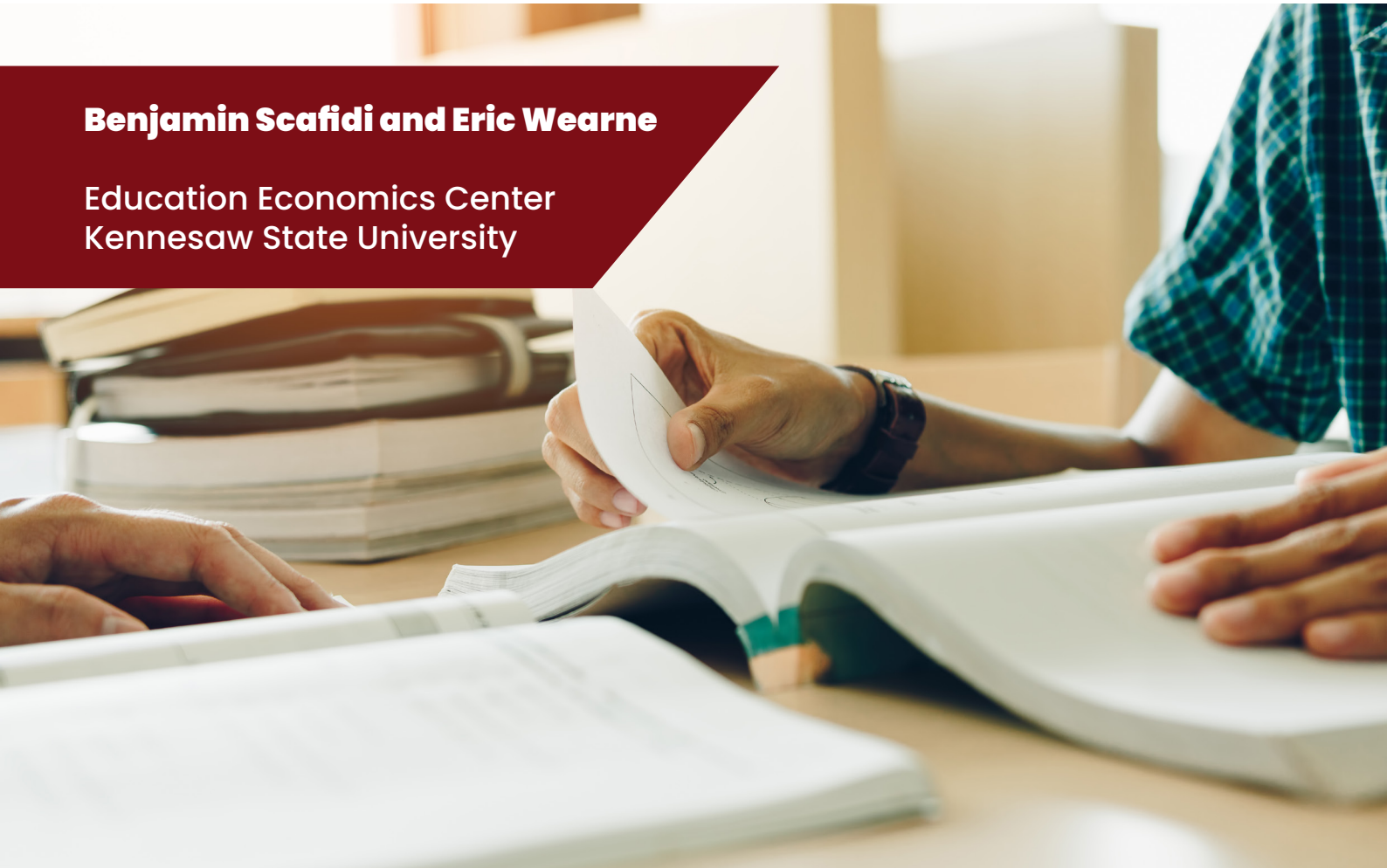




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INPUTS OR OUTCOMES? RANKING STATE CHARTER SCHOOL ECOSYSTEMS

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TABLE OF CONTENTS

I. Introduction	3
II. NACSA Rankings of “State Policy Scores” and NAPCS Rankings of “State Public Charter School Laws”	7
III. Our Approach to Ranking State Charter School Ecosystems	13
IV. The EFI Charter Ecosystem Rankings (ECER)	22
V. Future Work	26
Appendix: Comparing the NACSA Rankings to the EFI Charter Ecosystem Rankings (ECER)	30
Closing notes	33

I. INTRODUCTION



Outside of biological realms, ecosystems are “any system or network of interconnecting and interacting parts.”¹ In states that permit charter schools, there is a charter school ecosystem that is comprised of governing laws and regulations along with the actors in the charter school space—charter school boards, leaders, educators, education service providers (ESPs), charter network operators (CNOs), and families. Each of these “parts” of a state’s charter school ecosystem must work together to provide K-12 educations to students in charters. That is, each of the parts is needed for charter schools to even exist at all.

Laws and regulations determine what is permissible for families and charter schools—and they also yield incentives for each. Some laws and regulations make it easier for charter schools to be created and for parents to have more choice, some provide incentives for charter schools to be effective, while other laws and regulations hinder the accessibility and success of charters. Relevant laws and regulations that impact the actors in charter school ecosystems include statutes and regulation regarding flexibility, accountability, governance, funding, personnel, authorizing, etc.

Charter governing boards, charter school heads and educators, ESPs, and CNOs that work within each state’s legal and regulatory framework directly impact the quality and diversity of educational and social offerings available to families in the charter school space. Families have the final say as to whether their children are educated in the charter sector and in which charter school. Of course, families are constrained by legal and regulatory environments and the effectiveness and creativity of the charter schools present in their communities. Finally, families also have the final say with respect to how engaged they choose to be in their children’s charter schools and in their overall education. How involved parents choose to be is, in part, also a function of laws and regulations and the effectiveness of charter schools themselves.

Each of these parts—from state and local regulations and laws to charter school leaders and educators to charter school families—work together in state charter school ecosystems with the goal of providing children access to the highest possible educational and social experiences during their K-12 education, to as many children whose families wish to choose a charter school.

