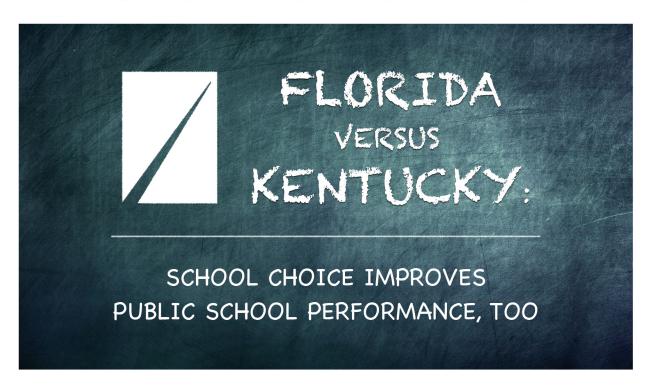
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BY RICHARD G. INNES • MAY 2021



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Florida Versus Kentucky: School choice improves public school performance, too

By Richard G. Innes

Summary

As Kentucky reacts to the stunning introduction of school choice in the state with passage of House Bill 563 during the 2021 Regular Legislative Session¹ – including the override of Gov. Andy Beshear's attempt to veto this important legislation – it's worthwhile to examine how this bill might start us down the road to better academic performance in our public schools in addition to giving Kentucky parents more opportunities when deciding where to educate their children. What's happening in Florida provides our case-in-point example for this discussion.

Despite numerous assertions that school choice will destroy Kentucky's public school system, an examination of how Florida's public schools have fared during the major expansion of school choice options there provides solid evidence that choice doesn't mean public schools will be harmed. In fact, evidence from the National Assessment of Educational Progress (NAEP) shows public schools in Florida also prospered notably as choice options steadily increased in the Sunshine State.

Florida moved ahead on NAEP, often dramatically

Back in 1992, public school systems in 26 other states statistically significantly outscored Florida's public schools in NAEP Grade 4 Reading, for one example. Flash forward to the latest NAEP Grade 4 Reading results for 2019 and now public school students in only one state — Massachusetts — statistically significantly outscore Florida's public school students. Along the way, Florida's Grade 4 public school students went from scoring statistically significantly lower than Kentucky's for NAEP Grade 4 Reading in 1992 to now scoring statistically significantly higher than Kentucky's in 2019.

In NAEP Grade 4 Math testing, 24 states statistically significantly outscored Florida's public school students in 1992. In 2019, no other state in the union scored statistically significantly higher. During this period, Florida went from posting a score statistically tied with Kentucky's NAEP Grade 4 Math results in 1992 to statistically significantly outscoring the Bluegrass State's public school fourth graders by 2019.

The good news for Florida holds when scores are broken out by race and the major racial minority group in Kentucky, Black students, is considered. In 1992, Black Grade 4 students in Florida's public schools were statistically outscored by Black public school students in 20 other states on NAEP Reading. By 2019, Black public school students in Florida were at the top, with no other state posting a statistically significantly higher reading score for Black public school students. In math, nine states outscored Florida's Black public school students on the NAEP in 1992 yet by 2019 no other state had a statistically significantly higher score for Black students than Florida.

Florida also made obvious improvements in Grade 8 NAEP testing during the same time interval compared to the rest of the states.

Florida defies expectations related to student demographic shifts

What makes the public school progress in Florida even more remarkable is that, considering the chronic achievement gaps found in education nationwide, the expectation is that student demographic shifts over time would push the state's score trend in the opposite direction. In 1992, Florida's fourth grade public school classrooms were 63% white but that figure dropped to just 40% by 2019. In sharp contrast, Kentucky's public school fourth grade enrollment was 90% white in 1992 and that figure remains at a very high 75% as of 2019. Nevertheless, Florida still generally outperforms Kentucky in recent NAEP results.

Kentucky spends more but Florida gets better results

Section 183 of Kentucky's Constitution² requires the commonwealth to have an "efficient" public school system. It's not just about spending more, but spending that gets better results.

However, despite Kentucky's constitutional mandate, Florida wins the efficiency prize when fourth grade NAEP results and spending data for 1992 and 2018 are considered.

According to federally reported school funding data, 1992 per pupil school funding in Florida was \$5,674 while Kentucky spent \$4,635 – a difference of just over \$1,000 in Florida's favor. By 2018, the latest year with reported data, Florida only increased funding per pupil to \$10,715 while Kentucky was spending \$12,444, making the 2018 difference over \$1,700 and now in Kentucky's favor.

If funding were the critical element in improving education results, Kentucky should outperform Florida on recent NAEP assessments. But it just hasn't happened.

We took a deeper look at efficiency, computing a "bang for the buck" set of numbers for 1992 and 2019 for Florida and Kentucky by dividing the public school NAEP Scale Scores each state achieved by the closest year of spending data available.

In fourth grade reading, in 1992 Florida scored 20.4 NAEP Scale Score Points for each \$1,000 of per pupil revenue it collected. Kentucky did notably better, scoring 25.6 NAEP Grade 4 Reading Scale Score points for each \$1,000 of its per pupil revenue.

