

NEPC REVIEW: THE EFFECT OF CONSTITUTIONAL PROVISIONS ON EDUCATION POLICY AND OUTCOME (FEDERAL RESERVE BANK OF MINNEAPOLIS, APRIL 2021)



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June 2021

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Suggested Citation: Baker, B.D. (2021). *NEPC review: The effect of constitutional provisions on education policy and outcome*. Boulder, CO: National Education Policy Center. Retrieved [date] from <http://nepc.colorado.edu/thinktank/constitutional-provisions>

Funding: This review was made possible in part by funding from the Great Lakes Center for Educational Research and Practice.



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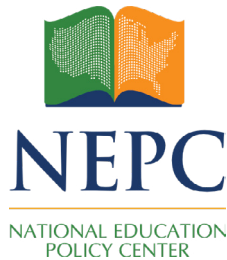
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Summary

A recent report published by the Federal Reserve Bank of Minneapolis examines the potential effects of amending the education clauses contained in states' constitutions. The apparent intent of this report is to provide an empirical justification for amending the education clause of Minnesota's constitution. Specifically, the report lays out four independent empirical analyses in an attempt to advance a theory of action for improving education quality. This theory of action asserts that amending state constitutional education clauses to include strong language regarding a legislative duty to fund schools leads to increased citizen leverage, potential judicial intervention, and adopted legislation which leads to better school quality and student outcomes. Unfortunately, the four analyses presented in the report use methods and models that exceed the capacity and quality of the data. In addition, these methods and models are inadequately linked to one another or to the theory of action. Ultimately, the report provides little evidentiary basis for the proposed theory of action or for the current campaign to amend the Minnesota constitution.



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I. Introduction

In April of 2021, authors Scott Dallman, Anusha Nath and Filip Premik from the Federal Reserve Bank of Minneapolis and University of Minnesota released the report, *The Effect of Constitutional Provisions on Education Policy and Outcomes*.¹ The apparent intent of this report is to provide empirical justification that amending the education clause of the state's constitution will lead to better outcomes for the state's children. The report lays out a theory of action as follows:



That is, amending state constitution education article(s), specifically to include stronger language regarding educational rights, creates opportunity for citizens to leverage those rights. But rather than leading only or mainly to litigation, the reasoning goes, a constitutional amendment leads to increased legislation to improve school quality. Further, the report argues, strong language in education clauses leads to increased likelihood of state high court intervention when legislatures do not respond.²

Some context for the present report is required. It was released amidst a campaign by the Minneapolis Federal Reserve (FRB) to revise the current education clause in the Minnesota state constitution. A January 2020 press released explained, “Minneapolis Federal Reserve Bank President Neel Kashkari and former Minnesota Supreme Court Justice Alan Page today called on Minnesotans to pass a constitutional amendment to give every child in Minnesota an equal right to a quality education.”³

The April 2021 report was preceded by a January 2020 article, also by Dallman and Nath,

which in some regards provides useful additional detail and background for the current version. Among other insights, the January 2020 version provides much greater detail on the substance of the data—the constitutional amendments adopted in other states—that were considered in the analyses.⁴ That pool of data was, as described below, substantially limited in the April 2021 report reviewed here, with little documentation or detail.

The April 2021 report includes four distinct empirical analyses intended to support its theory of action regarding constitutional amendments and school quality. In keeping with that theory, and drawing on the findings, the report concludes, “Our results show that strengthening education clauses results in higher per-pupil spending, an increase in teacher salaries, smaller class size, and improvement in reading and math test scores” (p. 26). As explained in this review, however, the main problem is that the report’s four separate analyses do not clearly establish the connections laid out in its theory of action. The report’s conclusions are not justified. With little regard for the content or purpose of amendments, the report links counts and timing of amendments to school resources and student outcomes. Next, it links amendments by broad categories to counts of legislation and judicial activity. Separately, it links constitutional strength to likelihood of judicial intervention, but without regard for whether that intervention led to real change in school resources, quality, and student outcomes.

All in all, the report presents a juggernaut of four discrete analyses, which (a) use methods and models that exceed the capacity and quality of the data, (b) are inadequately linked to one another or to the theory of action, and (c) ultimately provide little evidentiary basis for the proposed theory of action or for the current campaign to amend the Minnesota constitution.