The goal of this concept paper is to use readily accessible information to construct a ranking of state charter school ecosystems. Here, state charter school ecosystems are ranked according to their outcomes for students; specifically, states are ranked on the **accessibility and **academic performance** of their charter schools. We call our state rankings: The EFI Charter Ecosystem Rankings (ECER—pronounced eck-er) for short.**

In a famous quote from his 1932 dissenting opinion in *New State Ice Co. v. Liebmann*, Justice Louis Brandeis said, “a single courageous State may, if its citizens choose, serve as a laboratory; and try novel social and economic experiments without risk to the rest of the country.”



The state ranking that we construct in this paper points state **policymakers, voters, researchers, and charter advocates** to the states that have the **best charter ecosystems**—for students.

Over 40 states have served as laboratories for charter schools. State charter school ecosystems vary widely across the country, with some states making it relatively easy to start charters; some states limiting the number of charters; some states aggressively closing charters deemed as low performing, some providing more flexibility for leaders and educators, etc. By ranking state charter school ecosystems in terms of their impacts on outcomes—in terms of both accessibility and value-added learning gains for students, we direct charter school advocates, voters, and policymakers to the best charter school states in terms of their outcomes for students. Policymakers may then emulate the legal and regulatory structures in the highest performing states and design charter school laws and policies that have proven to be successful.

Our approach is in stark contrast to the methodologies used by the National Association of Charter School Authorizers (NACSA, 2015) and the National Association for Public Charter Schools (NAPCS, 2020) to rank states based on their policies.² Both NACSA and NAPCS judge states—not based on outcomes for students—but based on each state’s fidelity to arrays of charter policies created by experts.

The state ranking that we construct in this paper points state policymakers, voters, researchers, and charter advocates to the states that have the best charter ecosystems—for students.

It is our hope that state policymakers and charter school advocates will be more likely to seek to mimic the state policies that have actually produced the best outcomes for students—and not just guess and pick policies that “sound good” to experts. We also hope that NACSA, NAPCS, and others adopt the *EFI Charter Ecosystem Rankings* (ECER) in order to point policymakers and the charter school community to the policies in the highest performing ECER states and away from policies adopted in the lowest performing states—whatever those policies may be.

The goal of charter school movement is to have **high performing charter schools** available to every family who wants one.

The rest of this concept paper is organized as follow. Section II describes the NACSA “State Policy Score” rankings and the NAPCS “Ranking of State Public Charter School Laws” that are based on policy inputs, while section III describes our methodology to rank state charter school ecosystems based on charter school outcomes for students. Section IV presents a Beta version of the *EFI Charter Ecosystem Rankings*. This version of the rankings is a Beta version because it uses only easily accessible data on the accessibility and performance of charters. This easily accessible data is not ideal in that the accessibility information is dated and the performance data is limited. In section V, we outline future work that must be done in order to construct a complete and contemporary EFI ranking of states. An appendix shows the differences between the Beta version of the ECER rankings and NACSA’s ranking of states based on “State Policy Scores” and the NAPCS rankings based on “21 Essential Components.” The appendix shows that both the NACSA and NAPCS rankings of states point policymakers, advocates, and others to states that have poor charter school accessibility and/or performance. In addition, some states with relatively high charter school accessibility and performance are deemed as having poor charter school policies by NACSA and NAPCS.

We believe that the analyses and rankings by NACSA and NAPCS have it backwards. Policies that experts deem as “good” are not the goal of charter school movement. The goal of charter school movement is to have high performing charter schools available to every family who wants one. As such, laws and regulations should be chosen that serve families and students best in terms of the accessibility and performance of charter schools. This report allows readers to clearly see which states are best in terms of charter school access and success—and it is these states have laws and regulations that are, therefore, worth emulating.

II. NACSA RANKINGS OF “STATE POLICY SCORES” AND NAPCS RANKINGS OF “STATE PUBLIC CHARTER SCHOOL LAWS”



In 2015, the National Association of Charter School Authorizers (NACSA) issued a report, *“On the Road to Better Accessibility, Autonomy, and Accountability: State Policy Analysis 2015.”*³ Table 1, on page 9, of their report provides a ranking of each state’s “charter school policy.” Specifically, states are ranked according to their adherence to eight policies that NACSA deems wise and appropriate. Thus, NACSA is ranking state charter school ecosystems based on their policy inputs. According to NACSA’s 2015 report,

This is not a rating of the quality of the charter schools in each state, for state laws are only one factor affecting school quality. It is also not a rating of the actions of the authorizers in each state, for authorizers often develop practices that work around weaknesses or vagaries in state law. Rather, this is a publication that presents policies that **NACSA believes** would strengthen every state charter school law based on experience (emphasis added).

NACSA's analysis is based on eight specific policies, four related to authorizer "quality" and four related to school "quality." These eight policies are analyzed for each state on a rubric and the resulting scores produce NACSA's rankings. These eight policies are:



Authorizer Quality

- 1. Who Authorizes (alternative authorizer):** every charter school can be authorized by at least one body other than the local school district
- 2. Authorizer Standards:** the state endorses national professional standards for quality charter school authorizing
- 3. Authorizer Evaluations:** a state entity can evaluate authorizers on their practices or the performance of their charter schools—regularly or as needed
- 4. Authorizer Sanctions:** authorizers face consequences if they have poor practices or a high proportion of persistently failing schools



School Quality

- 5. Reports won Performance:** every authorizer publishes an annual report on the academic performance of the charter schools it oversees
- 6. Performance Management and Replication:** every charter school is bound by a charter contract and a set of performance expectations; high-performing charter schools are encouraged to replicate
- 7. Renewal Standard:** authorizers can close charter schools that don't meet their academic performance expectations
- 8. Default Closure:** charter schools that perform below a certain minimum threshold are closed⁴

Scoring on the NACSA rubric is calculated as follows:

- A state with no relevant policy receives 0 on that measure.
- Partial policies receive 1 or 2 points, depending on their quality.
- Policies that mirror NACSA’s recommendations receive 3 points.
- Three of the eight policies are higher priorities and receive double “weighting.”
- Five policies can produce 3 points each, and the three higher priority policies are worth 6 points each.
- The resulting rubric provides a total of 33 points.⁵

In 2015, NACSA’s rating produced the following results:

Table 1. NACSA 2015 Charter School State Policy Analysis Rankings

State	Rank	State	Rank	State	Rank
Indiana	1	DC	16	California	31
Nevada	1	Maine	16	Pennsylvania	31
Ohio	3	Arizona	18	Colorado	33
Alabama	4	Florida	18	Michigan	34
Texas	5	Idaho	20	Utah	35
Minnesota	6	Connecticut	21	New York	36
Mississippi	6	Massachusetts	21	Oregon	37
Missouri	8	New Mexico	21	Iowa	38
South Carolina	8	North Carolina	21	Alaska	39
Louisiana	10	Wisconsin	21	Wyoming	39
Oklahoma	10	Illinois	26	Maryland	41
Delaware	12	New Jersey	27	Virginia	42
Hawaii	12	Rhode Island	27	Kansas	43
Georgia	14	Arkansas	29	Washington	33/NA
Tennessee	14	New Hampshire	29		



The National Association for Public Charter Schools (NAPCS) also produces its own, separate charter school law rankings, titled “Measuring Up to the Model: A Ranking of State Public Charter Schools Laws,”⁶ using a similar methodology to NACSA. NAPCS’s rankings are based on “21 essential components of a strong charter school law.” Similar to NACSA, this ranking system is scored based on a rubric allotting points for how well each state’s charter school laws meet NAPCS’s 21 essential components.⁷ These “essential components” include, for example, “Adequate Authorizer Funding,” “Comprehensive Charter School Monitoring and Data Collection Processes,” “Full-time Virtual Charter School Provisions,” among others. This approach, like the one used by NACSA, focuses on inputs rather than results. According to NAPCS,

It is important to note that **our primary focus was to assess whether and how state laws and regulations addressed the National Alliance model law**, not whether and how practices in the state addressed it... the purpose of the analyses is to encourage state laws and regulations to require best practices and guarantee charter school rights and freedoms so that state charter school movements will benefit from a supportive legal and policy environment (emphasis added).

NAPCS has produced these rankings for 11 years; its most recent rankings were published in 2020, with some revisions to their methodology. The 2020 results are reported below.

Table 2. NAPCS 2020 Charter School Law Ranking

State	Rank	State	Rank	State	Rank
Indiana	1	Georgia	16	Hawaii	31
Colorado	2	Idaho	17	West Virginia	32
Washington	3	New York	18	Oregon	33
Minnesota	4	South Carolina	19	New Jersey	34
Alabama	5	California	20	Pennsylvania	35
Mississippi	6	Utah	21	Connecticut	36
Florida	7	Oklahoma	22	Illinois	37
Louisiana	8	Ohio	23	Rhode Island	38
Maine	9	Tennessee	24	Wisconsin	39
DC	10	New Mexico	25	Virginia	40
Nevada	11	New Hampshire	26	Iowa	41
Massachusetts	12	Missouri	27	Wyoming	42
Arizona	13	Michigan	28	Alaska	43
North Carolina	14	Texas	29	Kansas	44
Delaware	15	Arkansas	30	Maryland	45

In 1759 in the *Theory of Moral Sentiments* Adam Smith wrote critically of such a focus on prescriptive processes and inputs:

The man of system, on the contrary, is apt to be very wise in his own conceit; and is often so enamoured with the supposed beauty of his own ideal plan of government, that he cannot suffer the smallest deviation from any part of it. He goes on to establish it completely and in all its parts, without any regard either to the great interests, or to the strong prejudices which may oppose it.

In the roughly two and a half centuries since **Adam Smith** more formally **founded** the discipline of **economics**, economists have been analyzing **outcomes of policy**.

He seems to imagine that he can arrange the different members of a great society with as much ease as the hand arranges the different pieces upon a chess-board. He does not consider that the pieces upon the chess-board have no other principle of motion besides that which the hand impresses upon them; but that, in the great chess-board of human society, every single piece has a principle of motion of its own, altogether different from that which the legislature might chuse to impress upon it. If those two principles coincide and act in the same direction, the game of human society will go on easily and harmoniously, and is very likely to be happy and successful. If they are opposite or different, the game will go on miserably, and the society must be at all times in the highest degree of disorder.

The two prior efforts at ranking states based on their charter school policies based their rankings solely on policy inputs. In the roughly two and a half centuries since Adam Smith more formally founded the discipline of economics, economists have been analyzing **outcomes** of policy. This report endeavors to follow in this tradition and evaluate the effectiveness of charter school ecosystems in each state based on their **outcomes**.

III. OUR APPROACH TO RANKING STATE CHARTER SCHOOL ECOSYSTEMS



As detailed in the previous section, NACSA has ranked states based on their fidelity to eight charter school policies, and NAPCS has ranked states based on 21 “essential components” of state charter school law.

Our approach to ranking state charter school ecosystems is very different than NACSA and NAPCS. These prior efforts ranked states based on having charter school policies that experts deemed as wise. Our approach ranks states based solely on outcomes for students. The two outcomes that we use are accessibility and value-added learning gains. Thus, states with charter schools that are more available to students and states with charter schools that produce higher value-added learning gains for students are ranked higher using our approach. States that do not have much accessibility to charter schools and/or have charters that produce lower value-added learning gains for students are ranked lower.

We have four outcome components in this Beta version of the *EFI Charter Ecosystem Rankings*. The two accessibility outcomes that determine the rankings are: (1) the percent of public school students in each state who are enrolled in charter schools; and (2) the percent of public school students in each state who reside in a zip code with a charter school. The two value-added outcomes are: the statewide average of value-added learning gains for charter school students in (3) Reading and (4) Mathematics. We discuss each of these four components in turn.



