

Evaluating the Impact of Tennessee's Achievement School District *2nd Annual Report to the Walton Family Foundation*

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INTRODUCTION

A number of states and districts have adopted bold strategies for turning around low performing schools. Some of these initiatives have been modeled after Louisiana's Recovery School District (RSD), which, in some cases, took over and directly ran failing schools or, in other cases, turned these schools over to charter management organizations (CMOs).

Inspired by Louisiana's example and the potential of Race to the Top (RTTT) funding, Tennessee passed legislation called First to the Top in January 2010, which created the Achievement School District (ASD) (Public Chapter No. 2, 2010). With this legislation in hand, the state applied for RTTT funding and, in March of that year, Tennessee was awarded \$500 million to carry out the proposed initiatives, including the ASD.

The First to the Top legislation (along with a subsequent ESEA waiver submitted in 2011) called for the State Commissioner of Education to identify the state's lowest-achieving five percent of Title I schools. These schools, known as *priority schools*, would then face one of four interventions: (1) placement in the ASD, (2) turnaround under the auspices of an LEA innovation zone (also known as iZone schools), (3) turnaround through one of the federal School Improvement Grant (SIG) plans; or (4) LEA-led school improvement planning processes (ESEA Flexibility Request, 2013, p. 55).¹ Among these possible interventions, none has been more innovative or controversial than the ASD— a new state-run school district that removes schools from their home districts and either directly manages these schools or turns the schools over to charter management organizations (CMOs).

As initially conceived by the original First to the Top legislation, once a school is selected for the ASD, the school would remain in the ASD for at least five years. The school would return to the home district conditional on the performance of both the school and the home district (ESEA Flexibility Request, 2013, p. 57). While the application did not dismiss the possibility of the state fully operating ASD schools, the emphasis was on partnering with CMOs to take over and manage the school. Policymakers hoped that not only would the takeover of these schools lead to improved student outcomes for state takeover schools, but they also hoped that threat of takeover would improve student outcomes for other low-performing schools.

¹ It should be noted that while it was not clear from the ESEA Flexibility Request, some schools do receive multiple interventions. In addition, for interventions 3 and 4, if there is not improvement in results, the schools can be subject to ASD intervention.

In terms of improving the actual schools taken over by the state and managed by the ASD or a CMO, the overarching strategy for improvement was to provide autonomy to schools to hire talented educators, especially teachers (Race to the Top Application for Initial Funding, 2010). The ultimate goal of the ASD is to move the academic performance of schools taken over from the bottom five percent of schools to the top quartile of schools in Tennessee within five years.

As an alternative strategy, priority schools also become part of innovation zones or iZones, which are district managed schools (Memphis, Nashville and Chattanooga) given greater autonomy and resources with the hopes of recruiting and retaining high quality teachers and given them the freedom to produce high quality education.

Because many states are implementing or considering similar approaches, it is important to examine the effectiveness of the ASD and to better understand the movement of teachers and students into and out of ASD schools. Our research team, over the course of three years, is addressing the following questions:

1. What are the characteristics of teachers leaving and entering schools taken over by the ASD, including measures of quality?
2. What is the nature of student in-migration and out-migration to and from ASD schools?
3. What drives employment decisions of ASD teachers?
4. What initial effect has ASD had on student achievement?

In each project year, we produce an annual report similar to this one highlighting major findings from research over the past year. This is the second of three annual reports. In the first annual report, we provided a summary of our analysis of teacher and student mobility, which addressed questions 1 and 2 above. The full set of analyses can be found in a research brief entitled “Teacher and Student Migration in and out of Tennessee’s Achievement School District” on the Tennessee Education Research Alliance (TERA) website.²

From this report, we found that the vast majority of teachers exited schools once they came under the auspices of the ASD. Therefore the ASD faced a significant need to hire new teachers in their first year of operation. Among the new hires, nearly a third were novice teachers. Of those with teaching experience in Tennessee, the ASD hired more high performing teachers, in terms of value-added scores, as compared to the teachers that left before the ASD takeover. In terms of student mobility, we found that ASD had a high rate of student mobility into their schools in the first year of takeover, but the rates declined with each subsequent year. In examining the students that move in and out, the proficiency levels of students transferring into ASD schools had little effect on the overall proficiency rates of ASD schools.

² https://peabody.vanderbilt.edu/research/tnedresearchalliance/files/ASD_Teacher_Student_Migration.pdf

In the second year of the project, we focused on questions 3 and 4 by conducting surveys of current and former teachers in ASD schools as well analyzing student achievement data. Below, we highlight the findings from these two studies.

