

NEPC Review: Florida Versus Kentucky: School Choice Improves Public School Performance, Too (Bluegrass Institute for Public Policy Solutions, May 2021)



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July 2021

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Summary

As an increasing number of states adopt or expand choice programs in the form of charter schools, vouchers, tuition tax-credit scholarships, and education savings accounts, questions grow about their efficacy. This review analyzes a recent report from Kentucky's Bluegrass Institute for Public Policy Solutions claiming that trends from the 1990s to 2019 on the National Assessment of Educational Progress (NAEP) exhibit sufficient evidence that choice programs catalyze significant educational improvement. The NAEP is administered to a sample of students in all 50 states every two years, and the report looks at data from two states: Florida and Kentucky. The report claims that greater improvement in NAEP scores over this time period for students in Florida, home to much school choice, as compared to students in Kentucky, home to none, demonstrates that Florida's school choice programs have been a success. The report accordingly concludes that the passage in March of Kentucky's first voucher program should be embraced as a first step in following in Florida's path. This review rejects that determination for two reasons. First, the report overlooks the intensity of Florida's focus on preparing students for annual state exams in reading and math since the implementation of its A+ Accountability Plan in 1999, which appears to have had a substantial impact on the state's NAEP scores. Second, in focusing on Florida, the report fails to acknowledge that the majority of the top 10 states with choice programs (as measured by percentage of students enrolled in charter schools) fell short of Kentucky in posting gains on NAEP over this time period.



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I. Introduction

Since the introduction of a voucher program in Wisconsin in 1990, school choice programs in the form of vouchers, charter schools, tax-credit scholarships, and educational savings accounts have proliferated in the United States. Voucher programs or similar mechanisms now exist in 23 states and the District of Columbia, and many states are launching or aggressively expanding existing choice programs. Charter schools, which are publicly funded but privately managed, currently operate in 44 states and the District of Columbia. As of 2019, at least 10 percent of students in nine states were enrolled in charter schools.

Given the surging expansion of voucher programs and charter schools, questions regarding the efficacy of choice programs have become increasingly important for policymakers to consider. What evidence is there that such programs have produced positive student outcomes? What are the fiscal effects and considerations in states that have adopted them? Do choice programs have a positive or negative rub-off effect on conventional public schools?

This review describes and analyses the methods and findings of Richard G. Innes's report *Florida versus Kentucky: School Choice Improves Public School Performance, Too*, published by the Bluegrass Institute for Public Policy Solutions in May 2021. Though unmentioned in the report, the details of the Kentucky legislation are important for context.¹ In March, the legislature overrode Governor Andy Beshear's veto to introduce an annual \$25 million program of education opportunity accounts (EOAs) funded by tax credits. The program allows students from families making no more than 175 percent above the federal poverty threshold to enroll in private schools in three counties (Jefferson, Fayette, and Kenton) or to enroll in public schools in districts other than their own throughout the state.²

II. Findings and Conclusions of the Report

The report contends that as Kentucky stakeholders consider the merits of new legislation introducing school choice options within the state, they should look to outcomes in other states, specifically Florida, as evidence supporting the expansion of school choice options.³ The report argues that scores on the National Assessment for Educational Progress (NAEP) in Kentucky, which until now has had no school choice programs, and Florida, which is home to several school choice programs, provide “solid evidence” that choice boosts academic outcomes. Furthermore, the report contends that Florida’s NAEP data show that public schools “prospered notably” as choice mechanisms grew extensively within that state.⁴ The report concludes that Florida’s experience provides sufficient evidence to support school choice in Kentucky.

To document changes in NAEP scores in these two states, the report selects 1992 and 2019 for its analysis of Grade 4 reading and math results; 1998 and 2019 for its analysis of Grade 8 reading results; and 1990 and 2019 for its analysis of Grade 8 math results. No rationale—other than the qualification that NAEP reporting on reading for students in Grade 8 at the state level did not commence until 1998—is provided to explain why these specific years were selected as the snapshot periods under review.

