Toward Common Frameworks and Methods for Evaluating State School Finance Systems

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Core Principles

1. Proper funding is a necessary condition for educational success: Competitive educational outcomes require adequate resources, and improving educational outcomes requires additional resources.

2. The cost of providing a given level of educational quality varies by context: Equal educational opportunity requires progressive distribution of resources, targeted at students and schools that need them most.

3. The adequacy and fairness of education funding are largely a result of legislative policy choices: Good school finance policy can improve student outcomes, whereas bad policy can hinder those outcomes.
Core concepts

• Equity of Nominal Inputs
• Equity of “Real Resources”
  – Requires adjusting dollar inputs for the price of comparable resources (competitive wages)
• Equal Opportunity (to achieve a given outcome level)
  – Requires considering that certain children under certain circumstances require more resources than do others to achieve common outcomes
• Equal Opportunity to Achieve Adequate Outcomes
  – Sets a specific outcome bar to equal opportunity
Themes

• Money matters!

• Money translates primarily to human resources
  – Trade-off between quantity and wage
  – There are no magical substitutes
    • Tech-based solutions?
    • Public district, charter and private schools allocate resources largely the same!
      – Running multiple systems in a common space induces inefficiency

• School spending has not grown out of control for decades!
  – During bad times, school spending stagnates or even declines
  – But during good times, at least in recent cycles, spending doesn’t rebound

• School spending varies substantially across states!
  – For a variety of reasons
  – Some states have really thrown public schooling under the bus
Money matters myths!

- **Clouds of doubt**
  - Weak correlation between spending and outcomes?
    - More thorough statistical analysis finds otherwise!

- **The Long Term Trend**
  - Spending has doubled and performance is flat?
    - But a) spending hasn’t doubled and b) performance isn’t flat!
    - AND, more thorough statistical analysis finds otherwise!

- **International Comparisons**
  - We spend more than any other nation (in the world, ever!) and get little, by comparison, in return?
    - Just no!
    - Spending figures most frequently cited simply not comparable (do not cover comparable range of costs/services)
    - Numerous other relevant factors invariably left out of comparisons.

- **How money is spent matters more than how much?**
  - But, if you don’t have it, you can’t spend it!
    - (assumes flexibility in trade-offs between staffing quality/quantity)
    - LAUSD Class Size / Teacher Wage problem
What the research actually tells us

- **Recent national school finance studies** (Jackson et al., Lafortune & Rothstein, Candelaria & Shores)
  - Substantial and sustained state school finance reforms have led to improved short term and long term student outcomes
    - The funding increases which led to improved student outcomes generally led to a) smaller class sizes and b) more competitive teacher wages
  - Studies of recession era cuts are revealing short run declines in student outcomes

- **State specific school finance reform studies** (MI, MA, KS, VT, CA)
  - Several state specific longitudinal studies have revealed positive effects of increased funding on student outcomes, from test scores to graduation rates

- **Resources that matter for student outcomes cost money**
  - Smaller class sizes matter
  - More competitive teacher compensation matters
  - High Quality pre-school programs matter

ACTUAL
LONG TERM NATIONAL TRENDS & CYCLES

\[(\text{School} = b_0 + b_1 \text{State}_i + b_2 \text{LaborMarket}_i + b_3 \text{CWI}_i + b_4 \text{Finance}_i + b_5 \text{PopulationDensity}_i + b_6 \text{Enrollment}_j + b_7 \text{Indicators}_i + b_8 \text{Scale}_j + b_9 \text{Poverty}_i + b_{10} \text{SchType}_i + b_{11} \text{Database}_j + e)\]
Graduate School of Education

Per Pupil Spending

Nominal and Adjusted Per Pupil Spending

Year
1993 1995 1997 1999 2001 2003 2005 2007 2009 2011 2013 2015

Per Pupil Spending

Nominal

Adjusted for Labor Costs

www.schoolfinancedata.org
Direct Expenditure on Education as a Percent of Personal Income
(E027) Elem Educ-Direct Exp

1986 DOMESTIC GROSSES
Total Grosses of all Movies Released in 1986

Notes: "College graduates" excludes public school teachers, and "all workers" includes everyone (including public school teachers and college graduates). Wages are adjusted to 2015 dollars using the CPI-U-RS. Data are for workers aged 18–64 with positive wages (excluding self-employed workers). Nonimputed data are not available for 1994 and 1995; data points for these years have been extrapolated and are represented by dotted lines (see Appendix A for more detail).
COMMON PRINCIPLES, FRAMEWORKS & INDICATORS

Dude, look at that scatterplot! Love this stuff!

