with an overview of the national SES landscape and then discusses trends and patterns about the operation of SES in MNPS. The final section reviews evidence on whether NCLB tutoring services in MNPS improves student achievement.

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² The United States Department of Education has approved a small number of districts and states to serve as SES tutors, although private companies cannot be excluded from their markets.

National Context

Enrollment of eligible students in SES continues to fall well short of expectations. Only about one in five eligible students actually enroll in SES, while a nontrivial percentage of enrollees never attend a single tutoring session after enrolling with a provider. Generally, a greater percentage of elementary school students opt-in for tutoring compared to middle and high school students. Several recent studies further document that the percentage of eligible students receiving services either remains stagnant or declines considerably over time.

National studies have found mixed results on whether SES have a positive impact on student achievement. Evaluations of SES have reported a positive program effects on mathematics and/or reading test scores, while other studies report mixed or negligible program effects. Program effects may also vary by the provider offering afterschool tutoring services, with qualitative studies finding significant communication challenges between parents, districts, and providers. Both methodological challenges and a lack of high-quality data further complicate whether students benefit from SES.

It is difficult to ascertain how the SES provision will factor into the re-authorization of NCLB. It is certain, however, that under current legislation, increasing standards toward 100 percent proficiency in the 2013-14 school year will only continue to expand the number of students eligible for SES.

MNPS Context

MNPS’ SES are overseen by Phyllis Dyer in the Department of Federal Programs. With the longest-running program in the state and one of the largest populations of students receiving services, MNPS works closely with the Tennessee Department of Education on the implementation and monitoring of SES policy. Table 1 presents descriptive statistics for SES within MNPS, beginning with the 2006-07 school year. These data reveal the number of eligible schools and students has increased, and both the absolute number and percent of MNPS students attending SES increased dramatically in the 2008-09 school year. Both in MNPS and nationally, there is a significant portion of students who sign up for SES but never attend a single tutoring session (shown in the row labeled, “No-Shows”).

Table 1. Select Summary Statistics, grades K-8			
Student Eligibility and Attendance	2006-07	2007-08	2008-09
<i># of Eligible Students</i>	4,432	4,765	5,712
<i>% of K-8 Students who were Eligible</i>	9.7%	10.3%	12.4%
<i># of Students who Received SES</i>	771	737	1,538
<i>% of Eligible Student Attended</i>	17.4%	15.5%	26.9%
<i>No-Shows</i>	348	263	625
Notes: Data limited to continuously enrolled students in grades K-8 only. High schools only enrolled 25 students in 06-07, but have increased their sign-up rate in the past two years. In 08 and 09 high schools enrolled 5-6% of their eligible population.			

The extent to which students opt in to SES varies significantly from school-to-school and by school tier. Generally, elementary school students are less eligible but enroll in disproportionately high numbers (39% of eligible), middle school students are more eligible and drive the district average (19% of eligible), and high school students are more eligible and attend at a disproportionately low level (6% of eligible). Anecdotal evidence suggests the commitment of school-level personnel and the presence of an engaged school-level SES coordinator help drive SES participation rates.

Table 2 provides statistics on fiscal and organizational details of the program. NCLB requires 20% of a district’s Title I allocation be budgeted for expenses related to school choice and SES. In MNPS, the majority of these funds support SES: in the 2008-09 school year, \$461,000 was spent on school choice while \$2.52 million was spent on SES.

Table 2. Select Financial & Provider Statistics.			
Financial and Provider Information	2006-07	2007-08	2008-09
<i># of SES Providers</i>	13	14	14
<i>Total Title I Allocation</i>	\$20,007,491	\$22,387,461	\$25,397,000
<i>Per pupil Allotment</i>	\$1,274	\$1,272	\$1,355
<i>Total SES Cost</i>	\$873,543	\$1,815,144	\$2,520,765

Research Findings

Analysis of the effects of SES on student achievement focused on continuously enrolled MNPS students in grades 3-8 from 121 elementary and middle schools between the 2002-03 and 2007-08 school year. A key problem in evaluating programs into which students voluntarily enroll is controlling for selection bias. As such, this analysis relied on a student fixed effects model to control for potential selection effect. Methodologically, the model estimates how a student who attended SES performed compared with how that same student was expected to perform without SES tutoring. In addition to the usual student- and school-level covariates such as special education status, race, and gender, the authors also accounted for the content focus (reading, math, or both) of the student’s tutoring and the number of years a student utilized SES.

In this study, the authors found significant, positive effects of SES on student test scores in mathematics. Reading results were inconsistent. This pattern of findings – significance in mathematics and positive but insignificant in reading – is common across the research landscape, as reading scores are generally more difficult to influence than math. The average SES treatment effect was .13 standard deviations in mathematics (approximately a 25% increase in year-to-year scale score gain) and .04 standard deviations in reading

(approximately a 15% increase in year-to-year scale score gain). A cumulative effect was also observed for both math and reading wherein a student receiving two or more years of tutoring showed considerable test score gains. SES did not appear to disproportionately benefit a particular racial/ethnic, or ability level sub-group. Female students and students with disabilities did disproportionately benefit from participating in SES.

Qualifications and Conclusions

This brief is qualified on two dimensions. First, this study does not address the opportunity costs of participating in and offering SES. That is, this study does not address what educational opportunities have been lost because of the increased Title I resources allocated to SES. Second, there is no way to know the extent to which a student actually received academically focused tutoring while attending SES. The district has limited capacity and no legislative prerogative to monitor SES providers. What does appear as a consistent finding in the analysis, however, is that receiving SES is associated with higher MNPS math scores, with lower quality evidence that SES positively influences reading scores.