



REVIEW OF 2010 STATE SCHOOL REPORT CARD

Reviewed By

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Summary of Review

This review examines the Heartland Institute's report ranking states on student achievement, education expenditures, and adherence to learning standards, as well as a ranking based on an average of the first three. The rankings are based on indices created by the report's authors, and the report highlights the top- and lowest-performing states for each of the indices. The report assigns letter grades to each of the states (plus DC), with a forced distribution: 10 states are assigned A's, B's, C's, and D's, and 11 states must get F's. The report explains how the indices were devised but does not cite any research or provide rationales to support the methodological approach used in their creation. The report acknowledges that it does not control for state variations in demographic or other factors. It nevertheless presents conclusions concerning quality, and it recommends school choice as a remedy. The report's policy recommendations are undermined by the flaws in the report's methodological approaches, its limited and partisan selection of research references, and a clear disconnect between the recommendations and the report's findings.

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I. Introduction

With the No Child Left Behind Act of 2001 (NCLB) came calls for test score comparisons both within and across states. NCLB mandated that states receiving federal funding must (a) develop challenging academic standards, (b) test students annually using assessments aligned with those standards, and (c) measure whether schools, districts, and states are progressing toward those high standards.¹ Likewise, NCLB called for expanded school choice.

These calls resonate in the Heartland Institute's *2010 State School Report Card: A state-by-state analysis of learning, efficiency, and standards*, authored by Herbert J. Walberg and Marc Oestreich.² This *Report Card*, like numerous other reports,³ presents convenient, easy-to-read rankings of states on a variety of measurable outcomes showing top-performing and low-performing states (best and worst).⁴ The composite indicators constructed in the report include student achievement, educational expenditures as they relate to achievement, state standards, and an index of overall achievement.

In addition to state performance rankings, the *Report Card* warns that if all states do not follow the lead of top-ranked states, "traditions of relative prosperity and high economic growth will suffer" (p. 11). Its rankings were developed to "motivate legislators, governors, and others to further assess their states' learning progress and standards to make the changes needed to substantially improve student proficiency and benefit the nation as a whole" (p. 13). Its solution is to promote the creation of charter schools, to provide parents with vouchers so their students can attend private schools, and to provide tax credits for parents who homeschool their children (p. 11). This review examines the *Report Card*'s rationale, methods, and conclusions.

II. Findings and Conclusions of the Report

The *Report Card* presents a ranking of all U.S. states and the District of Columbia on four indices of school performance: learning, education expenditure efficiency, quality of state standards, and an overall achievement index that is an average of the first three indices. According to the report, "The data on which these indices are based have been separately published by the National Assessment of Educational Progress, National Center for Educational Statistics, and several think tanks" (p. 2). Part 2 of the report presents the methodology used to construct the four indices (pp. 3-6). Part 3 presents results and rankings for the 50 states plus the District of Columbia (9-10).

Part 4 discusses the policy implications of the findings (pp. 11-13), and the data used in making the final calculations are presented in an appendix to the report (pp. 15-16).

The norm-referenced method used in the report for assigning letter grades to states for each of the indices guarantees that there will be 10 states with A's, B's, C's, and D's, plus 11 states with F's—regardless of the actual degree of differences between states. For the purposes of this review, two new tables were created from the report's four results tables; the new tables show

Table 1: State School Report Card Rankings of Top Ten States in Student Achievement, Educational Expenditures, State Standards, and Overall Achievement

Ranking	Student Achievement	Education Expenditures	State Standards	Overall Achievement
1	AZ	HI	MA	AZ
2	SD	ID	CA	WA
3	MT	UT	WA	SD
4	AK	CA	CO	OR
5	OR	SD	FL	UT
6	NJ	AZ	MN	MN
7	PA	MT	IN	MO
8	IL	OK	OK	HI
9	ND	TN	HI	MA
10	MN	NC	ME	CA

Source: Walberg, H.J. & Oestreich, M. (2010). *2010 State School Report Card: A state-by-state analysis of learning efficiency, and standards*. Chicago, IL: Retrieved November, 1, 2010, from http://www.heartland.org/article/28630/2010_State_School_Report_Card.html

Table 2: State School Report Card Rankings of Lowest Ten States in Student Achievement, Educational Expenditures, State Standards, and Overall Achievement

Ranking	Student Achievement	Education Expenditures	State Standards	Overall Achievement
42	NY	FL	CT	NE
43	CA	MI	MT	SC
44	VA	NJ	NC	RI
45	DE	NY	PA	IA
46	RI	CT	KS	CT
47	NC	DE	IL	WY
48	MS	VA	IA	NY
49	AR	DC	WI	MI
50	FL	OH	AK	AR
51	WV	WY	NE	VA

Source: Walberg, H.J. & Oestreich, M. (2010). *2010 State School Report Card: A state-by-state analysis of learning efficiency, and standards*. Chicago, IL: Retrieved November, 1, 2010, from http://www.heartland.org/article/28630/2010_State_School_Report_Card.html

the top 10 ranked “best” states (Table 1) and the bottom 10 ranked “worst” states (Table 2). These tables show the variability across rankings and indices.