Employment Decisions

We examine the expressed preferences for teachers who have worked in ASD schools on three broad attributes of schools that may affect their labor market decisions: malleable school processes; structural features of employment; and school characteristics. To examine teacher preferences, we used Adaptive Conjoint Analysis (ACA) survey design, which is in contrast to much of the previous research on teacher preferences that have used survey designs containing a variety of Likert scale items or qualitative methods. The ACA survey design asks respondents to choose between different attributes of a job profile such that they are required to have relative preferences. This process makes it clearer how teachers weigh different trade-offs between positions and shows which factors are more important than others. This benefit is especially important since, with traditional surveys, teachers might rate all of the attributes as similar in importance.

For the analysis, we surveyed current teachers who can be categorized into one of three groups: (1) teachers at an ASD school in the 2014-15 school year (the time at which the survey was administered), (2) teachers who had worked at an ASD school prior to the 2014-15 school year, and (3) teachers who had worked in a school that was taken over by the ASD, but moved to a different school before the takeover. The final response rate was 63.5 percent, with current ASD teachers having a higher response rate (68.8 percent) than the former ASD teachers' response rate (52.5 percent).

Overall, we found that among the malleable, structural, and school characteristics, teachers put a premium on malleable features including consistent administrative support, consistent enforcement of discipline, school safety, small class sizes, and availability of high quality PD. Generally, short-term unchangeable school characteristics such as income levels or racial composition were the least important attributes to teachers who have worked in high poverty and low achieving schools. Also, structural conditions, such as salary and, to a lesser extent, performance-based pay are important to teachers. Eligibility for tenure appears to be less important overall but is more important to experienced teachers than novice teachers. In general, we view these results as presenting an opportunity for ASD schools since the malleable features teachers value are largely within the control of principals or CMOs and the ASD. Therefore, principals, CMOs, and the ASD with can assess and address these factors to improve recruitment and retention.

Student Achievement Analysis

In the analysis, we not only examined the performance of ASD in general, but priority schools as whole, as well as iZone schools. To conduct these evaluations, we utilized a database provided by the Tennessee Department of Education and compiled by the Tennessee Education Research Alliance. The database includes student-level data, including demographic characteristics, both

TCAP and EOC test scores³, and school enrollment data from 2009-10 through 2014-15 school years.

To conduct the analysis, we use a pre-post assessment called a difference-in-differences approach in which we examine student performance in schools prior to “treatment” (i.e., priority, iZone, ASD schools) relative to student performance in these same schools after treatment and examine whether the differences in the pre- and post-treatment performance is larger or smaller than the differences in performance of students in a set of similarly low-performing schools over the same time horizon.^{4 5} For each treatment, we present the overall results for reading, math, and science.

Overall, while the effects across all the Priority schools were small but positive, the effects in the 26 iZone schools were consistently positive and generally of meaning magnitudes across all subjects and the three local districts that operated them. The effects in the ASD schools were mainly statistically insignificant and occasionally significant, sometimes positive and sometimes negative (four times each) depending on subject and management organization.

Taking a positive perspective, the effects on test scores from priority schools indicates some overall progress in math and science achievement. Similarly, for schools under the auspices of the ASD, we found small overall effects in reading. In addition, we consistently find substantial, positive effects in all subjects for iZone schools, especially in Memphis. Therefore, one could argue that the students in these schools are better off than they were without these reforms, especially students attending iZone schools in Memphis.

From a less positive perspective, 28 of the schools (36%) that were identified as the state’s lowest performing in 2011 have not been included in either ASD or iZones. In addition, while the iZone schools have shown promising test score effects, the effect on test scores from priority schools as a whole and ASD schools, specifically, has been less than many advocates had hoped for. However, research suggests that it takes three to five years for reforms to take hold (Berends, Bodilly, and Kirby, 2002). Therefore, some may consider it premature to pass definitive judgment on the ASD schools or priority schools more generally as schools have been designated as priority

³ The Tennessee Comprehensive Assessment Program (TCAP) is the statewide assessment for students in grades 3 through 8. The End of Course (EOC) tests are statewide course-specific assessments, primarily given at the high school level (some students may take EOCs in middle school).

⁴ For the analysis of priority schools, we use schools that are in the lowest five to 10 percent as the comparison schools. For the analysis of ASD schools, we used all other non-iZone priority schools. For the analysis of iZone schools, we used all other non-ASD schools as the comparison schools.

⁵ One standard check for the validity of the difference-in-differences approach is to see whether there are differential gains of students in “treatment” condition relative to control condition prior to implementation of the treatment. To employ this validity check, we examined whether students in the treatment schools (i.e., priority, ASD, or iZone) had differential gains one year prior to treatment relative to earlier years and whether these gains were different from the control schools. This check not only serves as a “falsification test” of the estimates from the research design, it also is a possible check to see whether there was a demoralizing effect for schools being placed in the ASD as the announcement of takeover by ASD occurred in the year prior to treatment. From the analysis, we observed no statistically significant effect (positive or negative) in the year directly before treatment, which provides support for our research design and minimize concerns of a demoralizing effect

schools for only three years and most of the ASD schools have been under the auspices of the ASD for less than three years.