II. Findings and Conclusions of the Report

The report’s findings are summarized as follows:

We find that when an amendment is passed, the legislature responds by enacting education policies that meet the new standards. The number of education issues addressed in the newly enacted policies is significantly higher. Consistent with our hypothesis, there is no change in education cases after an amendment is passed. In addition, using school finance reforms as a case study, we provide evidence that in situations when the legislature fails to provide education services through equitable school financing, courts intervene to enforce constitutional standards to improve outcomes. This enforcement mechanism is more impactful in states that had higher constitutional minimum standards.⁵

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

The report’s above summary is backed by the four discrete analyses mentioned previously,

each of which requires numerous caveats.

- The first analysis (A1) attempts to determine which factors are most predictive of the occurrence of a constitutional amendment proposal. It controls for party affiliation of governors, balance of state legislatures, population race and poverty and school dropout rates. Finding only a connection with dropout rates, the report concludes that there may exist an endogeneity between proposing amendments and school quality, which may complicate subsequent analyses. That is, while amendments may lead to improved quality, there also appears to be a greater likelihood that amendments are introduced where quality is already higher. But the subsequent analyses do not really follow up on this problem.
- The second analysis (A2) involves two separate empirical approaches to the same question, which is whether passage of constitutional amendments is associated with changes in spending levels, class sizes, teacher salaries, and student achievement. The first approach applies regression discontinuity to assess differences in outcomes between states where amendments marginally passed and states where amendments marginally failed. The second approach applies event study models relating passage of amendments to school resources and student outcomes. The regression discontinuity analysis finds that amendment passage is associated with increased schooling resources and the event study analysis finds that passage of amendments is associated with increased resources and improved outcomes. Both are agnostic to amendment content.
- The third analysis (A3) evaluates the extent to which passage of amendments is associated with changes in legislative activity or appellate court cases. It disaggregates amendments by types (i.e., finance, early childhood, and school choice) finding that passage of amendments leads to increased legislative activity but not to increased appellate cases.⁶
- Finally, the fourth analysis (A4) evaluates whether the presence of stronger language pertaining to educational rights in state constitutions is associated with increased likelihood that high courts rule to overturn school funding policies. The report states:
 - “Conditional on equal access and quality standards, in states where the constitution imposes an obligation on the state legislature to provide education services (“Duty of the State”), court case rulings are significantly more likely to find inequities in school finance system to be unconstitutional.”⁷ (p. 25)

IV. The Report’s Use of Research Literature

The report provides a relatively comprehensive review with respect to both content and methodology, and its interpretation of the literature is reasonable. Its findings regarding A4 conflict with other recent studies, including Hutt, Klasik, and Tang’s (2020) research.⁸ This report cites that research, which is far more exhaustive in terms of reviews of existing higher

and lower court rulings in school finance-related litigation, but somewhat less exhaustive on parsing constitutional language.

One concern regarding gaps in the report's consideration of research literature relates to the political and demographic contextual factors associated with constitutional amendments, legislation and school finance reform. That discussion could have benefited from a deeper dive into economic literature on the topic, as well as consideration of political science literature.⁹ Among other things, the report may have identified more nuanced measures of political ideology than party balance (which means different things regionally) and better measures of racial composition, including differences in race between adult voting-aged populations and school enrollments.¹⁰ The report also misses a significant body of literature that establishes a link that the report's own methods overlook—the link between court orders and reform legislation—and resulting redistribution and/or leveling up of school funding.¹¹ This literature in particular is central to the report's claims, while not being validated in the report itself.

Perhaps more importantly, while the report mentions some work that attempts to tackle the complexities of reducing constitutional language to classification schemes and to linking that language to subsequent reforms, it pays too little attention to complexities at numerous other steps in the process: from constitutional language to court orders, to legislation, to actually changing the levels and distribution of schooling resources.¹²

V. Review of the Report's Methods

While typical methodological caveats are laid out along the way,¹³ what's missing are the major caveats about drawing inferences across the four analyses. The report's analyses of constitutional amendments (Analyses 1–3) deal with a large variety of constitutional amendments related to education. These analyses include counts of numbers and timing of amendments, and they place proposed constitutional amendments into categories. However, they do not generally address the substance of those amendments, and whether the amendment would strengthen—or perhaps weaken—education clauses.