(1) The percent of public school students in each state who are enrolled in charter schools

This first accessibility measure ranks all states in terms of their share of public school students who attend charter public schools. We deem this component of our ranking as an accessibility measure, because as charter schools become more accessible then more students are able to attend them. However, it is also a quality measure. A long research literature suggests that families choose schools for their children for a variety of reasons, including safety, preparation for college, curricular and non-curricular offerings, etc.⁸ In addition, students have different needs and interests, and to the extent that charter schools increase the diversity of academic and other offerings, more families will choose them. Thus, states with a larger proportion of students choosing charter schools clearly measures charter schools being more accessible to students, but it also measures an aspect of charter school quality. As an example, charter schools could be very close to where many students reside in a given state, but if they are not of high quality, then their enrollments will be relatively low.



(2) The percent of public school students in each state who reside in a zip code with a charter school

Our second component is a direct, albeit incomplete, measure of accessibility. This second component is the percent of public school students who reside in the same zip code as a charter school. There is no perfect measure of accessibility given commuting patterns, traffic, etc. Thus, having a charter school located in a given zip code may not mean the charter school is necessarily easily accessible to all students in the zip code. Second, a charter school in an adjacent zip code may be very accessible for some students. For these two reasons, this measure of accessibility is direct, but it is not a perfect measure of accessibility. Having the first measure of accessibility, described above, helps capture true accessibility as well. However, we believe this second measure of

accessibility should be a component of ranking states as well, because it gets at the statewide geographic diversity of charter schools. For example, a given state may have a few large charter schools in densely populated urban areas. However, these charters would not be accessible to many students who live in faraway suburban or rural areas.

A 2016 report released by The Hamilton Project and Brookings (Schanzenbach, et al., 2016) compiled publicly available data from the National Center for Education Statistics Common Core of Data to calculate the two components of statewide accessibility to charter schools: (1) the percent of students enrolled in charter schools; and (2) the percent of students who live in a zip code that contains a charter school. The data used for their report was from the 2013–14 academic year. We include both of these measures from 2013–14 as reported in Schanzenbach, et al. (2016) as components in our *EFI Charter Ecosystem Rankings*.

For the reasons discussed in the previous two subsections, we believe both of these accessibility measures need to influence the ranking of state charter school ecosystems, as they measure slightly different aspects of accessibility. In addition, the first component also captures aspects of charter school quality that are not measured by the value-added learning gains measured by test scores—which are described in the next subsection.

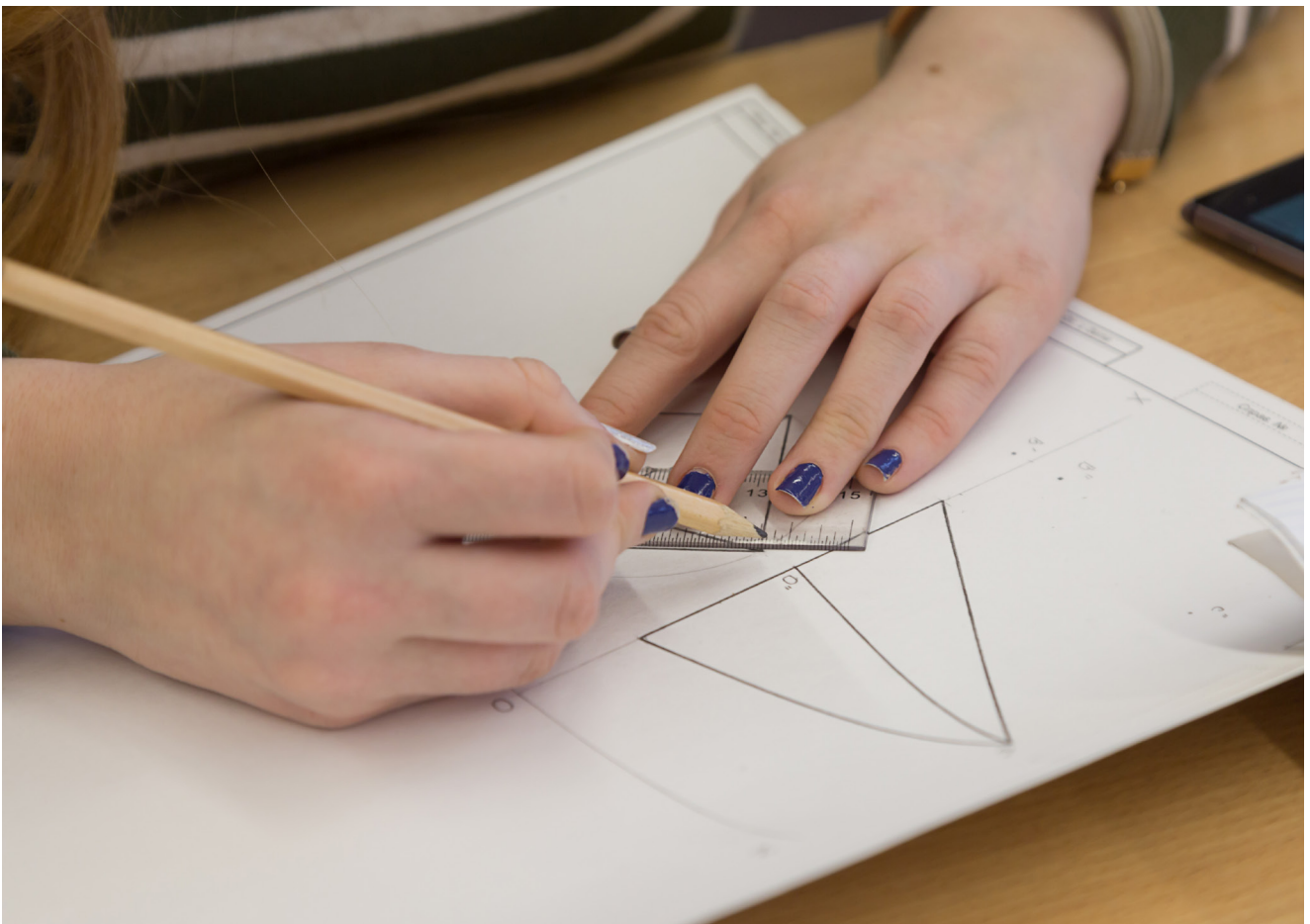


Value-added learning gains for charter school students in (3) Reading and (4) Mathematics

