After-School Programs, 2012-13

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At-a-Glance

The Dallas Independent School District’s (Dallas ISD’s) Department of Summer Learning and Extended-Day Services partnered with several organizations to provide a variety of after-school programming across the district’s elementary and middle schools during the 2012-13 school year. At the elementary level, Dallas After-School Achievers (DASA) operated on 29 campuses, Big Thought operated on 31 campuses, the City of Dallas Parks and Recreation Department operated on 19 campuses, St. Simon’s Episcopal Church operated 13 campuses, and the Wilkinson Center provided programming at 6 campuses. Big Thought also operated programs at eight middle schools.

After-school research has shown that student participation in these programs has a positive impact on both students’ academic achievement and social skills (Fashola, 1998; Halpern, 2004). The purpose of this evaluation was to determine if elementary after-school programs differed on reading and math achievement, and attendance rate.

The evaluator requested data on program participation for all five after-school providers, but only received data on students who participated in the Dallas After-School Achievers, St. Simon’s, and Wilkinson Center programs. The data consisted of daily attendance logs, copied and placed in binders. Due to the large amount of data, the evaluator cooperated with an analyst to enter each student into a spreadsheet if they had attended at least one day of after-school programming, then manually matched each student by campus and grade to a student identification number. We were unable to match 12.3 percent of the DASA students and 2.1 percent of St. Simon’s students to an identification number. The student identification numbers were matched to the Dallas ISD’s demographic, achievement, and attendance databases.

Demographics

The number of students in the programs differed across programs as 2,291 students participated in a DASA program, 475 in a St. Simon’s program, and 152 in a Wilkinson Center program. The percentage of students in each grade can be found in Figure 1. Enrollment rose throughout the lower grades (PK – 2) in each program. Enrollment generally decreases through the upper elementary grades, with only DASA serving more fifth grade students than kindergarten students. DASA enrollment increases until the fifth grade. The trend begins earlier for the other programs, as the percentage of students enrolled falls after the second grade for St. Simon’s and after the third grade for Wilkinson Center students. Over 26 percent of the Wilkinson Center students were in the third grade.

Table 1 illustrates each program’s enrollment by ethnicity. It is impossible to conclude differences between DASA students and students with the other programs due to a large number of students missing data. St. Simon’s, however, enrolls a slightly higher percentage of Black or African American students when compared to the Wilkinson Center programs (29.3 and 25.0 percent, respectively). The percentages of students classified as Hispanic/Latino (69.7%) or White (5.3%) attending a Wilkinson Center program are higher than the other after-school programs.

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>DASA</th>
<th>St. Simon’s</th>
<th>Wilkinson Center</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian</td>
<td>0.6</td>
<td>1.5</td>
<td>--</td>
</tr>
<tr>
<td>Black or African American</td>
<td>29.8</td>
<td>29.3</td>
<td>25.0</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>53.8</td>
<td>65.9</td>
<td>69.7</td>
</tr>
<tr>
<td>American Indian or Alaska Native</td>
<td>0.3</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Native Hawaiian or Pacific Islander</td>
<td>0.1</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Two or More Races</td>
<td>0.4</td>
<td>0.6</td>
<td>--</td>
</tr>
<tr>
<td>White</td>
<td>2.7</td>
<td>0.6</td>
<td>5.3</td>
</tr>
<tr>
<td>Missing</td>
<td>12.3</td>
<td>2.1</td>
<td>--</td>
</tr>
</tbody>
</table>

The St. Simon’s and DASA programs enrolled predominantly female students (53.3 and 45.9 percent, respectively, though missing data trivializes the
accuracy of the DASA percentage). That was reversed for St. Simon’s participants, as 51.8 percent were male and 46.1 percent were female. Exactly 2.1 percent of the St. Simon’s participants were missing data. The percentage of students classified as Limited-English Proficient was similar across programs, ranging from 29.6 percent of Wilkinson Center participants to 33.6 percent of DASA participants.

**Attendance**

A one-way analysis of variance (ANOVA) was conducted to assess the relationship between the percent of enrolled school days attended and the type of after-school program attended: DASA, St. Simon’s, Wilkinson Center, or students at the same schools not participating in an after-school program. The variable for percent attended was calculated as the number of days attended divided by the number of days enrolled – not the number of days in the school year – to account for students enrolling in or departing the district during the school year. The ANOVA was significant, $F(3, 22,646) = 31.61$, $p < .01$. The strength of the relationship, as assessed by $\eta^2$, was small and suggested that the type of program accounted for less than half a percent of the variance in the percentage of enrolled days attended.