The report uses a relative comparison approach to describe the performance of Florida and Kentucky on NAEP against all other states in the nation for the benchmark years and 2019. Data on the number of states that performed above, at, or below Kentucky and Florida on NAEP are included in a series of figures for the benchmark years and 2019. For each year and given subject area, the number of states that performed statistically significantly higher (above), not statistically significantly higher (at), and statistically significantly lower (below) the comparison state is listed. In addition to this general comparative data for Grades 4 and 8 in the subject areas of reading and math, the report includes analysis of 2009 NAEP data for Grade 8 science: While Florida performed below the national average, the state’s Hispanic students did better than their counterparts across the country; while Kentucky performed above the national average, the state’s White students underperformed.⁵

For Grade 4 reading, the report documents that in 1992, 26 states outscored Florida on NAEP, while only one state scored above Florida in 2019. For Grade 4 math, in 1992, 24 states had statistically significantly higher scores than Florida, while in 2019 no state outperformed it. The report contends that these and similar data provide sufficient evidence to document that school choice mechanisms result in improved student learning outcomes. The report also offers data for Black and Hispanic subgroups, again finding that expanded school choice options improved student performance.⁶

Finally, the report includes a section on per-pupil fiscal expenditures in Kentucky and Florida to make claims regarding “efficiency” and the use of public dollars in education. It selects two years, 1992 and 2018, and reports on per-pupil expenditures for each state in each year. The report notes that in 1992, Kentucky spent \$1,039 less per student than Florida, but that in 2018, Kentucky was spending \$1,729 more per student than Florida. The report then divides these per-pupil spending amounts by the change in points on NAEP from year A to year B to develop a “bang for the buck” efficiency matrix. Using this method, the report

claims that Florida was more “efficient” in improving student outcomes than Kentucky. “If funding were the critical element in improving education results,” the report states, “Kentucky should outperform Florida on recent NAEP assessments. But it just hasn’t happened.”⁷

III. The Report’s Rationale for Its Findings and Conclusions

The rationale for the report’s conclusion that school choice systems produce significant academic improvement derives from a comparative analysis of NAEP scores for Kentucky and Florida from the 1990s to 2019. Since the scores for Florida’s fourth graders in reading and math improved to a greater degree from 1992 to 2019 than the scores for Kentucky’s fourth graders over this time period, the report concludes that the difference must be due to substantial school choice in Florida and its absence in Kentucky. The report notes that while NAEP scores in math for eighth graders in both states increased at nearly the same rate from 1990 to 2019, NAEP scores in reading for eighth graders in Florida increased more so than those of their counterparts in Kentucky from 1998 to 2019. The report claims that no harm was done to public schools in Florida as the system for school choice grew and cited NAEP scores to document this.

IV. The Report’s Use of Research Literature

The report does not cite any research literature. Given the heavy emphasis placed on test preparation in Florida since the implementation of the state’s A+ Accountability Plan in 1999 and given the well-documented trouble of measuring the effectiveness of school systems by test scores alone, this shortcoming amounts to a significant weakness of the report. Under Governor Jeb Bush, Florida became the nation’s standard-bearer for high-stakes testing.⁸

The report’s claim that Florida’s system of school choice has caused no harm contradicts findings that the A+ Accountability Plan, which was developed in conjunction with the expansion of school choice in Florida, has caused significant damage in narrowing curricula, reducing schools to test-prep centers, and causing students, teachers, and administrators alike considerable stress.⁹

According to the A+ Accountability Plan, schools posting low student scores on the annual Florida Comprehensive Achievement Tests (FCATs) risked losing students to private schools or non-failing public schools (the FCAT was replaced by the Florida Standards Assessment in 2015). Researchers have documented that high-performing schools nevertheless suffer, too, as parents as well as teachers and administrators focused on the letter grade earned by schools. Dan Goldhaber and Jane Hannaway write in a 2004 study:

The instructional focus in both A schools and F schools narrowed significantly, according to our subjects. This response from the A schools was somewhat surprising. The principals in A schools explained that parents paid attention to

and cared about the grade, as did the teachers, which resulted in pressure to do whatever it might take to perform well on the test. One principal stated, “Even though they know better than to believe that any one test can show how good we are, they still want us to get an A.” . . . Teachers and students feel the greatest tension. Teachers at one A school cried when describing the pressure they felt to maintain their school’s grade. They also reported, as did parents, the tremendous pressure that students experience. One parent stated, “My daughter gets so nervous at testing time that she pulls her hair out.” While most A school teachers believed that standards and some level of accountability were good for schools, they felt the system had “gone from one extreme to the other,” at a high cost to education.¹⁰

While NAEP and state exams like the FCAT are distinct—the first given every two years to a sample of students in fourth, eighth, and twelfth grades and the latter given every year in grades three through eight and later grades, as well—a heavy test-prep culture tailored to the latter does stand to influence the results on the former. With a state like Florida so focused on test preparation since 1999, the effects of such emphasis warrant significant attention in a report invoking Florida as a model state for school reform.

In addition to Goldhaber and Hannaway, several other scholars as well as journalists have written in detail about the impact of substantial test prep.¹¹ Of particular concern has been the unintended consequences of high-stakes testing for non-targeted subjects, as documented by Benjamin W. Arold and M. Danish Shakeel.¹² Better reading and math results may indeed come at the expense of instruction in science, history, and other subjects. In fact, the report does note that Florida lagged behind Kentucky in science on the 2009 NAEP exam for Grade 8. The same was also true that year for Grade 4. In both cases, Kentucky posted statistically significantly better results in science. Results on the subsequent administrations of the NAEP science exam in 2011 and 2015 reflected this divergence.¹³

Substantial research also applies to the impact of school choice itself, with cautionary assessments of communal, academic, and fiscal ramifications.¹⁴ The report draws on none of such research to address these matters.

V. Review of the Report’s Methods

Given that the object of this report is to prove that systems of school choice lead to better academic outcomes, the focus on Florida falls far short of rigorous. More states with significant school choice programs should be studied. Moreover, any analysis of NAEP scores should acknowledge the difficulty of comparing states without adjusting for economic need, race, English proficiency, and similar demographic factors.¹⁵

Enrollment in charter schools is an effective proxy for school choice activity. We accordingly use charter school enrollment to gauge school choice activity. About six percent of the country’s 57 million K-12 students attended charter schools in 2019, with 10 percent of students

or more in nine states attending charter schools.¹⁶ While vouchers and tuition tax-credit scholarships have been gaining popularity, only one percent of the country's 57 million K-12 students made use of them in 2019.¹⁷ Florida and Kentucky stand out in both regards as polar opposites: While no students currently attend charter schools or use vouchers in Kentucky, 11 percent of Florida's K-12 students were enrolled in charter schools in 2019 and five percent used tuition tax-credit scholarships or vouchers to attend private schools.¹⁸

Of the 10 states with the highest percentage of students enrolled in charter schools in 2019—ranging from Pennsylvania with 8.4 percent and Michigan with 10 percent to Colorado with 13.7 percent and Arizona with 18.3 percent—Florida is an exception, posting greater improvement on NAEP over the time period in the report than the nine other states in Grade 4 reading, Grade 4 math, and Grade 8 reading while posting greater improvement in Grade 8 math than all but one state (see appendices).¹⁹ Yet Kentucky does nearly as well, posting greater improvement than most of these states in all subjects but Grade 8 reading (see appendices). Adjustments for demographic factors stand to alter this picture but not substantially, given recent data.²⁰

In the case of all states administering NAEP in the benchmark years (mandatory administration of NAEP did not begin until No Child Left Behind became law in 2003), there was no statistically significant association between charter school enrollment and NAEP scores between 1992 and 2019 for Grade 4 reading and math (see appendices). For Grade 8 reading between 1998 and 2019, the absence of NCES data for charter school enrollment in the benchmark year precludes analysis (in the earlier benchmark years, there were no charter schools, except for one in Minnesota, founded in 1992). For Grade 8 math between 1990 and 2019, there was a statistically significant but weak positive association between charter school enrollment and NAEP scores (see appendices). Adjustments for demographic factors stand to alter this picture, too, but not substantially, given recent data.²¹ The weak positive association between charter school enrollment and Grade 8 math NAEP scores nevertheless pales in comparison to the individual association exhibited by Florida, suggesting that Florida's NAEP story involves far more than a robust system of school choice.