By 2019, the picture had notably flip-flopped. Florida's reading bang for the buck had increased slightly to 21.0 NAEP Scale Score Points per \$1,000 of revenue per pupil. Meanwhile, Kentucky saw a major decline in education efficiency, posting only 17.8 NAEP Scale Score Points per \$1,000 of per pupil revenue, down sharply from its 1992 figure of 25.6.

In fourth grade math, Florida's improvement from 1992 to 2019 was even more impressive with its bang for the buck rising from 21.0 to 23.0. Meanwhile, Kentucky saw another major bang for the buck efficiency decline from 25.8 NAEP Scale Score points per \$1,000 of per pupil revenue to only a 19.2 figure.

Florida not only improved student outcomes more, but did so while producing more efficient use of education dollars.

It's time for Kentucky to get the benefits of school choice Florida already enjoys

As we review the amazing story of Florida versus Kentucky between the early days of the Kentucky Education Reform Act of 1990 (KERA) and the most recent year of data available, it's clear that school choice in Florida has been accompanied by amazing progress in that state's public schools as well. Far from fulfilling the doom-and-gloom prophecies from Kentucky's opponents of educational liberty, the real world facts in Florida show that public education in the Bluegrass State could experience similar improvements in both educational performance and tax dollar efficiency – if school choice policies here are implemented at least as well as Florida has achieved.

That "if" in this closing message is important. The very best laid plans in House Bill 563 can still be undone by the agencies who will actually implement the bill's provisions. Some of those agencies could create problems either by intent or a simple lack of enthusiasm. It will be important going forward to closely monitor how those implementation policies develop.

Florida Versus Kentucky: How school choice improves public school performance, too

Doom and gloom wrongly foretold

During the debates on HB 563, Kentucky's new school choice legislation, the bill's opponents wailed about dire consequences for the commonwealth's public schools. The imaginings of doom and gloom rose to the point of almost being comical. However, these scary predictions ignore the history of choice in Florida, which perhaps leads the nation for public school choice options. Let's look at what happened to public education over time in the Sunshine State, which has been a leader for adopting many important school choice initiatives.

The Florida Story

If the critics were even close to right, Florida's public schools certainly should have suffered dramatic decline after its many school choice programs came along. However, the actual history for public schools in Florida is just the opposite, as shown by how the state progressed in National Assessment of Educational Progress (NAEP) testing over time following the introduction of school choice options.

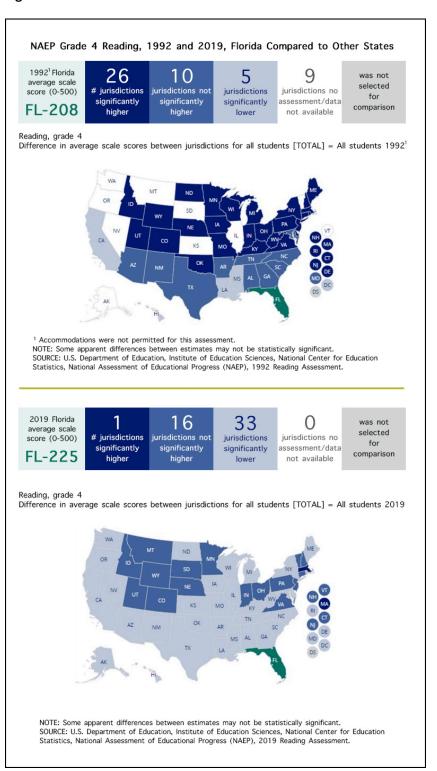
Example 1: NAEP Grade 4 Reading for all students

State-level NAEP Grade 4 Reading was first assessed back in 1992, well before Florida really got into education choice programs. Looking at the overall average student scores for each state in 1992, as shown in the top part of Figure 1, Florida faired rather poorly, outscored by a statistically significant amount by 26 other states and only statistically significantly outscoring just four states plus the Washington, DC schools.

(Note: Figure 1 and similar succeeding Figures 2 through 8 were assembled using the NAEP Data Explorer web tools.³)

Now, flash forward and note the significant change in the latest NAEP Grade 4 Reading results from 2019, shown in the bottom half of Figure 1. Remarkably, in 2019 only one state scores statistically significantly higher in NAEP Grade 4 Reading than Florida while 32 other states and the Washington, DC schools now score significantly worse.