The authors' earlier, January 2020 article referenced 312 proposed constitutional amendments, but this was trimmed down to the 74 included in the more recent version (see Appendix A). Classifications of those amendments in the earlier paper also provide more precision than in the later version. Yet little or no information is provided on how the authors screened and limited their selections for this report. Further, the report generally ignores the extent to which proposed amendments may have been efforts to exclude courts from exercising jurisdiction over school finance cases, or ones which impose tax and spending limits. Indeed, the analyses of counts and classes of amendments omits any discussion as to whether those amendments involved actually strengthening education clauses, per the framework used by the authors in the fourth analysis.

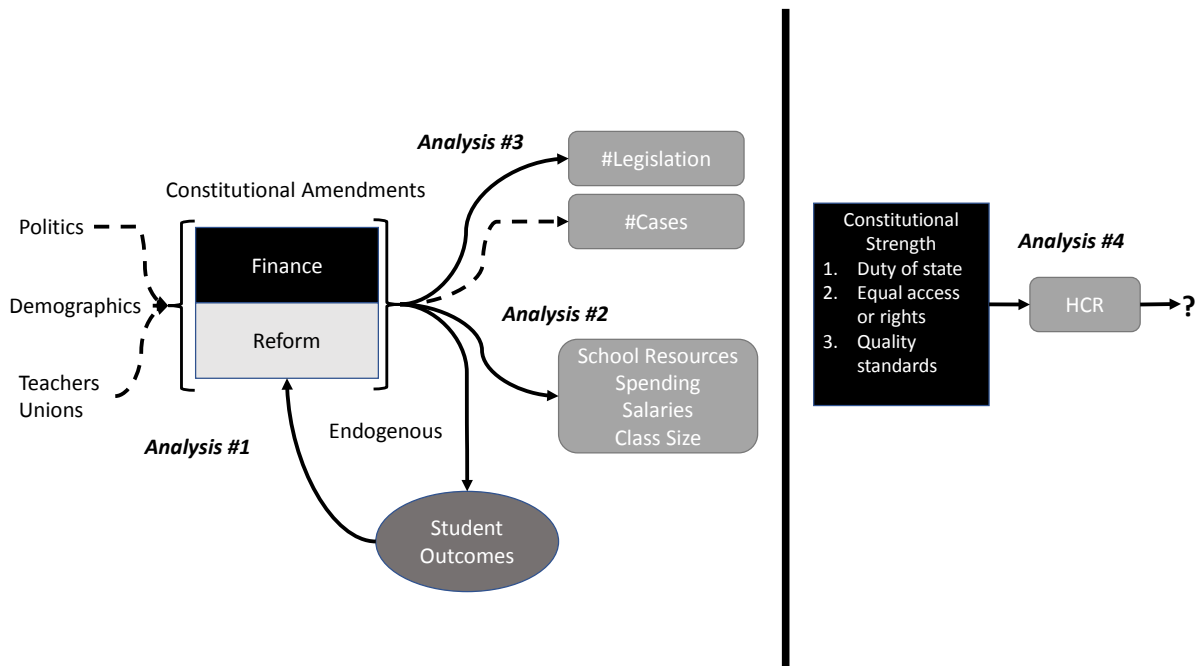
In fact, there have been very few major amendments to the education clauses of state constitutions since 1965, when Connecticut¹⁴ first adopted its education article and when Kansas¹⁵

enacted a complete overhaul of theirs. Illinois adopted substantial changes in 1970,¹⁶ Florida added “high quality” in 1998¹⁷ and Colorado adopted an amendment specifying funding increases in 2000.¹⁸ I address these amendments in slightly more detail later in this review.

Figure 1 (below) provides a schematic of the four distinct analyses. Each of these analyses has one or more gaps with respect to the authors’ conclusions and preferred interpretation. Analysis 1 reveals that only dropout rates, but not the selected demographic or political context measures, are associated with proposed amendments. This finding implies endogeneity between outcomes and amendments, a statistical concern when evaluating whether one thing causes another or vice versa. But that endogeneity is not sufficiently addressed in subsequent analyses. It may be that amendments occur in part where conditions are better, or that some other factors (better measures of political and demographic context or change) are simultaneously determining likelihood of amendments and outcomes (i.e., simultaneity). Analysis 2 links occurrence of amendments with resources and outcomes, but without regard for amendment substance or quality. Analysis 3 shows that amendment passage—by amendment type (lacking detail on classification)—is not related to increased litigation but is related to increased legislation. Again, missing in Analysis 3 is detailed analysis of the substance of that legislation.