VI. Review of the Validity of the Findings and Conclusions

The findings and conclusions of this report are too narrow. In confining the analysis to just two states at two points in time with reference to NAEP reading and math results, the report fails to acknowledge the implications of Florida's intense emphasis on high-stakes testing. The report likewise overlooks Kentucky's greater rate of improvement on NAEP than that of the majority of the country's 10 states with the highest percentage of students in charter schools.

VII. Usefulness of the Report for Guidance of Policy and Practice

Policymakers should not turn to this report for guidance on implementing or expanding school choice programs. Much more evidence than this report provides is necessary for drawing clear lessons about the implications of Florida's school choice strategy for Kentucky or any state.

Appendix A

Table A.1

	Percentage of Students in Charter Schools, 2019	Grade 4 Reading, 1992	Grade 4 Reading, 2019	Change in Points	Change in Percentage
Florida	11.0	208	225	17	8.2
California	10.6	202	216	14	6.9
Nevada	10.6	208	218	10	4.8
Kentucky	0.0	213	221	8	3.8
Colorado	13.7	217	225	8	3.7
Arizona	18.3	209	216	7	3.3
Louisiana	12.0	204	210	6	2.9
Delaware	11.6	213	218	5	2.3
Utah	11.5	220	225	5	2.3
Michigan	10.0	216	218	2	0.9
Pennsylvania	8.4	221	223	2	0.9

Percentage of public school students in 2019 enrolled in charter schools in Kentucky and the 10 states with the largest choice programs; and NAEP scores for reading in Grade 4 in 1992 and 2019 unadjusted for demographic factors and expressed in raw numbers on a scale of 0 to 500, with a national average of 217 in 1992 and 220 in 2019. States are sequenced by change in percentage of NAEP scores. (Sources: National Center for Education Statistics (2021), *Public Charter School Enrollment*, retrieved June 22, 2021, from <https://nces.ed.gov/programs/coe/indicator/cgb>; and NAEP Data Explorer, retrieved June 11, 2021, from <https://www.nationsreportcard.gov/ndecore/landing>)

Table A.2

	Percentage of Students in Charter Schools, 2019	Grade 4 Math, 1992	Grade 4 Math, 2019	Change in Points	Change in Percentage
Florida	11.0	214	246	32	15.0
Louisiana	12.0	204	231	27	13.2
California	10.6	208	235	27	13.0
Kentucky	0.0	215	239	24	11.2
Arizona	18.3	215	238	23	10.7
Delaware	11.6	218	239	21	9.6
Colorado	13.7	221	242	21	9.5
Pennsylvania	8.4	224	244	20	8.9
Utah	11.5	224	244	20	8.9
Michigan	10.0	220	236	16	7.3
Nevada	10.6	N/A	236	N/A	N/A

Percentage of public school students in 2019 enrolled in charter schools in Kentucky and the 10 states with the largest choice programs; and NAEP scores for math in Grade 4 in 1992 and 2019 unadjusted for demographic factors and expressed in raw numbers on a scale of 0 to 500, with a national average of 220 in 1992 and 241 in 2019. States are sequenced by change in percentage of NAEP scores. (Sources: National Center for Education Statistics (2021), *Public Charter School Enrollment*, retrieved June 22, 2021, from <https://nces.ed.gov/programs/coe/indicator/cgb>; and NAEP Data Explorer, retrieved June 11, 2021, from <https://www.nationsreportcard.gov/ndecore/landing>)