Follow-up tests (with equal variances not assumed) were conducted to evaluate differences among the means of each type of after-school program. The tests revealed several significant differences among the groups (see Figure 2). The Wilkinson Center students attended school at a higher rate than all other groups. They attended, on average, 1.6 percent more enrolled days than students not in a program, 1.5 percent more days than St. Simon’s participants, and 0.7 percent more days than DASA participants. Because this analysis accommodated students enrolling or departing the Dallas ISD mid-year, it is inappropriate to convert the percentages to the number of days in the 182-day school year.

**Reading and Mathematics Achievement**

The evaluator conducted two one-way analyses of covariance (ANCOVAs) to assess differences among after-school program participants on gains in scores for the *State of Texas Assessments of Academic Readiness (STAAR) Reading* and *STAAR Mathematics* exams from administrations in 2012 to the administrations in 2013. The gain score was computed by subtracting the relevant 2012 scale score from the 2013 scale score. Because the analyses required two years of data, only fourth and fifth grade students were included. The Wilkinson Center’s low number of overall participants precluded including the program as a category in these analyses. So, the comparison groups were left as: participants in the DASA program, participants in the St. Simon’s program, and students attending school at a DASA or St. Simon’s site but not participating in an after-school program.

The St. Simon’s participants mean reading scale score gain ($M = 117.81$), after accounting for the previous year’s performance, was higher than both comparison groups (see Figure 3). The score gains for DASA and students not in an after-school program were strikingly similar ($M = 101.34$ and $M = 101.30$, respectively). The ANCOVA was not significant, $F(2, 5,537) = 0.29$, $p = .75$, failing to reveal any differences among the three groups most likely due to the small number of St. Simon’s participants relative to the other groups.

The St. Simon’s participants also had higher mathematics gains ($M = 145.95$) than either DASA participants ($M = 113.55$) or students not in an after-school program ($M = 106.67$) after controlling for the previous year’s *STAAR Mathematics* scores (see Figure 4). The ANCOVA was not significant, $F(2, 5,538) = 1.66$, $p = .19$. The non-significant results are,
as with the reading results, most likely due to the relatively small number of St. Simon's participants when compared to other groups.

Although the academic achievement results were not significant, the St. Simon's program seems to create more positive gains than the other groups. Interviews with the program's site leaders and observations showed a required homework period for the first portion of the after-school session, and while other programs required homework completion, St. Simon's site leaders divided participants into small groups by grade and sent them to separate classrooms with an aide. In observations of other programs, students completed homework in a large communal area such as the cafeteria.

**Summary and Recommendations**

The demographics of after-school students marginally differed amongst the three programs from which data was received: DASA, St. Simon's, and the Wilkinson Center. Missing data from the DASA student records prohibited making any definitive statements.

For two groups – DASA and St. Simon's – attending the after-school program was associated with a higher rate of attending school overall. On average, Wilkinson Center participants attended school at a rate no different than students not in an after-school program.

An ANCOVA was conducted to determine if reading gains on the STAAR exam differed among the types of after-school programs after controlling for the previous year's performance. While St. Simon's participants showed, on average higher estimated reading gains, they were not significantly higher than other groups. Results of the ANCOVA for math achievement also showed no difference among the groups. While the academic achievement analyses did not yield significant results, the results do indicate that St. Simon's students may be producing higher academic gains than students in other types of programs or no program at all. Further qualitative research into the after-school programs is necessary.

Other recommendations focus around the lack of useable data for evaluating after-school programs. For some programs, student attendance records were requested but not delivered. For all other programs the records were not in a useable format. The current paper format did not allow for further study into the efficacy of after-school programs. For example, the question of whether after-school attendance rates differ among the different types of programs could not be answered. As another example, the evaluator could not examine if the number of after-school sessions attended relates to academic achievement. Going forward, all after-school sites should track student attendance accurately and electronically, using student identification numbers where possible.

For more information contact Program Evaluation at (972) 925-6457.

**References**