Then there’s a gap—a solid wall between the analyses on the left side and the one on the right—that finds an association between what is coded as strong language in education clauses and high court rulings. Further, the authors use the analyses on the right-hand side of the figure to assert a causal effect of these rulings on school quality and student outcomes, by way of citation to other sources.¹⁹

Figure 1



The authors do present a potentially unique contribution to the classification of language in state constitution education clauses—specifically, the use of three separate dummy variables rather than a combined index—leading to findings that differ from prior literature.²⁰ Future research should explore this approach further.

VI. Review of the Validity of the Findings and Conclusions

The report's findings, as appropriately tied to its analyses, can be summarized as follows:

- State constitutional amendments of any kind matter with respect to schooling resources or outcomes, though the direction of causation is in question (endogeneity issue);
- Passage of specific types of amendments may be associated with increased legislative activity but not with court cases; and
- Strong constitutional language, specifically around the question of “duty of the state” is associated with increased likelihood of a high court ruling overturning school funding formula.

But those findings do not necessarily support the report's broader conclusion or theory of action for achieving change in Minnesota or elsewhere. The broader conclusion is that adopting state constitutional amendments that include strong language will create pressure on legislatures to adopt significant reform legislation—and if not, citizens will take action and courts will intervene.

Anecdotal comparisons throughout the report provide some of the clearest evidence of the failures of this theory of action:

On page 7, the report contrasts Vermont and Florida, noting that Vermont has weak constitutional requirements while Florida has strong ones. Yet, Vermont's courts found in 1997 that the constitution does provide a recognized and enforceable education right,²¹ whereas Florida is among the handful of states where an actionable education right has not been acknowledged by the courts or advanced by citizens.²²

On page 24, the Illinois education article is used to illustrate what strong language looks like on all three elements included in the report's ranking scheme (Duty of State, Equal Access Rights, and Quality Standards). Yet, Illinois is also among those states where courts have decided that the constitution does not provide a recognized or enforceable education right.²³

The newness of constitutional language also does not seem to provide a clearer path to reform. The Illinois language dates back to only 1970.²⁴ Connecticut was, as noted above, the last state to adopt a substantive education article, in 1965. Connecticut receives no mention in this report. While earlier cases acknowledged an enforceable education right in Connecticut, the state's most recent high court ruling overturned a lower court ruling that favored

underfunded, high-need plaintiff districts.²⁵ Kansas overhauled its education article in 1965. Among these states, Kansas courts have most consistently upheld and enforced education rights, and the legislature has been largely responsive.²⁶ Kansas also receives no mention in the article, despite being one of a few states with major high court rulings (in 2014 and 2017) overturning school funding since the great recession.²⁷

In terms of the equity and adequacy of financing schools—the desired end result of all of this—Illinois remains one of the least equitably funded states in the country,²⁸ and Florida and Colorado are among the least adequately funded state systems.²⁹ Recall that Colorado is among the only states with recent funding-related amendments.³⁰

While I remain skeptical that any sufficient statistical model can predict legislative or judicial behavior in the way the authors wish, this particular report is thwarted by its failure to consider several relatively well-understood constraints and conditions. Among other things, in its attempt to cast constitutional amendments as mainly positive and progressive, the report brushes aside constitutional amendments that are reactionary and destructive to public services such as constitutional tax and expenditure limits, such as Colorado's TABOR³¹ and California's Proposition 13.³² A vast body of literature in public economics points to the detrimental influence of such amendments on public service quality, including schools.³³ All constitutional amendments are not created equal, which is acknowledged in the report's fourth analysis.

Empirically, the simultaneity and endogeneity issues noted above are difficult, if not implausible, to ever distill. In our examination of the how courts and policymakers interact to determine policy, Zack Oberfield and I found three interrelated patterns:

- Court-ordered reforms, sometimes characterized as “exogenous shocks,” were related to state politics:
 - Judges were more likely to overturn school finance systems when lawmakers became more ideologically liberal.
 - This relationship was strongest in states that directly elect judges.
- Political and demographic characteristics, not court decisions, were the strongest predictors of school finance progressivity. As states became more liberal or economically unequal, policymakers made their states more progressive (i.e., provided greater funding in higher poverty settings).
- When Black and Hispanic populations increased—and particularly when this increase was among school-aged children—lawmakers made their states more regressive (i.e., reduced funding in higher poverty settings).³⁴