Table A.3

	Percentage of Students in Charter Schools, 2019	Grade 8 Reading, 1998	Grade 8 Reading, 2019	Change in Points	Change in Percentage
Florida	11.0	255	263	8	3.1
California	10.6	252	259	7	2.8
Delaware	11.6	254	260	6	2.4
Louisiana	12.0	252	257	5	2.0
Utah	11.5	263	267	4	1.5
Colorado	13.7	264	267	3	1.1
Kentucky	0.0	262	263	1	0.4
Nevada	10.6	258	258	0	0.0
Arizona	18.3	260	259	-1	-0.4
Michigan	10.0	N/A	263	N/A	N/A
Pennsylvania	8.4	N/A	264	N/A	N/A

Percentage of public school students in 2019 enrolled in charter schools in Kentucky and the 10 states with the largest choice programs; and NAEP scores for reading in Grade 8 in 1998 and 2019 unadjusted for demographic factors and expressed in raw numbers on a scale of 0 to 500, with a national average of 264 in 1992 and 263 in 2019. States are sequenced by change in percentage of NAEP scores. (Sources: National Center for Education Statistics (2021), *Public Charter School Enrollment*, retrieved June 22, 2021, from <https://nces.ed.gov/programs/coe/indicator/cgb>; and NAEP Data Explorer, retrieved June 11, 2021, from <https://www.nationsreportcard.gov/ndecore/landing>)