Figure 13

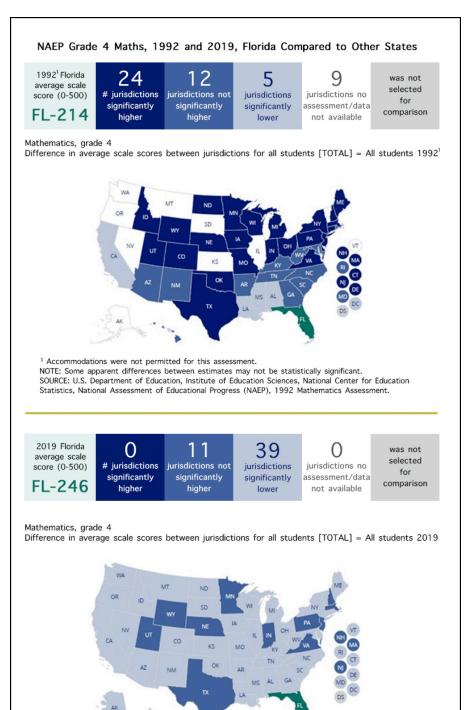


If you check the shading of the states in Figure 1 carefully, back in 1992 Kentucky scored statistically significantly higher than Florida on NAEP Grade 4 Reading; by 2019 Kentucky was scoring statistically significantly lower.

Increasing school choice in Florida was accompanied by a major improvement in that state's public school NAEP Grade 4 Reading results compared to what happened in Kentucky's choice-devoid public education system.

Example 2: NAEP Grade 4 Mathematics for all students

Figure 23



NOTE: Some apparent differences between estimates may not be statistically significant.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 Mathematics Assessment.

Florida's reading picture is pretty much duplicated when we look at the NAEP Grade 4 Math results (Figure 2). In 1992, a total of 24 states statistically significantly outscored Florida; only five scored statistically significantly lower. As of 2019, Florida now scores significantly higher than 39 other jurisdictions; not a single jurisdiction scores statistically significantly higher.

So, the fourth grade math picture for Florida over time is even better than the already remarkable picture for reading.

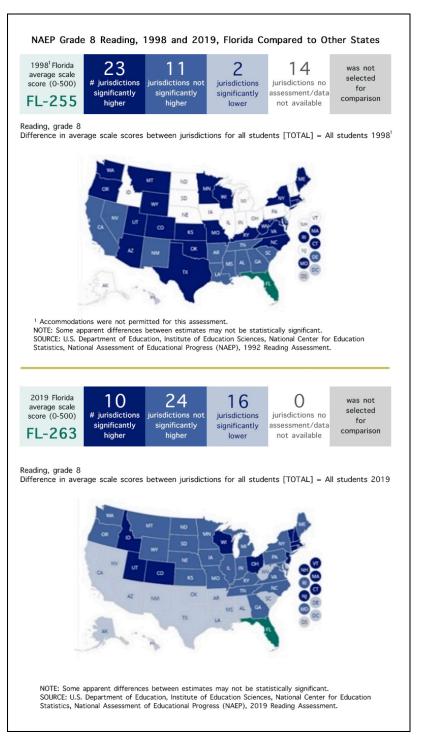
Also note that in 1992, Florida statistically tied Kentucky's NAEP Grade 4 Math results. But just like for reading in 2019, Florida now outscores Kentucky in math by a statistically significant amount.

Compared to the Bluegrass State, Florida's education progress in elementary public schools has been remarkable.

Examples 3 and 4: NAEP Grade 8 Reading and NAEP Grade 8 Math for all students

Note in Figures 3 and 4 that Florida also moved ahead with the NAEP Grade 8 results over time, though not as dramatically as with the fourth grade results. In both sets of eighth grade results, Florida in 2019 outscores notably more states than it did in the first year each of these assessments was given, which was 1990 for NAEP Grade 8 Math and 1998 for NAEP Grade 8 Reading

Figure 3³



Notice how Florida moved from behind Kentucky in NAEP Grade 8 Reading for public school students in 1998 to tying the Bluegrass State by 2019.

Figure 4³

NAEP Grade 8 Math, 1990 and 2019, Florida Compared to Other States

1990¹ Florida average scale score (0-500) FL-255

25 # jurisdictions significantly higher 8 jurisdictions not significantly higher

jurisdictions juri significantly assertioner no

13 jurisdictions no assessment/data not available was not selected for comparison

Mathematics, grade 8

Difference in average scale scores between jurisdictions for all students [TOTAL] = All students 1990¹



¹ Accommodations were not permitted for this assessment. NOTE: Some apparent differences between estimates may not be statistically significant. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990 Mathematics Assessment.

2019 Florida average scale score (0-500)

FL-279

24
jurisdictions
significantly
higher

17 jurisdictions not significantly higher

9 jurisdictions significantly lower

jurisdictions no assessment/data not available

was not selected for comparison

Mathematics, grade 8

Difference in average scale scores between jurisdictions for all students [TOTAL] = All students 2019



NOTE: Some apparent differences between estimates may not be statistically significant. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 Mathematics Assessment.

Even though Florida experienced only a modest gain for overall student scores in Grade 8 NAEP Math, it did advance with five more states scoring statistically significantly lower in 2019.

Kentucky and Florida tied in NAEP's eighth grade math performance in 1990 and 2019.

The trend in NAEP for Florida's public schools when we look at all public school student overall average scores (again, the graphics above only cover public school results) has been an increase in performance over time while that state's school choice programs also have multiplied dramatically.