A deeper qualitative dive is required for understanding the specific characteristics that have enabled reforms in each state. The January 2020 article provides some examples (e.g., Florida's 1998 amendment), but this report excludes them. An especially good example of how details matter is Kansas, where eight conditions that have kept the state's school finance in reasonable balance in terms of equity and adequacy.³⁵ These conditions include the 1966

ratification of the current education article. Significantly, the education article created a unique governing structure—a unique balance of powers—in addition to expressing a strong duty. It established an independently elected Kansas State Board of Education, with self-executing constitutional powers to oversee elementary and secondary education (general supervision of schools), and required that the legislature “shall make suitable provision for finance of the educational interests of the state.”

Other conditions included a judicial selection and retention process that reduces the role of political ideology among state high court justices and limits turnover, thereby providing the opportunity for state high court judges to develop a deep understanding and institutional history of complex ongoing litigation. This judicial structure was adopted by constitutional amendment in the 1950s. A variety of other conditions in Kansas and in other states reinforce the state-level uniqueness and complexity that makes me skeptical that any sufficient statistical model can predict legislative or judicial behavior in the way the report here attempts to do.³⁶

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

The report provides limited useful guidance for policy and practice. This stems mainly from the fact that the majority of its analyses in A1 to A3, even when they do categorize amendments by category or type, are agnostic to the actual substance or purpose of those amendments. They simply link quantities or occurrence of amendments to changes in resources or legislative activity. While the report’s parsing of constitutional language strength (A4) produces a unique result with respect to high court rulings, its model for strong constitutional language—Illinois—provides perhaps the most compelling evidence that adopting strong language alone is insufficient to advance educational equity. Further, this final analysis fails to address the ultimate question of whether court orders induced by strong language actually lead to substantive and sustained improvement to school funding, quality, and student outcomes. Sometimes they do and sometimes they don’t. The report’s theory of action regarding constitutional amendment and education reform is overly simplistic, despite using excessively complex analyses to make the case.

Appendix A

Table 2: Proposed Amendments by Category (1990-2018)

Category	Total Proposed	Total Passed
[a] Nonrevenue-Related Amendments		
Compulsory Attendance	1	0
Early Childhood Education	5	3
Education First - Paramount Issue	2	2
English Language Requirements	4	1
Equal Access	12	8
Fundamental Right to Education	4	1
Improving Quality of Education	1	0
Parental Rights	2	1
Reduce Class Size	2	2
Role of State in Funding	7	5
School Choice	8	1
School Oversight and Accountability	6	4
State Takeover of Failing Schools	2	1
Teacher Pay for Performance	3	1
Use of Public Facilities	2	2
[b] Revenue-Related Amendments		
Expenditure - Limitations or Requirements	6	2
Expenditure - Increase Per-pupil Amounts	2	0
Funding - Creating Dedicated Funds	66	48
Funding - Equitable Allocation of Funds	5	4
Funding - Increase in Revenue	47	27
Funding - Investing Public Funds	13	6
Funding - Tax or Debt Limits	14	10
[c] Other Amendments		
Higher Education	64	40
Other Miscellaneous Provisions	32	24
Total	312	193

Source: Authors' calculations

Table 2: Proposed Amendments That Raise Minimum Standards, 1990-2018

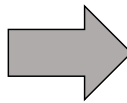
[a] Improving education services

Classification	Frequency
Funding	22
Equal Access	12
Right to Education	3
Funding - Equitable Allocation of Funds	3
Expenditure Requirements	3
Education First - Paramount Issue	2
Improving quality of education	1
Establish adequate and efficient system of education	1

[b] Specific education policy

Classification	Frequency
School Choice	8
Early Childhood Education	5
English Language Requirements	4
Teacher pay for performance	3
State Takeover of Failing Schools	2
Reduce Class Size	2
Accountability	1
Compulsory Attendance	1
Parental Rights	1

