Florida’s charter school sector is one of the largest and fastest-improving in the nation.

According to Florida Department of Education data, Florida had more than 270,000 charter school students in the 2015-16 school year. More than 16 percent of Florida’s public schools are charters and 9 percent of students are enrolled in charters. Florida charter schools educate a majority-minority student population, with white students constituting only 33 percent of the student body total.

But how is this large sector performing? When looking at state and federal academic performance data, it appears that Florida charter schools are one of the fastest growing and academically effective sectors in American education.

NAEP COHORT GAINS

For decades, information on American student achievement has been detailed by the National Assessment of Education Progress (NAEP), commonly known as The Nation’s Report Card. Starting in the early 1990s, NAEP has administered exams in math and reading to nationally- and state-representative samples of students in grades 4, 8 and 12 and has administered the fourth- and eighth-grade assessments every two years since 2003. Since NAEP is the most scientific and uniform set of data on student learning, these exams of are of great interest to policymakers across the nation.

The timing and scaling of fourth- and eighth-grade NAEP tests have been designed and conducted in such a way as to allow the measurement of cohort gains. A NAEP cohort gain is a comparison of eighth-grade students across states while factoring their prior achievement four years earlier in fourth grade. For example, we can examine fourth-grade math scores in 2011 and compare them to the scores of eighth graders four years later in 2015.

This measure is more inexact due to larger errors in measurement when examining subgroup scores. Therefore, reading too much into few-point differences between states is not helpful. It’s also not very helpful to rank-order states based on these gains—just as the difference between being ranked fourth or fifth on NAEP achievement is less important than the difference between being ranked fifth and thirty-fifth. Cohort gains are much more effective at identifying the high flyers and laggards.

The examination of cohort gain scores has significant advantages over simple achievement scores, which correlate strongly with student demographics (gaps between white and black students, poor and non-poor, etc.). For instance, on the 2015 fourth-grade NAEP math exam, there was a national 24-point difference in scores between children who
qualified for a free or reduced price lunch and those that did not. However, between the 2011 fourth-grade math exam and the 2015 eighth-grade math exam, children eligible for free or reduced price lunch gained 39 points in their scores, while higher-income students made 44 points of progress—meaning a much smaller cohort gain for higher-income students of just five points.

Similarly, there are large achievement gaps between the average student of different ethnicities when compared within the same year, but small differences in four-year cohort gains. As shown on Table 1, white students held a 31-point advantage over black students on the eighth-grade math NAEP exam and a 22-point advantage over Hispanic students. These gaps are both large and meaningful, given that the average student in the U.S. only made an average of 10 points of progress per year in math between 2011 and 2015. In other words, the average white eighth-grade student was scoring what the average Hispanic student would not reach until tenth grade, and the average black student would not reach until eleventh grade, assuming the same rate of average progress.

Yet, as large as the ethnic achievement gaps are in a single year, they are less pronounced when looking at cohort gains. As Table 1 shows, despite large differences in overall achievement, the differences in gains with the cohort are small in comparison—36, 40 and 42—just a few points of difference.

### Table 1

<table>
<thead>
<tr>
<th></th>
<th>2011 4th Grade</th>
<th>2015 8th Grade</th>
<th>Cohort Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>249</td>
<td>291</td>
<td>+42</td>
</tr>
<tr>
<td>Black</td>
<td>224</td>
<td>260</td>
<td>+36</td>
</tr>
<tr>
<td>Hispanic</td>
<td>229</td>
<td>269</td>
<td>+40</td>
</tr>
</tbody>
</table>

COMPARING COHORT GAINS BETWEEN STATE PUBLIC AND CHARTER SECTORS

Thus, cohort gains allow us to observe large changes in student learning between cohorts. NAEP data also allows us to examine students based on school type—including comparisons between students enrolled in district-run schools and charter schools.

Given data limitations, only charter sectors in 19 states and the District of Columbia had the necessary data to calculate cohort gains. The other states either did not have charter schools during the time studied or did not have a charter sector large enough to create a reliable sample. In other words, the 20 charter sectors studied have been around long enough to have enough schools and students to make a valid comparison.