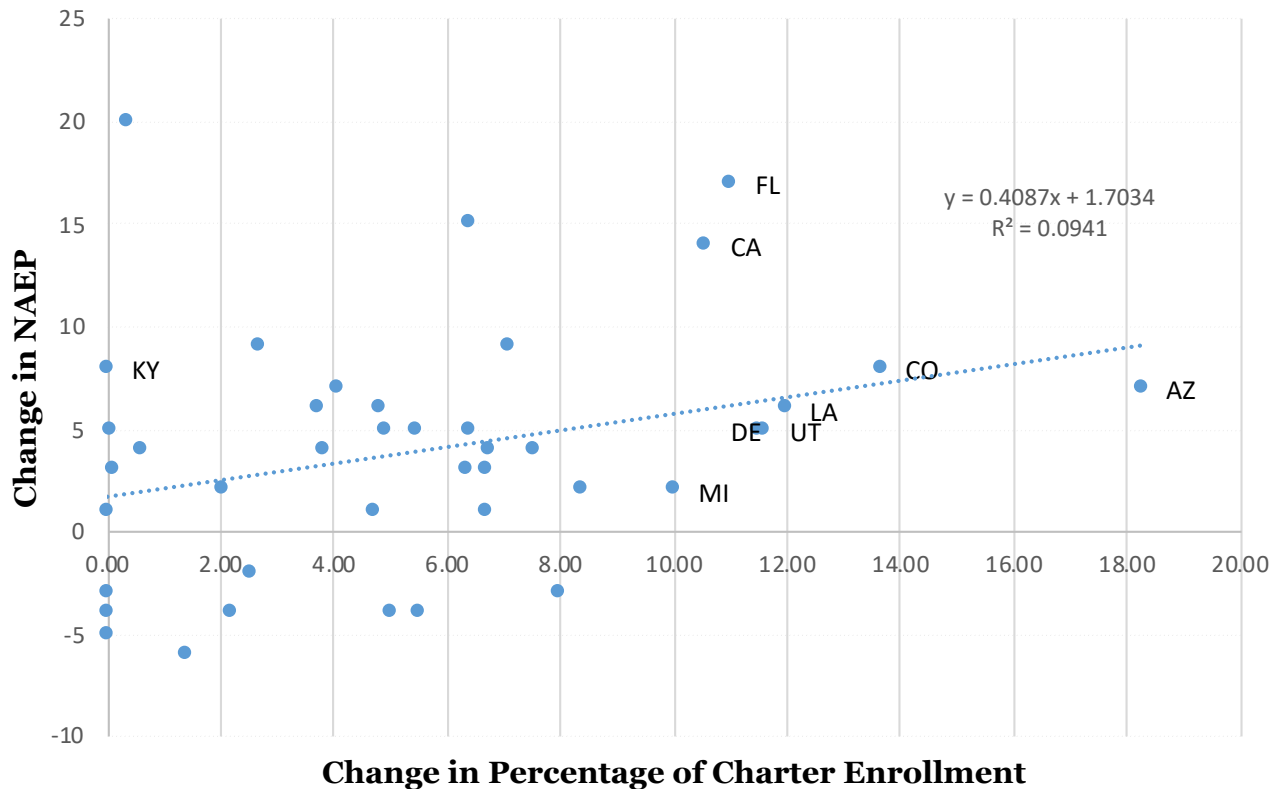
Table A.4

	Percentage of Students in Charter Schools, 2019	Grade 8 Math, 1998	Grade 8 Math, 2019	Change in Points	Change in Percentage
Louisiana	12.0	246	272	26	10.6
Florida	11.0	255	279	24	9.4
Kentucky	0.0	257	278	21	8.2
California	10.6	256	276	20	7.8
Arizona	18.3	260	280	20	7.7
Pennsylvania	8.4	266	285	19	7.1
Colorado	13.7	267	285	18	6.7
Delaware	11.6	261	277	16	6.1
Michigan	10.0	264	280	16	6.1
Utah	11.5	274	285	11	4.0
Nevada	10.6	N/A	274	N/A	N/A

Percentage of public school students in 2019 enrolled in charter schools in Kentucky and the 10 states with the largest choice programs; and NAEP scores for math in Grade 8 in 1990 and 2019 unadjusted for demographic factors and expressed in raw numbers on a scale of 0 to 500, with a national average of 263 in 1992 and 282 in 2019. States are sequenced by change in percentage of NAEP scores. (Sources: National Center for Education Statistics (2021), *Public Charter School Enrollment*, retrieved June 22, 2021, from <https://nces.ed.gov/programs/coe/indicator/cgb>; and NAEP Data Explorer, retrieved June 11, 2021, from <https://www.nationsreportcard.gov/ndecore/landing>)