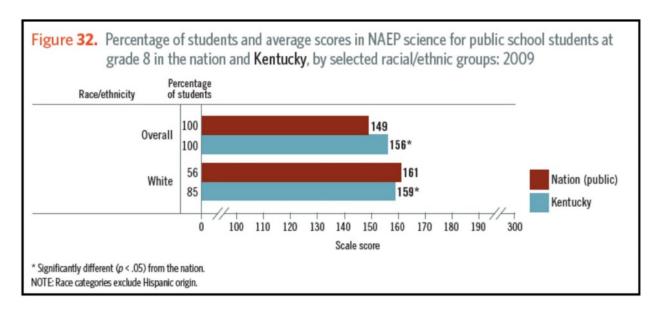
Could some shift in student demographics explain why Florida did better?

It's important to note that evaluations of NAEP performance between states over time need to consider how student demographics varied. Such variations can possibly impact scoring, which documentation from the NAEP itself makes clear.

For example, a discussion on Page 32 in the NAEP 2009 Science Report Card⁴ specifically addresses how a state's performance picture can change notably once you factor in consideration for different racial groups.

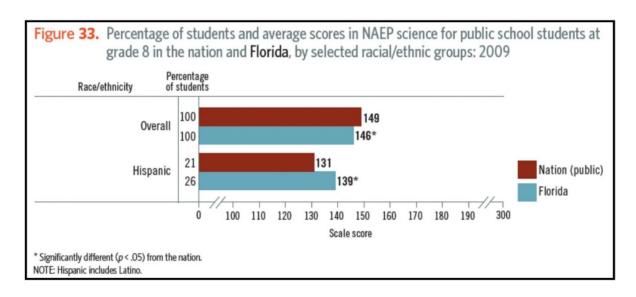
Figure 5 (extracted from Figure 32 on Page 32 in the 2009 NAEP Science Report Card) uses Kentucky's NAEP performance as one example to show how the NAEP picture can change when the data is disaggregated and considered by race. A look at overall average student scores in Figure 5 indicates Kentucky scored above the national average for NAEP Grade 8 Science in 2009. But when only white student scores are considered, Kentucky scores statistically significantly below the national average. That's certainly a different picture, made even more important by the fact that the vast majority of Kentucky's students are white.

Figure 5⁵
Extracted Figure 32 from NAEP 2009 Science Report Card



The same page in the 2009 Science Report Card has another example (see Figure 6) that cites Florida's Hispanic performance.

Figure 6⁵
Extracted Figure 33 from NAEP 2009 Science Report Card



If one only looks at overall performance on NAEP Grade 8 Science in 2009, Florida scores below the national average by a statistically significant amount.

But once the data is disaggregated, Florida's Hispanic students score statistically significantly higher than the national average for their racial counterparts in other states.

To summarize, student demographics can be an important factor that needs to be considered in NAEP analysis. To facilitate this, the NAEP Data Explorer provides student demographic information. The Grade 4 Reading NAEP data summarized in Table 1 provide representative data.

Table 13

Percentages of Grade 4 Enrollment by Race in
Kentucky and Florida in the 1992 and 2019 NAEP
Grade 4 Reading Assessments

Year	Jurisdiction	White Percentage	Black Percentage	Hispanic Percentage
2019	Florida	40	19	34
2019	Kentucky	75	11	7
1992¹	Florida	63	24	11
19921	Kentucky	90	10	#

[#] Rounds to zero.

NOTE: Black includes African American, Hispanic includes Latino. Some apparent differences between estimates may not be statistically significant.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992 and 2019 Reading Assessments.

As you can see, Florida's public school system experienced a much more significant increase in minority student enrollment during the years KERA has been in place in Kentucky. All other things held equal, due to the relative shift in racial demographics and the endemic racial achievement gaps found across the country, this should tend to make Florida's overall average scores on NAEP lower than Kentucky's. However, as Figures 1 to 4 indicate, that isn't what happened. Shifts in racial demographics cannot explain Florida's impressive academic achievements compared to Kentucky's.

We cannot look at Hispanic performance over time on NAEP due to missing scores for Kentucky in the early years of state NAEP testing.

But we can examine Black student scores in a

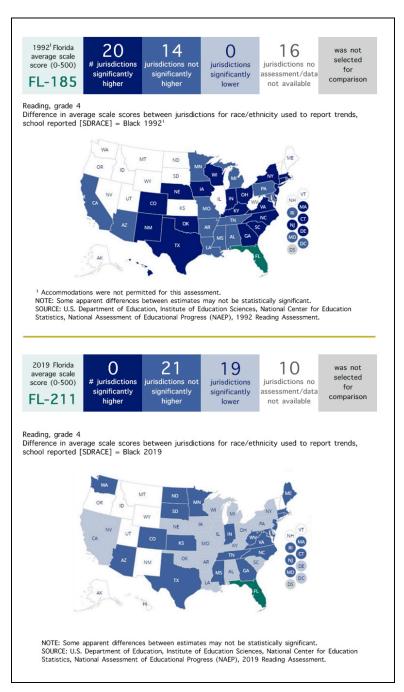
¹ Accommodations were not permitted for this assessment.

similar manner to the way we looked at overall student scores in Figures 1 to 4. The result is a new set of NAEP comparison maps for fourth and eighth grade public school Black student scores in reading and math.