Total **74**



Notes and References

- 1 Dallman, S., Nath, A., & Premik, F. (2021, April 26). *The effect of constitutional provisions on education policy and outcomes*. Minneapolis, MN: Federal Reserve Bank of Minneapolis. Retrieved May 3, 2021, from <https://www.minneapolisfed.org/research/staff-reports/the-effect-of-constitutional-provisions-on-education-policy-and-outcomes>
- 2 In the authors' words: "We propose a mechanism for why strengthening education clauses in state constitutions leads to better outcomes. The underlying mechanism is that a strong constitutional provision improves the bargaining position of citizens vis-à-vis that of their elected leaders. If the citizens do not receive education services as described in the constitution, they can go to court to enforce the minimum constitutional standards. The mere presence of a threat that citizens can litigate and win against the state government should result in enactment of policies that meet constitutional standards." (p. 4)
- 3 Federal Reserve Bank of Minneapolis (2020, January 8). *Constitutional amendment proposed to close Minnesota's achievement gaps*. Retrieved June 7, 2020, from <https://www.minneapolisfed.org/news-releases/2020/constitutional-amendment-proposed-to-close-minnesotas-achievement-gaps>

Related article:

- Dallman, S., & Nath, A. (2020, January 8). *Education clauses in state constitutions across the United States*. Minneapolis, MN: Federal Reserve Bank of Minneapolis. January 8, 2020. Retrieved June 8, 2021, from <https://www.minneapolisfed.org/~media/assets/articles/2020/education-clauses-in-state-constitutions-across-the-united-states/education-clauses-in-state-constitutions-across-the-united-states.pdf?la=en>
- 4 Dallman, S., & Nath, A. (2020, January 8). *Education clauses in state constitutions across the United States*. Minneapolis, MN: Federal Reserve Bank of Minneapolis. January 8, 2020. Retrieved January 8, 2020, from <https://www.minneapolisfed.org/~media/assets/articles/2020/education-clauses-in-state-constitutions-across-the-united-states/education-clauses-in-state-constitutions-across-the-united-states.pdf?la=en>
 - 5 Dallman, S., Nath, A., & Premik, F. (2021, April 26). *The effect of constitutional provisions on education policy and outcomes* (p. 4). Minneapolis, MN: Federal Reserve Bank of Minneapolis. Retrieved May 3, 2021, from <https://www.minneapolisfed.org/research/staff-reports/the-effect-of-constitutional-provisions-on-education-policy-and-outcomes>
 - 6 Authors' summary:

Panel [a] shows the effect of amendments related to finance on number of finance bills enacted and number of education finance cases. There is an increase in finance bills enacted but no change in finance related court cases.

Panel [b] examines the effect of early childhood (EC) amendments on EC bills enacted and EC court cases. Two years after an amendment passes, there is a significant increase in the number of EC bills enacted. The number of enacted bills decreases thereafter.

Panel [c] shows the effect of school choice (SC) amendments on SC bills enacted and SC court cases. In contrast to finance and EC bills, there is no clear pattern for school choice bills enacted.
 - 7 Dallman, S., Nath, A., & Premik, F. (2021, April 26). *The effect of constitutional provisions on education policy and outcomes* (p. 25). Minneapolis, MN: Federal Reserve Bank of Minneapolis. Retrieved May 3, 2021, from <https://www.minneapolisfed.org/research/staff-reports/the-effect-of-constitutional-provisions-on-education-policy-and-outcomes>
 - 8 Hutt, E., Klasik, D., & Tang, A. (2020). How do judges decide school finance cases?. *Washington University*

Law Review, 97(4), 1047-1130.

- 9 Wood, B., & Theobald, N. (2003). Political responsiveness and equity in public education finance. *The Journal of Politics*, 65(3), 718-738.

Shor, B., & McCarty, N. (2011). The ideological mapping of American legislatures. *American Political Science Review*, 105(3), 530-551.

- 10 Alemán Jr, E. (2007). Situating Texas school finance policy in a CRT framework: How “substantially equal” yields racial inequity. *Educational Administration Quarterly*, 43(5), 525-558.

Figlio, D., & Fletcher, D. (2012). Suburbanization, demographic change and the consequences for school finance. *Journal of Public Economics*, 96(11-12), 1144-1153.

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Poterba, J. (1997). Demographic structure and the political economy of public education. *Journal of Policy Analysis and Management*, 16(1), 48-66.

- 11 Candelaria, C., & Shores, K. (2019). Court-ordered finance reforms in the adequacy era: Heterogeneous causal effects and sensitivity. *Education Finance and Policy*, 14(1), 31-60.