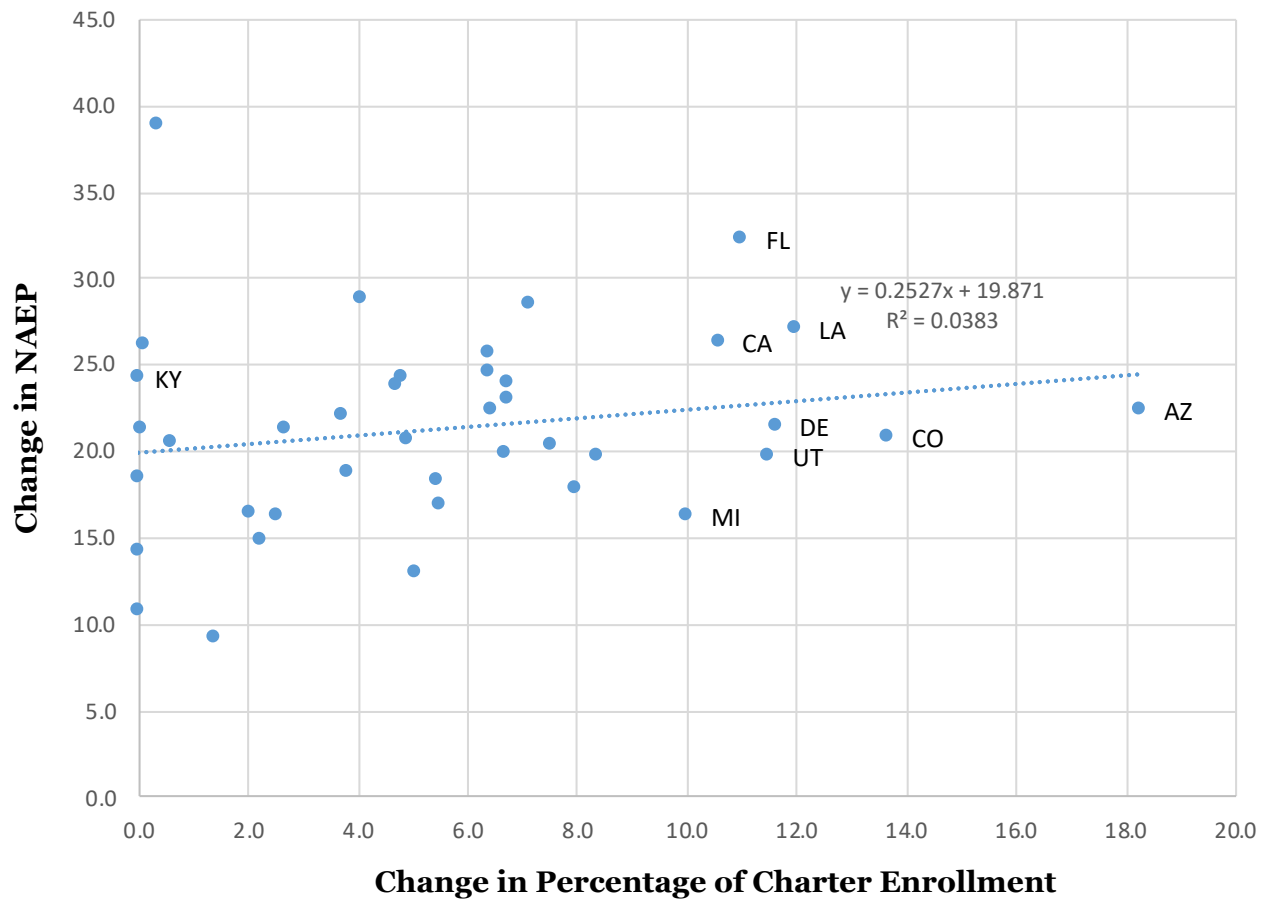
Appendix B

Figure B.1



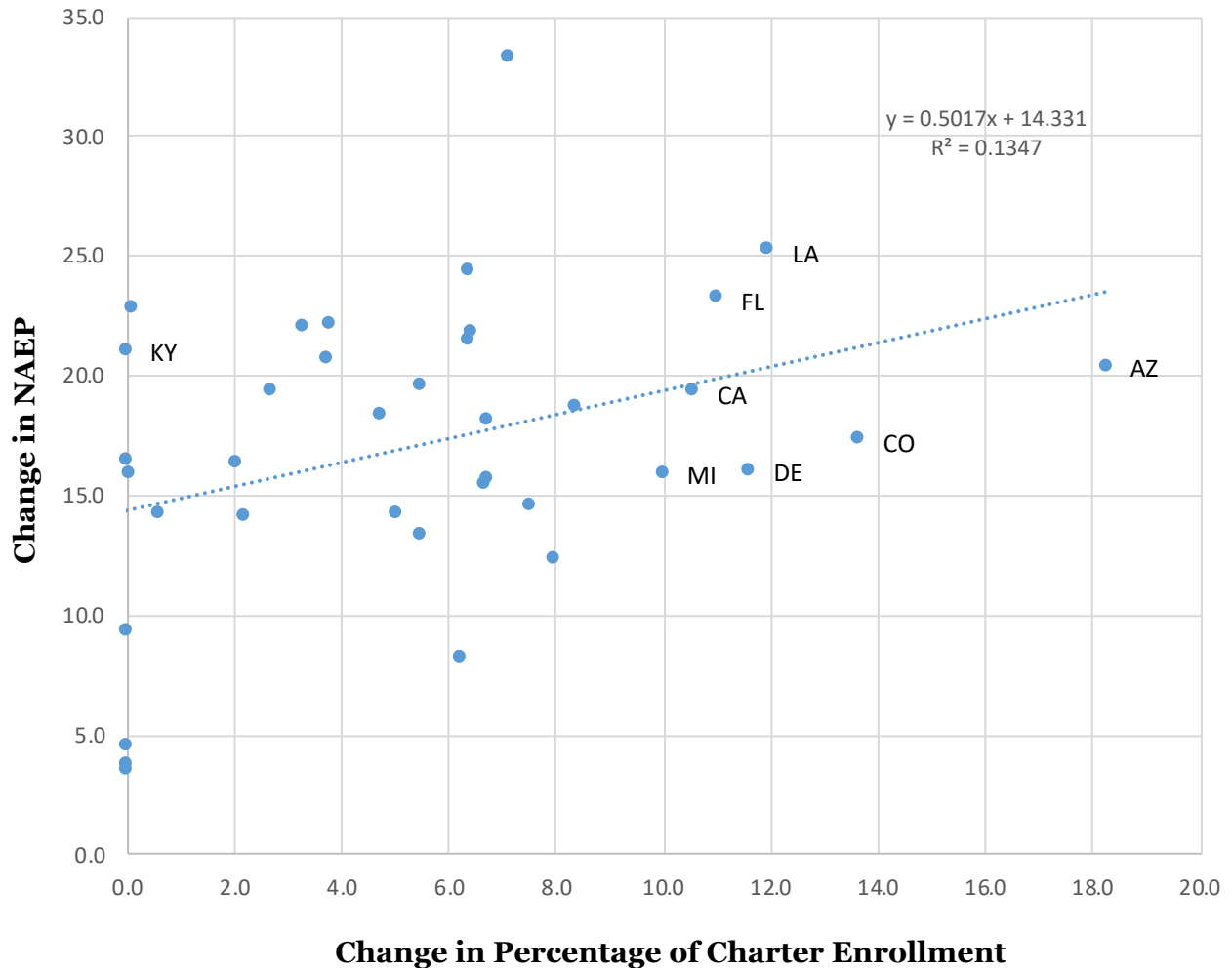
Change in charter school enrollment from 1992 to 2019 by state (on the x-axis) associated with change in NAEP scores for Grade 4 reading (on the y-axis). With a p-value of 0.051, the association between charter school enrollment and NAEP scores does not meet the standard for statistical significance. As NAEP was administered in only 41 states for Grade 4 reading in 1992, that is the number of states in this sample. Labels are for the states listed in the tables above. (Sources: National Center for Education Statistics (2021), *Public Charter School Enrollment*, retrieved June 22, 2021, from <https://nces.ed.gov/programs/coe/indicator/cgb>; and NAEP Data Explorer, retrieved June 11, 2021, from <https://www.nationsreportcard.gov/ndecore/landing>)