Example 5: NAEP Grade 4 Reading for Black students

Florida (Figure 7) dramatically moved from having 20 states statistically significantly outscoring it for Black student NAEP Grade 4 Reading in 1992 to where no state now outscores it. Even more significant for our purposes here, Florida's Black students moved from scoring statistically significantly behind Kentucky to scoring statistically significantly ahead.

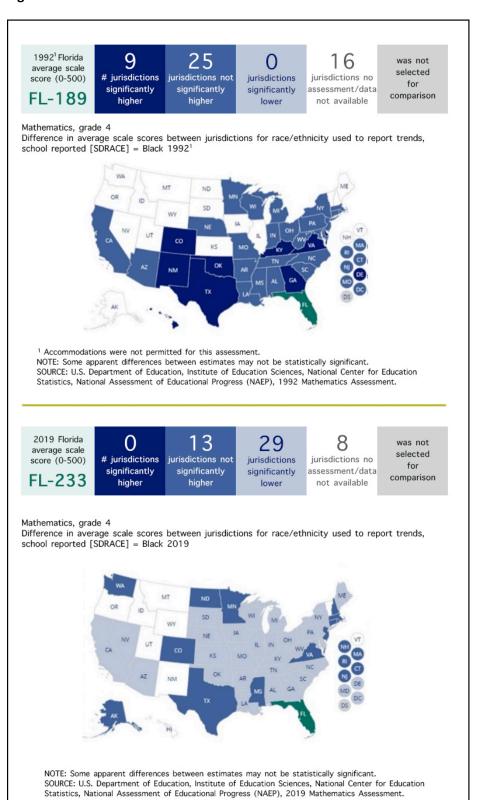
Figure 7³



And don't forget, as we explore further below, Florida moved from spending notably more per student than Kentucky in 1992 to now spending considerably less per student according to the most recent data available.

Example 6: NAEP Grade 4 Math for Black students

Figure 83

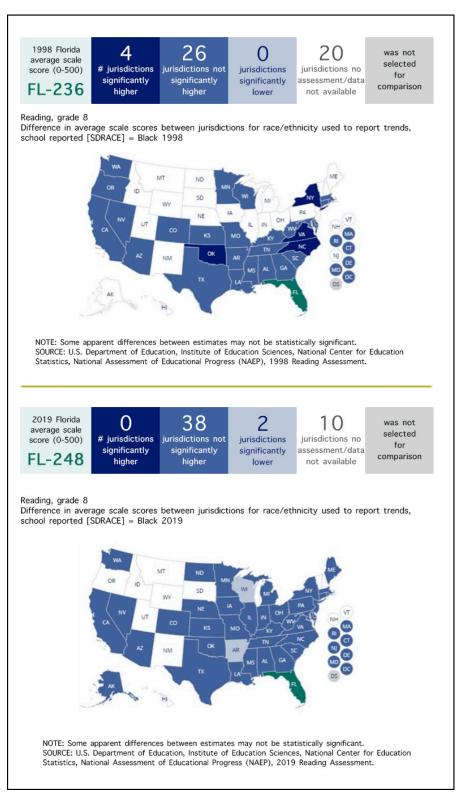


The reading situation for fourth grade Black students in public schools is pretty much replicated in math (Figure 8) to the point of Kentucky moving from statistically significantly ahead to statistically significantly behind Florida.

Examples 7 and 8: NAEP Grade 8 Reading and NAEP Grade 8 Math for Black students

The picture for the eighth grade isn't as dramatic, but here are the maps.

Figure 9³



Again, notice in Figure 9 that testing for NAEP Grade 8 Reading didn't start at the state level until 1998. Perhaps the Florida picture would look more dramatic if we had earlier NAEP data to examine.

Still, Florida made some progress and no longer does any state outscore its public school Black students in Grade 8 NAEP Reading.

Figure 10³

1990¹ Florida average scale score (0-500) FL-231



O 22 jurisdictions no significantly lower assessment/data not available

was not selected for comparison

Mathematics, grade 8

Difference in average scale scores between jurisdictions for race/ethnicity used to report trends, school reported [SDRACE] = Black 1990^1



¹ Accommodations were not permitted for this assessment.
NOTE: Some apparent differences between estimates may not be statistically significant.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990 Mathematics Assessment.

2019 Florida average scale score (0-500)

FL-259

1 37
jurisdictions significantly higher significantly higher

jurisdictions significantly lower

jurisdictions no assessment/data not available was not selected for comparison

Mathematics, grade 8
Difference in average scale scores between jurisdictions for race/ethnicity used to report trends, school reported [SDRACE] = Black 2019



NOTE: Some apparent differences between estimates may not be statistically significant. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 Mathematics Assessment.