Of the 71 sectors examined (51 statewide district public school systems and 20 statewide charter sectors), the success of charter sectors was mixed—with 10 of the sectors scoring above average on math cohorts gains and 10 scoring below average. Figure 1 below also shows that the sector has wide variation: with charter sectors making up the top six sectors, but also several of the sectors with the least amount of growth.
Figure 1: NAEP Math Cohort Gains (2015 8th grade minus 2011 4th grade scores) for District-Run and Charter Sectors for general education students, by state
Figure 2 below presents score calculations for reading cohort gains. The data shows similar results in reading: charter sectors contributing relatively high and low cohort gains—though less pronounced than on the math exam.
FLORIDA CHARTER PERFORMANCE ON NAEP

A charter sector that continues to grow while NAEP cohort gains continue to improve should be welcomed and encouraging news for Floridians. However, one source of data measured in one way is not enough to draw conclusions about a sector as a whole. For instance, it could be that Florida charters performed so low on prior exams that large cohort gains, while encouraging, still represent low overall performance. In other words, it may be that they gained so much because they started so low.

Overall NAEP scores tell us different, however. On all four exams, Florida charter schools scored better than both the national average and Florida district average in 2015—often reflecting the large improvements measured by cohort gains.

As Figure 3 shows, Florida’s charter sector is making gains that are pushing it higher and higher in national rankings—whether measured from cohort-to-cohort, or from year-to-year.

Figure 3 Comparing Average NAEP Scores
The Center for Research on Education Outcomes (CREDO) at Stanford University has published a series of broader studies of charter school academic outcomes based upon the use of matching and statistical controls. With this method, researchers match charter school students with district school students based on similar characteristics: grade level, prior test scores, gender, race, family income, special education status, etc.

There is reason to suspect from CREDO’s research that larger differences will be found in charter school performance in eighth-grade scores. In examining the scores of urban charter schools, CREDO documented a powerful relationship between length of attendance and academic outcomes, as demonstrated by Figure 4.

The positive impact of charter school attendance on math achievement is fifteen times greater for urban students with four years of attendance relative to those with one year of attendance according to CREDO’s urban charter research. The reader should keep in mind that many students enroll in charter schools with still greater initial deficits. Moreover, these are average levels of gains, with wide variations across individual schools. Simply by the presence of a greater opportunity to have attended charter schools for a greater period of time, the research would predict a greater impact on eighth-grade NAEP scores than fourth-grade scores.
Skeptics may also point to the difficulty in comparing charter school students to their district peers using just NAEP scores. There are, of course, more students in district-run public schools than in charter schools, which may result in some measurement error when comparing samples of relatively large and small groups of students.

Luckily, in March 2017 the Florida Department of Education (FLDOE) published a performance study of charter schools in the state based on state accountability information.4 This data represents the average of all district and charter student test scores across the state—not a smaller sample of students.

FLDOE compared charter and district students across numerous characteristics—income, race, grade level, English as a second language, prior performance, etc. When comparing Florida charter school students to students in district-run public schools:

- Charters demonstrated higher rates of students scoring grade-level performance or higher in 65 of 77 comparisons,
- Charters demonstrated smaller achievement gaps between student subgroups in 20 of 22 comparisons and
- The percentage of students making learning gains was higher for charters in 62 of 72 comparisons.

Furthermore, in 15 of the 24 instances where Florida district schools performed better on average than charters, the district school’s advantage over charters was two percentage points or less. Put another way: Florida’s district-run schools only significantly outperformed their charter school peers in nine of the 171 comparisons conducted by FLDOE.

Florida’s charter school sector is one of the largest in the nation. And, according to Florida Department of Education data (Figure 5), parents in the Sunshine State continue choosing charters for their children. Based on the existing data, Floridians should be optimistic about the charter sector’s growing influence in the state.

**Figure 5: Florida Charter Student Enrollment**

*Source - FL Department of Education (2016)*
ENDNOTES


2 State-level samples have typically not been collected for the twelfth-grade example. Hence, state level results are not available for this grade level.