The report’s conclusion is somewhat unfocused. After noting that some states do better than others on these indices, it asks, “What are the highest-ranking states doing right?” and then answers, “there is actually very little empirical data on why some states achieve more or are

The report does not mention research literature regarding school choice at odds with its policy recommendations.

more efficient achievers than other states” (p. 11). But the authors then advocate for national adoption of two sets of policies: so-called Parent Trigger legislation⁵ modeled on legislation in California (pp. 12-13), as well as school choice policies.

The school choice push is included because, according to the report, “the closest thing we have come to finding a 50-state study of this kind is the *Education Freedom Index*...which found that the greater degree of school choice within a state, the better its achievement” (p. 11; the *Education Freedom Index* was published a decade ago by the free-market Manhattan Institute). The report also claims that “Private and charter schools cost less, on average, than public schools (charter schools cost on average about 80 percent of nearby traditional public schools)” (p. 12).

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

Beyond the choice advocacy, the rationale for the report’s findings and conclusions appears to rest solely on the four tables of results. Table 1 (Learning) is constructed from “gains (or losses) in test scores on the NAEP mathematics and reading tests in each state from 2005 to 2009...and, to measure typical recent progress, the grade gain in NAEP proficiency between 4th graders and 8th graders in 2009” (p. 3). Table 2 (Efficiency), is based on an “index of outcomes relative to how much each state spends per student adjusted for state cost of living” (p. 4). This efficiency index uses (a) cost per graduate, (b) cost per student, (c) cost per learning gain over time, (d) cost per unit of learning gain between grades, and (e) ratio of teachers to staff (p. 4). Table 3 (Standards) is based on Paul Peterson’s *Education Next* rankings of how inflated a state’s proficiency claims are, plus the Fordham Institute state grades based on “rigor and content of its math, reading, and science standards” (p. 6). Table 4 is a simple composite score for each state’s first three indices “divided by three, and ranked from 1-51 (with 1 being the most desirable)” (p. 6).

IV. The Report’s Use of Research Literature

The report’s achievement results are based on nationally reputable data sources (NAEP and NCES). All other citations are to reports and articles published by conservative and free-market

think tanks: Fordham, Friedman, Hoover, Manhattan, and Cato. The report does not mention research literature regarding school choice at odds with its policy recommendations.

V. Review of the Report's Methods

As noted above, the *Report Card* offers a letter-grade ranking of schools by state, based on three criteria. First, the report presents a state-by-state calculation of gains in test scores on the NAEP across time and between grades. The second measure takes these learning gains into account, along with money spent per graduate and per student, to calculate states' economic efficiency. Finally, the report ranks states' educational standards by assessing the rigor of these standards as a stand-alone measure and by comparing standards to NAEP scores. The ranks in each category are combined to create an overall state ranking.

The report's use of norm-referenced outcomes reported by letter grades guarantees that there will be failing states even though the numerical differences between the states are often not very large (p. 15). The method of calculating state-level overall rankings from the individual rankings also does not account for degrees of difference between each rank. If there is, for example, a small difference between states ranked 3rd versus 13th, but a large difference between states ranked 13th and 23rd, the results will be skewed when they are used as a basis for the report's subsequent calculation. An examination of the data used in making the final calculations for each of the report's results tables finds numerous states that do in fact have nearly identical scores. However, the methodology in calculating the final rank requires an exaggeration of these differences through the assignment of different letter grades in the achievement, efficiency, and standards sections. That is, for each of the results sections, states are ranked from best to worst even though there may not be great differences between states (p. 15).

The report then shifts to a discussion of policy implications for lower-ranked states. This section, which advocates school choice and "parent trigger" laws, is based not on the earlier calculations of state rankings but rather on several brief and uncritical references to past think tank reports.

VI. Review of the Validity of the Findings and Conclusions

The report presents a 50-state, plus the District of Columbia, ranking and comparison of author-created indices of school performance. It highlights the top- and lowest-performing states in each of the indices (see Tables 1 and Table 2 above). Unfortunately, each of the three core indices are flawed—two of them seriously so. Given the methods of calculation, such rankings indicate little about the actual achievement of students or efficiency of state educational programs.