Finally, Figure 10 has the picture for eighth grade public school Black students' NAEP math performance between 1990, the first year this state test was administered and the most recent 2019 results.

In NAEP Grade 8 Math, Florida's Black students moved from behind Kentucky in 1990, the first year this state test was administered, to statistically tie Kentucky in 2019. (Figure 10)

Was it money?

Many of the arguments heard against HB 563 focused on money. So, it's interesting to compare changes in spending per pupil in Florida and Kentucky over about the same time frame as the NAEP results shown above. Table 2 contains per pupil funding data (unadjusted for inflation) for 1991-92 and 2017-18 for both states. The data was extracted from federal reports listed in Attachment A.

Table 2

Total Public School Per Pupil Funding in Florida and Kentucky, 1991-92 and Fiscal Year 2018 (2017-18 School Term) (Uncorrected Dollars)						
1991-92 FY 2018						
Florida	\$5,674	\$10,715				
Kentucky \$4,635 \$12,444						
See Appendix A for Sources						

Under the influence of KERA, which was enacted in 1990, Kentucky has seen a much sharper rise in public school funding than Florida experienced.

According to the U.S. Census Bureau, Florida's ranking for per pupil revenue in 2018 was only 44th place while Kentucky ranked 35th. Per the theories of school choice opponents who often predict giving parents more options for educating their children will spell doom and gloom for public education, such financial differences should have resulted in dire reports of Florida's public education system sinking into the pits. But as the NAEP results previously mentioned show, it just didn't work out that way. Florida's public education system, in fact, surpassed Kentucky's.

This information also confirms that the simplistic idea of just throwing more money at education and hoping it will cause improvement doesn't work in practice. Given more money – especially absent other stimulation – the monopolistic public school system will tend to just drift on casually. Gains for students will come at the slow rate Kentucky has already demonstrated in the last 30 years rather than at the impressive improvement rates enjoyed in Florida.

How about efficiency?

The availability of spending and score data allows assembly of a "bang for the buck" comparison of how efficiently each state uses its education spending.

The spending data indicate Florida has improved its per-dollar education performance on NAEP over the years while Kentucky's education bang for the buck has decayed in math and reading.

Table 3 summarizes those Bang for the Buck numbers for NAEP Grade 4 testing. Details regarding the derivation of these numbers are found in Attachment A.

Table 3 (Extracted from Attachment A Tables)

Kentucky and Florida: 1992 and 2019 NAEP Scale Score Points per \$1,000 of Per Pupil Revenue								
	Reading Math							
State	1992 NAEP Reading Scale Score Points Per \$1,000 of 1992 Inflation- Adjusted Per Pupil Revenue	2019 NAEP Reading Scale Score Points Per \$1,000 of 2018 Per Pupil Revenue	1992 NAEP Math Scale Score Points Per \$1,000 of 1992 Inflation- Adjusted Per Pupil Revenue	2019 NAEP Math Scale Score Points Per \$1,000 of 2018 Per Pupil Revenue				
Florida	20.4	21.0	21.0	23.0				
Kentucky	25.6	17.8	25.8	19.2				

In 1992, Florida scored 20.4 NAEP Scale Score Points for each \$1,000 it spent on each pupil (See Table 3, which covers NAEP Grade 4 Reading). Kentucky was a lot more efficient at that time than Florida, achieving 25.6 NAEP Scale Score Points for each \$1,000 of per pupil revenue. However, Kentucky didn't maintain that efficiency.

During the 2017-18 school term, the NAEP Scale Score per-dollar performance in Florida improved

slightly to 21.0 points per \$1,000 of per pupil revenue while Kentucky's seriously decayed to only 17.8 points per \$1,000 of per pupil revenue.

Simply put, Kentucky's educational efficiency in reading suffered a serious decline while Florida posted an improvement that put the Sunshine State ahead of Kentucky for bang for the buck as of 2019.

The same sorts of shifts occurred in bang for the buck for math with Florida showing a larger improvement in bang for the buck compared to its small, but also positive, improvement in reading.

Overall, it's clear that a big increase in school choice in Florida is associated with a notable increase not only in public school academic performance but also with much better employment of education dollars by those public schools.

School choice-poor Kentucky shows the opposite trend in efficiency and notably less academic improvement as well.

Just spending more on education doesn't mean you get what you should – better education for students. Despite what anti-choice doom-and-gloomers would have us believe, it's better education for students – not just measuring dollars spent – we really need to value.

Clearly, real and credible results indicate school choice programs don't result in performance declines for public schools. Instead, it appears that competition created by school choice programs spurs the public school system to better performance.

And that's why Kentucky needs solid implementation of HB 563 from the 2021 session of the Kentucky General Assembly rather than just more poorly targeted spending on an increasingly inefficient public school system that has already shown it isn't likely to improve without some external stimulus.