While gains in test scores are far from a perfect measure of school effectiveness, they are the measure that is available for charter schools in most states. To consider the performance of charter schools in each state in terms of the value-added learning gains in Reading and Math for students, we used statewide estimates of these gains from a series of CREDO reports.⁹ Most of the estimates we used are from CREDOs 2013 *National Charter School Study* (CREDO, 2013). The state-specific estimates

of value-added learning gains for charter schools in CREDO 2013 come from data up through the 2010–11 academic year, which is based on data that is at least ten years old. For 12 states, CREDO used subsequent data in state-level reports. However, for most of these 12 states, the data remain many years old. Another issue is that CREDO was only able to obtain data from 30 states. Finally, for almost all of the 30 states in their reports, CREDO only reports value-added learning gains for all charter school students—and not a separate estimate for the subgroup of students who are from economically disadvantaged backgrounds.

To be clear, the methodological approach in the CREDO studies has critics¹⁰, but their effort was nothing short of herculean in terms of data collection and analysis. We are thankful to be able to access their statewide value-added measures for charter schools.





Creating an Index Score for Each State

There are various ways to combine these four state-level components (two accessibility components and two measures of value-added learning gains for students) into a single index score for each state. A single index score—one for each state—is needed in order to create an overall ranking of state charter school ecosystems using information from all four components.

For each of the four components, each state can be ranked from 1 to 30, with 1 representing the state with the highest performing state and 30 representing the state with the lowest performance. Next, we **summed the rankings of each of the four components** to create an index score of charter school success in each state. As an example, if a given state had been the best performer on each component—the highest percent of charter school students in the nation; the highest percent of students in the nation residing in a zip code with a charter; highest value-added learning gains in Reading and Mathematics in the nation—then that state would receive an index score of “4” ($1+1+1+1$), as this state was the best in each of the four components.

No state actually ranked as the best performer on each of the four components, so this example merely demonstrates how we created the index scores for each state.

The next four tables show how each state ranked on each of the four components, listed from the best performer to the lowest performer. We are only able to rank 30 states, including Washington, DC, because some states do not have charter schools and some state departments of education did not share their test score data with CREDO to allow the latter to estimate value-added learning gains for charter schools.

Tables 3 and 4 show the state rankings for both accessibility measures, where these accessibility measures will be used to create a single index score for each state and ultimately the *EFI Charter Ecosystem Rankings*.

Table 3. Ranking of Percent of Students Enrolled in Charter Schools (from highest to lowest)

State	Rank	State	Rank	State	Rank
District of Columbia	1	Idaho	11	Massachusetts	21
Arizona	2	New Mexico	12	New York	22
Colorado	3	Nevada	13	Indiana	23
Michigan	4	Minnesota	14	South Carolina	24
Utah	5	Oregon	15	Illinois	25
Florida	6	Arkansas	16	New Jersey	26
California	7	Texas	17	Maryland	27
Pennsylvania	8	Rhode Island	18	Missouri	28
Louisiana	9	Georgia	19	Tennessee	29
Ohio	10	North Carolina	20	Washington	30

Table 4. Ranking of Percent of Students with Charter Schools in Their Zip Code (from highest to lowest)

State	Rank	State	Rank	State	Rank
District of Columbia	1	Minnesota	11	Pennsylvania	21
Arizona	2	Oregon	11	Georgia	22
Utah	3	Rhode Island	13	Massachusetts	23
Colorado	4	North Carolina	14	New Jersey	24
New Mexico	5	Ohio	15	Indiana	25
Florida	6	Nevada	16	Maryland	26
Idaho	7	New York	17	Illinois	27
Michigan	8	South Carolina	18	Tennessee	28
California	9	Arkansas	19	Missouri	29
Texas	10	Louisiana	20	Washington	30

While these rankings in Tables 3 and 4 are highly similar for both accessibility measures, they are not exactly the same. Therefore, including both rankings adds information about accessibility, as opposed to using only one ranking or the other. The simple correlation between the rankings is 0.856. States that tend to have a higher percentage of students enrolled in charter schools also have a higher percentage of students living in a zip code with a charter school—and the converse is true as well. Washington, DC and Arizona have the two highest percentages of students both enrolled in charters and with charters in their zip codes. Missouri, Tennessee, and Washington State rank at the bottom of both accessibility measures—albeit in different orders.

For value-added learning gains, the rankings are also highly correlated across subjects—the simple correlation is 0.85. Tables 5 and 6 show the rankings of learning gains in charter schools in Reading and Mathematics, respectively, and these rankings will be combined with the accessibility rankings in Tables 1 and 2 to create a single index score for each state and ultimately the *EFI Charter Ecosystem Rankings*.

Table 5. Ranking of Charter School Value-Added in Reading Test Scores (from highest to lowest)

State	Rank	State	Rank	State	Rank
Rhode Island	1	Idaho	11	Ohio	20
Tennessee	1	North Carolina	12	Pennsylvania	20
District of Columbia	3	Texas	13	South Carolina	20
Louisiana	4	California	14	Washington	20
Michigan	5	Minnesota	14	Utah	25
New Jersey	5	Georgia	14	Florida	25
Massachusetts	7	Illinois	14	Arizona	27
Indiana	8	Missouri	14	Oregon	27
New York	9	Colorado	19	Arkansas	27
Maryland	10	New Mexico	20	Nevada	30

Table 6. Ranking of Charter School Value-Added in Mathematics Test Scores (from highest to lowest)

State	Rank	State	Rank	State	Rank
Rhode Island	1	Missouri	10	California	21
District of Columbia	2	Indiana	12	Georgia	21
Tennessee	3	Florida	13	Arkansas	23
Louisiana	4	New Mexico	13	Arizona	24
Massachusetts	4	Idaho	13	Pennsylvania	25
New York	6	Texas	13	Ohio	26
New Jersey	7	Washington	13	Utah	27
Michigan	8	Colorado	18	Oregon	28
Maryland	9	Minnesota	18	South Carolina	29
Illinois	10	North Carolina	18	Nevada	30

Charter schools in Rhode Island, DC, and Tennessee produced the largest learning gains for students—relative to their peers in traditional public schools in their respective states. Nevada ranked at the bottom in learning gains for both subjects.