Corcoran, S., & Evans, W. (2010). *Income inequality, the median voter, and the support for public education*. National Bureau of Economic Research.

Corcoran, S., & Evans, W. (2015). Equity, adequacy, and the evolving state role in education finance. In H. Ladd & E. Fiske (Eds.), *Handbook of research in education finance and policy* (pp. 353-371). Routledge.

Corcoran, S., Evans, W., Godwin, J., Murray, S., & Schwab, R. (2004). The changing distribution of education finance, 1972–1997. *Social Inequality*, 43-465.

- 12 Baker, B., & Welner, K. (2011). School finance and courts: Does reform matter, and how can we tell? *Teachers College Record*, 113(11), 2374-2414.

- 13 For example, with respect to the regression discontinuity analysis in A2:

Despite having a small number of treatment and control observations around the threshold, we find significant effects on education inputs. The first column shows a significant and positive effect on per-pupil total expenditure and column (2) shows a significant decrease in class size—an estimated fall of one student per teacher.

- 14 Rollins, E. (2019) *Five minutes that changed Connecticut: Simon Bernstein and the 1965 Connecticut Education Amendment*. Retrieved June 8, 2021, from <https://connecticuthistory.org/five-minutes-that-changed-connecticut-simon-bernstein-and-the-1965-connecticut-education-amendment/>

- 15 Berger, C. (1998). Equity without adjudication: Kansas school finance reform and the 1992 School District Finance and Quality Performance Act. *Journal of Law and Education*, 27(1).

- 16 Section 1 of article X of the Illinois Constitution of 1970 provides:

“A fundamental goal of the People of the State is the educational development of all persons to the limits of their capacities.

The State shall provide for an efficient system of high quality public educational institutions and services. Education in public schools through the secondary level shall be free. There may be such other free education as the General Assembly provides by law.

The State has the primary responsibility for financing the system of public education.” (Emphasis added.) Ill.

Const. 1970, art. X, § 1.

The education article of the 1970 Constitution originated as a proposal submitted by the education committee of the Sixth Illinois Constitutional Convention. 6 Record of Proceedings, Sixth Illinois Constitutional Convention 227 (hereinafter cited as Proceedings). At the outset, we note that an introductory passage in the education committee's report on the proposed education article states, "[t]he opportunity for an education, where the state has undertaken to provide it, is a right which must be made available to all on equal terms." *Committee for Educational Rights v. Edgar*, 672 N.E.2d 1178, 174 Ill. 2d 1, 220 Ill. Dec. 166 (1996).

- 17 Bauries, S.R. (2006). Florida's past and future roles in education finance reform litigation. *Journal of Education Finance*, 32(1), 89-104.
- 18 Amendment 23: A constitutional amendment adopted in 2000 that sets minimum levels of increase in the statewide base per-pupil funding amount and for total categorical program funding. It also creates the State Education Fund and earmarks a portion of income tax revenue for the fund. Amendment 23 is codified as Article IX, Section 17, Colorado Constitution. Retrieved June 8, 2021, from <https://www.colorado.gov/pacific/sites/default/files/SCHOOL%20FINANCE%20BOOKLET%202015.pdf>
- 19 Jackson, C.K., Johnson, R.C., & Persico, C. (2016). The effects of school spending on educational and economic outcomes: Evidence from school finance reforms. *The Quarterly Journal of Economics*, 131(1), 157-218.
- 20 Those elements include:

We create three indicators based on provisions in the education clauses of state constitutions. Each indicator takes value 2 {0, 1}.

 1. Duty of state: takes value 1 if the constitution imposes an obligation on the state legislature or provides that duty to provide education services is "primary" or "paramount."
 2. Equal access or rights: takes value 1 if the education clause includes language mandating equal access to education services or provides that education is "fundamental."
 3. Quality standards or specific policies: takes value 1 if the constitutional provision mandates that the system of public schools meet a certain minimum standard of quality or if any specific policy prescription is included in the education clause, p. 23
- 21 *Brigham v. State*, 692 A.2d 384, 166 Vt. 246 (1997).

See also: www.schoolfunding.info
- 22 SchoolFunding.Info, Teachers College, Columbia University (n.d.). New York, NY: Center for Educational Equity. Retrieved June 7, 2021, from <http://www.schoolfunding.info>
- 23 *Committee for Educational Rights v. Edgar*, 672 N.E.2d 1178, 174 Ill. 2d 1, 220 Ill. Dec. 166 (1996).