Figure B.2



Change in charter school enrollment from 1992 to 2019 by state (on the x-axis) associated with change in NAEP scores for Grade 4 math (on the y-axis). With a p-value of 0.226, the association between charter school enrollment and NAEP scores does not meet the standard for statistical significance. As NAEP was administered in only 40 states for Grade 4 math in 1992, that is the number of states in this sample. Labels are for the states listed in the tables above. (Sources: National Center for Education Statistics (2021), *Public Charter School Enrollment*, retrieved June 22, 2021, from <https://nces.ed.gov/programs/coe/indicator/cgb>; and NAEP Data Explorer, retrieved June 11, 2021, from <https://www.nationsreportcard.gov/ndecore/landing>)

Figure B.3



Change in charter school enrollment from 1990 to 2019 by state (on the x-axis) associated with change in NAEP scores for Grade 8 math (on the y-axis). With a p-value of 0.027, the association between charter school enrollment and NAEP scores does meet the standard for statistical significance. With an R-squared of 0.135, this association between charter school enrollment and NAEP scores was nevertheless weak, with only 13.5 percent of the variation in NAEP scores explained by charter school enrollment. With a slope of 0.5, an increase in charter school enrollment by one percentage point was associated with 0.5 increase in NAEP points for Grade 8 math over this time period. As NAEP was administered in only 37 states for Grade 8 math in 1990, that is the number of states in this sample. Labels are for the states listed in the tables above. (Sources: National Center for Education Statistics (2021), *Public Charter School Enrollment*, retrieved June 22, 2021, from <https://nces.ed.gov/programs/coe/indicator/cgb>; and NAEP Data Explorer, retrieved June 11, 2021, from <https://www.nationsreportcard.gov/ndecore/landing>)

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