The rankings of each of these four components from the tables above are added together to create an index score for each state. These index scores are reported in Table 7.

Table 7. Index Score* (alphabetical by state)

* Index Score equals the sum of the rankings in tables 1-4.

State	Index	State	Index	State	Index
Arizona	55	Louisiana	37	North Carolina	64
Arkansas	85	Maryland	72	Ohio	71
California	51	Massachusetts	55	Oregon	81
Colorado	44	Michigan	25	Pennsylvania	74
District of Columbia	7	Minnesota	57	Rhode Island	33
Florida	50	Missouri	81	South Carolina	91
Georgia	76	Nevada	89	Tennessee	61
Idaho	42	New Jersey	62	Texas	53
Illinois	76	New Mexico	50	Utah	60
Indiana	68	New York	54	Washington	93

There is **no** obviously “**correct**” way to preserve the **cardinality** of the various **rankings** to create an **overall index** number for each state—because the components **measure** such **different things**.

Our home state of Georgia has an index score of 76. This index score was generated as follows:

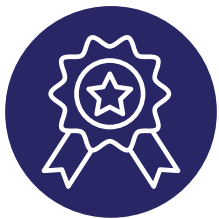
76 = 19 + 22 + 14 + 21, where Georgia was ranked

- 19th in charter school enrollment percentage (Table 3)
- 22nd in percent of students living in a zip code with a charter school (Table 4)
- 14th in value-added learning gains in Reading (Table 5), and
- 21st in value-added learning gains in Mathematics (Table 6).

This approach to aggregating the rankings across components uses only the ordinal nature of the rankings and therefore does not use the cardinality of the rankings. There is no obviously “correct” way to preserve the cardinality of the various rankings to create an overall index number for each state—because the components measure such different things. For example, how should one compare a 5-percentage point difference in charter school enrollment between two states with a 4-day difference in learning gains in Reading between the states? We hope this example demonstrates the issue that any approach to using the cardinality of the rankings would be arbitrary—and this is why we choose to use only the ordinal nature of the rankings to create the *EFI Charter Ecosystem Rankings*.

The Beta version of this approach to ranking of state charter school ecosystems is presented and discussed in the next section.

IV. THE EFI CHARTER ECOSYSTEM RANKINGS (ECER)



This Beta version of the new ECER incorporates two measures of access, and two measures of performance. These access measures are taken from the Brookings Institution's "Who Has Access to Charter Schools?" report,¹¹ and the performance measures are taken from CREDO's state-level charter school studies.¹²

In sum, the new EFI index includes two measures of Access: Enrollment in charter schools and Access to charter schools, and two measures of Performance: Value-added scores in Reading and Math, measured in "Growth in Days of Learning."

The Beta version of the ECER rankings results based on these four measures are reported in Table 8.

Table 8. The Beta Version of the EFI Ranking of State Charter School Ecosystems

State	Rank	State	Rank	State	Rank
District of Columbia	1	New York	11	Maryland	21
Michigan	2	Massachusetts	12	Pennsylvania	22
Rhode Island	3	Arizona	13	Illinois	23
Louisiana	4	Minnesota	14	Georgia	24
Idaho	5	Utah	15	Missouri	25
Colorado	6	Tennessee	16	Oregon	26
New Mexico	7	New Jersey	17	Arkansas	27
Florida	8	North Carolina	18	Nevada	28
California	9	Indiana	19	South Carolina	29
Texas	10	Ohio	20	Washington	30



Discussion of the EFI Charter Ecosystem Rankings

In the ECER ranking, the District of Columbia scores very high in accessibility, and also quite high in performance measure by growth scores, placing in the top three across the four components of the ECER. Michigan placed far higher under ECER than under either the NACSA or NAPCS rankings. A 2017 *New York Times Magazine* article declared, “Michigan gambled on charter schools. Its children lost”.¹³ Michigan’s charter ecosystem, however, finished highly ranked in ECER across each of the four components of access and learning gains for students, placing between 4th and 8th on each measure of access and performance. Rhode Island, the third-rated state in the ECER rankings, finished only middle-of-the-pack for enrollment and access, but placed first for test score growth in both subject areas.

At the other end of the table, Nevada, similar to Rhode Island, had middling rankings for access, but the lowest ranking in both reading and math scores. Conversely, the state of Washington had mid-range score growth, but ranked last in both access measures. We also do not believe that a state with only a handful of really good charter schools is worthy of emulation, as not many students are able to benefit from their high performing charters.





Differences between the NACSA, NAPCS, and ECER Rankings

The Appendix to this report includes side-by-side view of the NACSA, NAPCS, and ECER rankings. One striking and illustrative difference among the models is the fact that both the 2020 NAPCS report and the 2015 NACSA report place Indiana first in the nation (with NACSA in fact giving Indiana a perfect score in its analysis), while in the ECER analysis Indiana places 19th out of 30 states. In the ECER analysis, Indiana ranks 8th in reading growth and 12th in math growth. But only 23rd and 25th in access and enrollment. Indiana placed first in the 2015 NACSA analysis, despite enrolling only 4 percent of public school students in charter schools. Another noticeable difference is Michigan, noted above for having access and performance ranks between 4th and 8th across all of the ECER measures. In other words, a comparatively large number of Michigan students have access to charter schools, are enrolling in them, and are performing well in both reading and math in those charter schools. NAPCS ranked Michigan 28th in 2020 and NACSA ranked them at 34 in 2015. Policymakers and the charter school community should seek to emulate the laws and regulations in Michigan, as opposed to Indiana—if the goal is better outcomes for students.