See also: <http://www.schoolfunding.info>
- 24 Rollins, E. (2019) *Five minutes that changed Connecticut: Simon Bernstein and the 1965 Connecticut Education Amendment*. Retrieved June 8, 2021, from <https://connecticuthistory.org/five-minutes-that-changed-connecticut-simon-bernstein-and-the-1965-connecticut-education-amendment/>
- 25 *CCJEF v. Rell*, 176 A.3d 28, 327 Conn. 650 (2018).

See also: Baker, B.D., Cotto, R., & Green, P.C. III (2021) Fixing Connecticut school finance: The time is now. *CT Mirror*. Retrieved June 8, 2021, from <https://ctmirror.org/category/ct-viewpoints/fixing-connecticut-school-finance-the-time-is-now/>
- 26 *Montoy v. State*, 279 Kan. 817, 112 P.3d 923 (2005).

Gannon v. State, 319 P.3d 1196, 298 Kan. 1107 (2014).

Gannon v. State, 390 P.3d 461, 305 Kan. 850 (2017).

- 27 Washington's high court overturned their formula in 2012. The Kansas decisions, however, are even more recent, in 2014 and 2017, but within the timeframe of the authors' analysis.

McCleary v. State, 269 P.3d 227, 173 Wash. 2d 477 (2012).

- 28 Baker, B.D., Di Carlo, M., & Weber, M. (2020) *The adequacy and fairness of state school finance systems*. Retrieved June 8, 2021, from <http://www.schoolfinancedata.org>

- 29 Baker, B.D., Di Carlo, M., & Weber, M. (2021) *The adequacy of school district spending in the U.S.* *Albert Shanker Institute*. Retrieved June 8, 2021, from https://www.schoolfinancedata.org/wp-content/uploads/2021/03/SFID_DCDbrief_Mar2021.pdf

- 30 Amendment 23: A constitutional amendment adopted in 2000 that sets minimum levels of increase in the statewide base per-pupil funding amount and for total categorical program funding. It also creates the State Education Fund and earmarks a portion of income tax revenue for the fund. Amendment 23 is codified as Article IX, Section 17, Colorado Constitution. Retrieved June 8, 2021, from <https://www.colorado.gov/pacific/sites/default/files/SCHOOL%20FINANCE%20BOOKLET%202015.pdf>

- 31 Colorado General Assembly, Taxpayer Bill of Rights, State of Colorado. Retrieved June 8, 2021, from <https://leg.colorado.gov/agencies/legislative-council-staff/tabor>

- 32 Downes, T.A., & Figlio, D.N. (1999). Do tax and expenditure limits provide a free lunch? Evidence on the link between limits and public sector service quality. *National Tax Journal*, 113-128.

- 33 Downes, T.A., & Figlio, D.N. (1999). Do tax and expenditure limits provide a free lunch? Evidence on the link between limits and public sector service quality. *National Tax Journal*, 113-128.

Downes, T.A., & Figlio, D.N. (2008). Tax and expenditure limits, school finance, and school quality. In H.F. Ladd & E.B. Fiske (Eds.), *Handbook of research in education finance and policy* (pp. 373-388). Routledge.

- 34 Oberfield, Z., & Baker, B.D. (2021). *The politics of school finance progressivity: Court-ordered reforms, ideology, and demographic difference*. Working paper. Available on request.

- 35 Baker, B.D. (2021) *School finance and education equity: Lessons from Kansas*. Cambridge, MA: Harvard Education Press.

- 36 Other conditions enabling school finance reform in Kansas include: The legislature has been generally responsive to the state high court in terms of orders to increase and/or redistribute state aid and in terms of meeting its obligation to provide empirical evidence to guide school finance reforms. The state has an independent and trusted non-partisan legislative research division, which has played a role in performing and digesting empirical evidence pertaining to school finance reform, including collaborating with outside scholars. Add to all of this an informed state and local media; persistent legal counsel with deep knowledge and institutional history, representing plaintiffs in several rounds and decades of litigation, from 1990 to the present day; and the availability of high-quality evidence for (a) informing judicial evaluation of the state of school finance in Kansas and (b) guiding legislative reforms.

See: Baker, B.D. (2021) *School finance and education equity: Lessons from Kansas*. Cambridge, MA: Harvard Education Press.