The report uses the NAEP (which does meet The Code of Fair Testing Practices⁶) to look at "time gain" to construct its Learning index. Yet, time gain cannot be considered a valid measurement of NAEP grade gain between fourth- and eighth-grade students in 2009 for two reasons: (a) as the authors acknowledge, the report "does not control for all state variations in demographic or other factors" (p. 3); and (b) the authors do not indicate whether they are using NAEP pass rates

or scale scores in their computations. In fact, our own examination of NAEP results⁷ found that students in Florida (ranked 50th in this Heartland report) outperformed students in Arizona (ranked 1st) in both reading and mathematics.

The report's efficiency index, developed with NCES Common Core Data, fails to provide essential weighting information for the five indices that were selected to support the efficiency measure. The efficiency index is based on the authors' arbitrary use of equally weighted supporting indices that are not buttressed by a single research reference. All the indices selected

Given the weaknesses in the three composite indices, the resulting overall index is a meaningless and flawed indicator.

use a common education figure as numerator to calculate the resultant sub-indices. For example, to calculate the cost per graduate, the report uses each state's adjusted education spending figure divided by the number of public school diplomas issued in each state to calculate a per-graduate spending indicator. However, it does so without considering state-level variation in both education spending and high school graduation rates, which weakens the indicator. Our comparison of high school graduation rates from the NCES finds that the state with the highest Efficiency ranking in this report (Hawaii) had a graduation rate that was 8 percentage points lower when compared with the 50th ranked state (Ohio)—69% versus 77% (p. 8).⁸

The report's rankings of states' Standards by averaging an *Education Next* (EdNext) Standards rankings and a Fordham Institute set of State Standards rankings is not valid, given the apparent lack of consistency between the two measures. For example, the EdNext Standards ranking is based on state-level proficiency scores in reading and mathematics relative to NAEP scores, while the Fordham rankings of state standards is based on an arbitrary score that grades each state on the rigor and content of its math, reading, and science standards. The Standards index (combining the two) does not meet the test of construct validity because it fails to operationalize the methods used in the supporting rankings in specific and concrete terms.

The Overall index is a simple composite score for each state created by averaging the three individual rankings with no differential weighting. Given the weaknesses in the three composite indices (described above), the resulting overall index is a meaningless and flawed indicator.

The report's final conclusions are also highly problematic. The conclusion that failure to support school choice will have dire effects on the nation's economic well-being and its international economic standing simply does not follow from the calculations made to rank states into four categories. In fact, the report's authors acknowledge in a footnote (n. 17, p. 12) that the Manhattan Institute "freedom" rankings do not significantly correlate to the rankings presented in this new *Report Card*. That is, the empirical ranking and grading exercise in the Heartland report does not support the Manhattan contention that states with more choice (freedom) do better—yet the Heartland report nevertheless pushes the choice policies.

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

The Heartland *Report Card* uses national data to rank states. A report of this type that is in fact able to identify states that are doing extremely well or extremely poorly in important areas can then be used as a jumping off point for a deep and careful examination of practices, conditions, leadership and resources that may account for the differences. However, this particular report offers only a limited but somewhat skewed view of state-level educational outcomes. It does not provide an adequate examination of the state-level outcomes reported in its simplistic, norm-referenced rankings. The rankings and other evidence fail to show that a state's school choice policies have any significant relationship to its students' educational performance. For these reasons, the report is not useful in guiding policy or practice.

Notes and References

¹ No Child Left Behind (NCLB) Act of 2001, Pub. L. No. 107-110, § 115, Stat. 1425 (2002).

² Walberg, H.J. & Oestreich, M. (2010). *2010 State School Report Card: A state-by-state analysis of learning efficiency, and standards*. Chicago, IL: Retrieved November, 1, 2010, from http://www.heartland.org/article/28630/2010_State_School_Report_Card.html.

³ See, e.g., Peterson, P.E. & Lastra-Anadon, C.X. (2010, May 8). *State standards rise in reading, fall in math*. Retrieved November 16, 2010, from <http://educationnext.org/state-standards-rising-in-reading-but-not-in-math>.

⁴ For critique of these ranking approaches, see Bracey, G.W. (2007). The first time ‘everything changed’. *Phi Delta Kappan*, 89(2), 119-136.

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⁵ Parent Trigger laws allow parents whose children attend a failing public school to sign a petition demanding immediate reform of their school (Walberg & Oestreich, 2010, 12).

⁶ Joint Committee on Testing Practices (2004). *Code of Fair Testing Practices in Education*. Washington, DC: Author.

⁷ National Center for Educational Statistics (2009). *Percentages of fourth- and eighth-grade students in reading and mathematics meeting state proficiency standards and performing at or above the NAEP Proficient level, by state: 2007*. Retrieved November 17, 2010, from http://nces.ed.gov/nationsreportcard/studies/statemapping/2007_naep_state_table.asp.

⁸ National Center for Educational Statistics (2010). *Public School Graduates and Dropouts from the Common Core of Data: School Year 2007–08*. Retrieved November 17, 2010, from <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2010341>.

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