– Richard G. Innes is an education analyst at the Bluegrass Institute for Public Policy Solutions, Kentucky's free market think tank. (May 2021)

Attachment A

Details of the Funding and Bang for the Buck Data

The following expanded tables provide the information assembled to create Tables 2 and 3 in the main body of this paper.

Table A-1

Kentucky and Florida Reading: Total Public School Revenue for 1991-92, Total Fall Enrollment 1991, Calculated Per Pupil Revenue in 1991-92 (In Uncorrected and in Inflation-Adjusted June 2018 Dollars), Fiscal Year 2018 Per Pupil Revenue, Percentage Difference in 1992 and 2018 Revenue, 1992 and 2019 NAEP Grade 4 Reading Assessment Scale Scores, NAEP Score Points per \$1,000 of Per Pupil Funding										
Column →	1	2	3	4	5	6	7	8	9	10
State	Total Revenue 1991-92	Total K to 12 (No Pre-K) Enrollment Fall 1991	Revenue 1991-92	1991-92 Per Pupil Revenue in Inflation- Adjusted June 2018 Dollars	2018 Fiscal Year Per Pupil Revenue	by "1992 Per Pupil Revenue in Inflation-	Grade 4 Reading	NAEP 2019 Grade 4 Reading Scale Score	NAEP Scale Score Points Per \$1,000 of Inflation-Adjusted Per Pupil Revenue, 1992 (1,000 * Column 7 / Column 4)	NAEP Scale Score Points Per \$1,000 of 2018 Per Pupil Revenue, 2019 (1,000 * Column 8 / Column 5)
Florida	\$10,810,522,000	1,905,347	\$5,674	\$10,198	\$10,715	105.1%	208	225	20.4	21.0
Kentucky	\$2,939,351,000	634,098	\$4,635	\$8,331	\$12,444	149.4%	213	221	25.6	17.8
Data Source	Digest of Ed Stats 1994, Table 158, Online at: https://nces.ed.gov/p ubs94/94115.pdf	Digest of Ed Stats 1994, Table 42, Online at: https://nces.ed.g ov/pubs94/94115. pdf		Calculated from Column 3 Using the US Bureau of Labor Statistics CPI Inflation Calculator. Online at: https://data.bls.gov/cgi- bin/cpicalc.pl	US Census Bureau Excel Spreadsheet, "Summary Tables, Public Elementary. Secondary Education Finances: Fiscal Year 2018, "Table 11, Online at: https://www.census.gov/programs- surveys/school- finances/tables/2018/secondary-education- finance/elsec18_sumtables.xis	Calculated	NAEP Data Expi https://www.nai ov/ndecore		Calcu	lation

The 1992 total revenue (Column 1) and Fall 1991 enrollment data (Column 2) from the 1994 edition of the Digest of Education Statistics⁶ are used here to calculate the 1992 per pupil revenue amounts shown in Column 3. (We could not locate an online edition of Public Education Finances: 1992)

Those initial 1992 per pupil revenue figures were adjusted for inflation using the Bureau of Labor Statistics' online CPI Inflation Calculator.⁷ Column 4 shows the 1991-92 revenue figures converted into inflation-adjusted June 2018 dollars.

The 2018 per pupil revenue figures in Column 5 come directly from a U.S. Census Bureau Excel spreadsheet.⁸ Fiscal Year 2018 data (2017-18 school year) is the latest data available. The 2019 numbers probably won't be released before May 2021.

Notice when you compare the inflation-adjusted revenue in Column 4 to the 2018 revenue figures in Column 5 that Kentucky moved from spending notably less than Florida to considerably more. But, as pointed out in the body of the report, Kentucky's increase was not spent nearly as efficiently as Florida's, and, as also shown in the body of the report, Florida moved ahead of the Bluegrass State for both NAEP scores and for more efficient use of tax dollars funding public education.

Column 6 shows how much real funding has grown in Florida and Kentucky since 1992. Clearly, Kentucky's revenue has increased much more than Florida's.

Columns 7 and 8 show the NAEP Grade 4 Reading Scale Scores for 1992 and 2019 extracted from the NAEP Data Explorer.⁹

Finally, Columns 9 and 10 show the NAEP Scale Score points per \$1,000 of per pupil revenue in both states for 1992 and 2019. These columns show that Florida moved from behind to ahead of Kentucky on NAEP reading.

Table A-2 provides the same information format for the math results.