Multiple other important differences exist. On NACSA's 2015 ranking for example, Alabama placed fourth in the country, while having 0 charter schools and 0 charter school students. NACSA noted that in 2015 Alabama "passed a new charter law in 2015 that is based on best practices in charter school policy" for context. Mississippi ranked 6th, with a then-five-year-old charter school law, a single authorizer, and 0 open charter schools. Arizona placed 18th in the same analysis, with 15% of their public school students enrolled in charter schools, the highest number in the country, except for the District of Columbia, which finished 2 places ahead Arizona and enrolled 44% of their students in charter schools. Clearly both the NACSA and NAPCS rankings are promoting states that do not provide access to charter schools for students in the real world.



Evaluating Charter School Ecosystems in a Straightforward and Clear Manner – The ECER

Rather than serving as a menu of theoretical “best practices,” or a list of experts’ policy preferences, the ECER strives to measure a state’s charter school ecosystem by asking two straightforward questions:

- “How much access do students have to charters schools?” and,
- “What evidence do we have that the education students are getting at those charter schools is any good?”

Though states with relatively large numbers of students in charter schools, and in charter schools which are scoring well, may not have policies that echo “best practices” or theoretical white papers, it is possible, if a bit imperfectly, to measure the size and performance of states’ charter school sectors and to compare them to each other. States’ records on actually creating charter schools vary quite a bit; those charter schools’ records of performance vary quite a bit as well. Policymakers and anyone else interested in improving student outcomes should look to states that rank high on the ECER and mimic their policies.

V. FUTURE WORK



This Beta Version of the *EFI Charter Ecosystem Rankings* uses dated information on charter school accessibility and dated and limited data on charter schools' value-added learning gains for students. Thus, the purpose of this paper is to demonstrate the concept of ranking states based on charter school outcomes for students. In doing the research for this paper, we learned a lot about creating state-level index scores for this endeavor and what state-level data is available to create a great ranking of states with more contemporary data—and we believe we have demonstrated this concept of ranking states based on the outcomes they produce for charter school students.

In this section we outline state-level information that can be compiled from existing databases to create a more real-time ranking of states. The virtue of using the information described in this section is that it allows the *EFI Charter Ecosystem Rankings* to be updated periodically, or even annually. Importantly, this information that can be compiled will contain more complete information on state averages of charter schools' value-added to student learning.

There are two overall pieces to our proposed *EFI Charter Ecosystem Rankings*: state-level measures of charter school accessibility and value-added learning gains for students. Below, we present future work that uses existing databases from which more contemporary and, in the case of value-added, better information can be compiled in order to have a version of the ECER that is better than the Beta version presented in the prior section. We discuss each component that will be included in this future work in turn.



Accessibility

A 2016 report released by The Hamilton Project and Brookings (Schanzenbach, et al., 2016) compiled publicly available data from the National Center for Education Statistics Common Core of Data (CCD) to calculate the two components of statewide accessibility to charter schools used here: (a) the percent of students enrolled in charter schools; and (b) the percent of students who live in a zip code that contains a charter school. The data used for their report was from the 2013–14 academic year—which is now seven years old.

In future work, we plan to replicate these two measures of accessibility from Schanzenbach, et al. (2016) using the most recent year available from the CCD. At the time of writing this concept paper, the CCD is available for the 2019–20 academic year. It is important to use contemporary data on accessibility when ranking state charter ecosystems for at least two reasons. First, the charter sector has been growing rapidly since the first charter school opened almost thirty years ago. Second, changes in state and local laws and regulations may have led to increases or declines in charter school accessibility, with a time lag. Thus, to allow policymakers, advocates, and others to assess which states have charter school policies worth emulating, they need the most recent information as possible on accessibility.

Given that the data required to calculate both components of charter school accessibility are publicly available, we will use them in our future ranking of states.



Performance

To consider the performance of charter schools in each state in terms of the value-added learning gains in Reading and Math for students, we used statewide estimates of these gains from a series of CREDO reports. Most of the estimates we used are from CREDOs *2013 National Charter School Study* (CREDO, 2013). The state-specific estimates of value-added learning gains for charter schools in CREDO 2013 come from data up through the 2010–11 academic year, which is based on data that is at least ten years old. For 12 states, CREDO used subsequent data in state-level reports. However, for most of these 12 states, the data remains many years old. Another issue is that CREDO was only able to obtain data from 30 states. Finally, for almost all 30 states included in their reports, CREDO only reports value-added learning gains for all charter school students. Given the emphasis that policymakers place on the learning of low income students and the stubbornly persistent learning gaps between higher and lower income students in the American public education system¹⁴, it is important to include measures of learning gains for low income students separately when ranking state charter school ecosystems.

There are databases available from the Educational Opportunity Project (EOP) at Stanford University that provide more contemporary information on charter school performance, where there is additional information that improves our state ranking. Specifically, the analyses done by the EOP can be compiled to create statewide averages of value-added learning gains for (i) all charter school students and (ii) separate estimates for low income charter school students.



The Seven Sub-Components of Our Enhanced EFI State Charter Ecosystem Rankings

While the beta version of the *EFI State Charter Ecosystem Rankings* contained four components, our enhanced version will include the following seven components—three measures of accessibility and four measures of performance. Table 9 lists each of these seven components.

Table 9. Components that will be used in the proposed final version of the EFI Charter Ecosystem Rankings

Accessibility	% of students attending a charter school
Accessibility	% of students residing in a zip code with a charter school
Accessibility	% increase in charter schools from the prior year
Performance	Value-added learning gains in Reading for all charter students
Performance	Value-added learning gains in Math for all charter students
Performance	Value-added learning gains in Reading for low income charter students
Performance	Value-added learning gains in Math for low income charter students

The Beta version of our rankings described earlier in this concept paper are based on only four of the seven sub-components listed above. The enhanced rankings will include value-added learning gains in Reading and Math for low income charter students, which yields the seven components that will be included in our future work.