Table A-2

Kentucky and Florida Math: Total Public School Revenue for 1991-92, Total Fall Enrollment 1991, Calculated Per Pupil Revenue in 1991-92 (In Uncorrected and in Inflation-Adjusted June 2018 Dollars), Fiscal Year 2018 Per Pupil Revenue, Percentage Difference in 1992 and 2018 Revenue, 1992 and 2019 NAEP Grade 4 Math Assessment Scale Scores, NAEP Math Score Points per \$1,000 of Per Pupil Funding										
Column →	1	2	3	4	5	6	7	8	9	10
State \$\dag{\psi}\$	Total Revenue 1991-92	Total K to 12 (No Pre-K) Enrollment Fall 1991	Revenue 1991-92	1991-92 Per Pupil Revenue in Inflation- Adjusted June 2018 Dollars	2018 Fiscal Year Per Pupil Revenue	"2018 Per Pupil Revenue" Divided by "1992 Per Pupil Revenue in Inflation- Adjusted Dollars," as Percentage (Column 5 / Column 4)	Math Scale	NAEP 2019 Grade 4 Math Scale Score	NAEP Math Scale Score Points Per \$1,000 of Inflation- Adjusted Per Pupil Revenue, 1992 (1,000 * Column 7 / Column 4)	NAEP Math Scale Score Points Per \$1,000 of 2018 Per Pupil Revenue, 2019 (1,000 * Column 8 / Column 5)
Florida	\$10,810,522,000	1,905,347	\$5,674	\$10,198	\$10,715	105.1%	214	246	21.0	23.0
Kentucky	\$2,939,351,000	634,098	\$4,635	\$8,331	\$12,444	149.4%	215	239	25.8	19.2
Data Source	Digest of Ed Stats 1994, Table 158, Online at: https://nces.ed.gov/p ubs94/94115.pdf	Digest of Ed Stats 1994, Table 42, Online at: https://nces.ed.g ov/pubs94/94115. pdf		Calculated from Column 3 Using the US Bureau of Labor Statistics CPI Inflation Calculator. Online at: https://data.bls.gov/cgi- bin/cpicalc.pl	US Census Bureau Excel Spreadsheet, "Summary Tables, Public Elementary- Secondary Education Finances: Fiscal Year 2018," Table 11, Online at: https://www.census.gov/programs- surveys/school- finances/tables/2018/secondary-education- finance/elsecIB_sumtables.xls	Calculated	https://www.na	lorer. Online at: tionsreportcard.g /xplore/nde		lation

Tables A-1 and A-2 reinforce the assertion made throughout this policy brief that just spending more on education doesn't mean you automatically get what you should – better education for students. Florida's example also shows that school choice is associated with notable public school test-score improvement as well as more efficient use of dollars, too.

Attachment B

Kentucky House Bill 563¹ establishes education opportunity accounts, an exciting new program to provide parents with expanded educational I choices for their children. The provisions include a lot more than just creating an opportunity for low to moderate income parents to enroll their child in a private school; the bill also includes choices within the public school system, including:

- Paying tuition to attend a private school if student lives in a county with 90,000 or more residents;
- Enrolling their child in another public school in another district;
- Providing tuition or fees for online learning programs;
- Paying for tutoring services;
- Contracting with a public school for such services as individual classes and extracurricular activities and programs;
- Paying for textbooks, software and computer hardware;
- Paying for school uniforms;
- Paying fees for assessments like AP exams and college entrance tests and for preparatory materials and courses for those assessments;
- Paying for summer education programs;
- Covering tuition and fees for technical schools and higher education such as dual credit courses;
- Paying for occupational, behavioral, physical, speech-language and audiology therapies provided by a licensed professional and for transportation to such services.

With COVID-19 creating serious educational challenges for students, including big increases in course-failure rates, ¹⁰ the assistance to parents in HB 563 is more crucial than ever.

Endnotes

- ¹ Kentucky House Bill 563: https://apps.legislature.ky.gov/recorddocuments/bill/21RS/hb563/bill.pdf.
- ² Section 183 of the Constitution of Kentucky is online in the Kentucky Legislative Research Commission website: https://apps.legislature.ky.gov/Law/Constitution/Constitution/ViewConstitution?rsn=213.
- ³ All the figures with NAEP scoring maps and Table 1 were assembled using the NAEP Data Explorer web tool. NAEP Data Explorer: https://www.nationsreportcard.gov/ndecore/xplore/nde.
- 4 NAEP 2009 Science Report Card: http://nces.ed.gov/nationsreportcard/pdf/main2009/2011451.pdf.
- ⁵ Figures 5 and 6 are extracts from the NAEP 2009 Science Report Card, Page 32.
- ⁶ The Digest of Education Statistics 1994: https://nces.ed.gov/pubs94/94115.pdf.
- ⁷ The US Bureau of Labor Statistics CPI Inflation Calculator: https://data.bls.gov/cgi-bin/cpicalc.pl.
- 8 The US Census Bureau's "SUMMARY TABLES, PUBLIC ELEMENTARY-SECONDARY EDUCATION FINANCES: FISCAL YEAR 2018" Excel Spreadsheet: https://www2.census.gov/programs-surveys/school-finances/tables/2018/secondary-education-finance/elsec18_sumtables.xls.
- 9 NAEP Data Explorer is online: https://www.nationsreportcard.gov/ndecore/xplore/nde.
- ¹⁰ See, Innes, Richard, "Evidence growing: COVID has "Drastic," adverse impacts on Kentucky education": https://bipps.org/blog/evidence-growing-covid-has-drastic-adverse-impacts-on-kentucky-education.



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