We hope to complete our enhanced version of the EFI Charter Ecosystem Rankings by the end of 2021. **Thus, we ask that readers view the rankings in this concept paper as preliminary and wait for the enhanced rankings before making inferences about which states have the best charter school ecosystems in terms of accessibility and performance.**

APPENDIX

COMPARING THE NACSA RANKINGS TO THE EFI CHARTER ECOSYSTEM RANKINGS (ECER)



Below, the ECER, NACSA, and NAPCS rankings are reported side-by-side for comparison. Differences between the ECER rankings and the NACSA and NAPCS rankings of the District of Columbia, Indiana, Michigan, and others, have been noted above. There are other differences. Alabama and Mississippi, for example, which both score highly in the NACSA and NAPCS rankings, are not included in the ECER rankings. CREDO did not produce analyses of these two states – because those states had no charter schools to evaluate. States like New York and New Jersey rank higher on the ECER index compared to the others, both perhaps because ECER, unlike the other ranking systems, takes performance into account, and both New York and New Jersey ranked in the top 10 for both reading and math growth. Washington State is another interesting case. The state places 30th (last) in the ECER rankings due to low access and only fair performance. NACSA placed Washington at 33rd, though at the time the state’s charter school law was in the process of being held unconstitutional. NAPCS placed the new Washington State law at 3rd–best in the nation in its 2020 report, though at the time the state only had 8 charter schools. Compare this result to Maryland, which placed last in the 2020 NAPCS report, despite having 49 charter schools open that year, enrolling over ten times as many students as Washington’s charter schools did.

Table 10. ECER, NACSA (2015), and NAPCS (2020) Rankings

Ranking	ECER Beta	NACSA	NAPCS
1	DC	Indiana	Indiana
2	Michigan	Nevada	Colorado
3	Rhode Island	Ohio	Washington
4	Louisiana	Alabama	Minnesota
5	Idaho	Texas	Alabama
6	Colorado	Minnesota	Mississippi
7	New Mexico	Mississippi	Florida
8	Florida	Missouri	Louisiana
9	California	South Carolina	Maine
10	Texas	Louisiana	DC
11	New York	Oklahoma	Nevada
12	Massachusetts	Delaware	Massachusetts
13	Arizona	Hawaii	Arizona
14	Minnesota	Georgia	North Carolina
15	Utah	Tennessee	Delaware
16	Tennessee	DC	Georgia
17	New Jersey	Maine	Idaho
18	North Carolina	Arizona	New York
19	Indiana	Florida	South Carolina
20	Ohio	Idaho	California
21	Maryland	Connecticut	Utah
22	Pennsylvania	Massachusetts	Oklahoma
23	Illinois	New Mexico	Ohio
24	Georgia	North Carolina	Tennessee
25	Missouri	Wisconsin	New Mexico

Ranking	ECER Beta	NACSA	NAPCS
26	Oregon	Illinois	New Hampshire
27	Arkansas	New Jersey	Missouri
28	Nevada	Rhode Island	Michigan
29	South Carolina	Arkansas	Texas
30	Washington	New Hampshire	Arkansas
31		California	Hawaii
32		Pennsylvania	West Virginia
33		Colorado	Oregon
34		Michigan	New Jersey
35		Utah	Pennsylvania
36		New York	Connecticut
37		Oregon	Illinois
38		Iowa	Rhode Island
39		Alaska	Wisconsin
40		Wyoming	Virginia
41		Maryland	Iowa
42		Virginia	Wyoming
43		Kansas	Alaska
44		Washington*	Kansas
45			Maryland

*Technically ranked 33, but placed at the end of the table in the NACSA report due to a legal dispute at the time.

CLOSING NOTES

- 1 <https://www.dictionary.com/browse/ecosystem> .
- 2 NACSA State Policy Analysis 2015: https://www.qualitycharters.org/wp-content/uploads/2015/12/NACSA_State_Policy_Analysis_2015.pdf NAPCS Ranking of State Pubic Charter School Laws 2020" https://www.publiccharters.org/sites/default/files/documents/2020-01/2020_model_law_ranking_report-single-draft2%20%281%29.pdf
- 3 https://www.qualitycharters.org/wp-content/uploads/2015/12/NACSA_State_Policy_Analysis_2015.pdf .
- 4 https://www.qualitycharters.org/wp-content/uploads/2015/12/NACSA_State_Policy_Analysis_2015.pdf p. 5.
- 5 *ibid* p. 122.
- 6 https://www.publiccharters.org/sites/default/files/documents/2020-01/2020_model_law_ranking_report-single-draft2%20%281%29.pdf p. 8.
- 7 *ibid* p. 102
- 8 See, for example, Kelly and Scafidi (2013), <http://www.edchoice.org/wp-content/uploads/2015/07/More-Than-Scores.pdf>
- 9 CREDO researchers used a matching technique to match charter schools to traditional public schools with similar characteristics. Using this approach, CREDO researchers estimated the value-added learning gains for charter school students as compared to those gains for traditional public school students. CREDOs approach allowed them to construct estimates of how many days of Reading and Mathematics did charter school students gain relative to similar public school students. If their matching technique is valid and removes the effects of unobserved characteristics on learning gains, then CREDOs approach yields estimates of how much charter school students learned during the academic year—relative to how much they would have learned in they had attended a traditional public school. CREDO aggregated their estimates over all tests in Reading (and aggregated them separately for Mathematics) that were administered in grades 3–12. Finally, CREDOs analysis produces statewide estimates of the value-added days of all charter school students for each subject—two numbers for each state, an estimate of value-added gains for charter school students in Reading and the same for Mathematics..
- 10 See, for example, the back and forth between Caroline Hoxby and CREDO here: <https://credo.stanford.edu/publications/credo-hoxby-debate> .
- 11 <https://www.brookings.edu/wp-content/uploads/2016/07/Read-the-full-paper.pdf>
- 12 <https://credo.stanford.edu/studies/charter-school-studies>
- 13 <https://www.nytimes.com/2017/09/05/magazine/michigan-gambled-on-charter-schools-its-children-lost.html>
- 14 Hanushek et al. (2020) report that learning gaps between higher and lower income students are very large and have been stubbornly persistent for decades in the American public education system, <https://www.nber.org/papers/w26764> .