You’re telling me? Glad I’m done with that Ph.D!

He’s at it again Jazzman!
Core Indicators

1. **Effort**: how much of a state’s total resources or capacity are spent directly on K-12 education;

2. **Adequacy**: whether states provide sufficient resources to districts, relative to other states or to common outcome goals (e.g., test scores);

3. **Progressivity**: whether states allocate more resources to districts serving larger proportions of disadvantaged children.
1. **Effort**: All else being equal, more effort is better, particularly for states with less capacity. Conversely, however, states with larger economies may not require as much effort as states with smaller economies.

2. **Adequacy**: In light of widespread agreement that educational outcomes in the U.S. must improve, we assert, as a general principle, that allocating more resources to schools is better. However, states should also provide resources to schools that are commensurate with achieving common outcomes or improvement toward those outcomes.

3. **Progressivity**: States’ allocation of resources should be progressive — i.e., districts serving more high-needs students should receive more revenue. The optimal degree of progressivity, however, might depend on factors such as the amount of inequality of education outcomes (for example, states with large achievement gaps might allocate resources more progressively).
Effort

State effort = \frac{\text{Total K-12 education spending}}{\text{State economic capacity}}

Factors
- Total K-12 education spending

Variables
- Combined state and local direct education expenditures
- Option 1: Gross state product
- Option 2: Aggregate personal income

**FIGURE 2**
Illustrative Model of State Fiscal Effort Indicator
Progressivity

1. Substantial progressivity: The ratio of adjusted state and local revenue in higher-poverty districts (10, 20, or 30 percent poverty) to that of the lowest-poverty districts (0 percent poverty) within a given state.

2. Systematic progressivity: The correlation between revenue and poverty (labor market centered) among all districts within a given state.
Generating Comparable Revenue Measures

**FIGURE 1**
Illustrative Model of Adjusted Revenue/Spending
Describing State School Finance Systems

State A: High Spending, Progressive
- Required spending
- Actual spending
- Progressivity

State B: Low Spending, Progressive
- Required spending
- Actual spending
- Progressivity

State C: Low Spending, non-progressive
- Required spending
- Actual spending
FIGURE 8
Substantial Progressivity Ratios
Ratio of adjusted state and local revenue in 10/20/30 percent poverty districts to adjusted state and local revenue in 0 percent poverty districts, by state, 2016

Notes: Values within the bars are progressivity ratios at each poverty level (i.e., bars = 0 percent poverty). Total length of bar is the sum of the three ratios.

Variables used:
predicted_income6
predicted_income10
predicted_income30

FIGURE 9
Systematic Progressivity
Withhold correlations between district state and local revenue and district poverty, by state, 2016

Notes: Hawaii not included due to its having only one school district. Revenue and poverty are calculated around 100, divided by the average of the district’s labor market.

Variables used:
sys_prog

Values over one indicate progressive education funding—that is, moderate and high poverty districts receive more revenue than zero poverty percent poverty districts, else being equal. The states toward the bottom fund education regressive—zero percent poverty districts actually receive more revenue than moderate and higher poverty districts.

Positive numbers in the graph indicate that higher poverty districts tend to receive more revenue (progressively), whereas negative numbers denote the opposite (regressive funding). The higher the number, the greater the strength of this positive or negative relationship.
Describing State School Finance Systems

FIGURE 11
Illustrative Model of State School Finance Systems
SIDEBAR: STATE AID & PROGRESSIVENESS

Progressiveness results from well targeted state aid, not merely the amount or share of total
State Share is Not a Determinant of Spending Progressiveness

% Total Revenue from State

Spending Fairness Ratio (Progressiveness)

R² = 0.0557
MA and NJ have higher local shares of funding than NY but generally more equitable funding over time.
MA and NJ have higher local shares of funding than NY but generally more equitable funding over time.
VOLATILITY OF TAX REVENUES BY SOURCE

- Property tax
- Sales tax
- Income tax

RACIAL DISPARITIES

Does Race Still Matter in State School Finance Systems?
Graduate School of Education

Difference in Dollars per Pupil Relative to
a) Labor Market Mean, or
b) Predicted Cost of National Mean Outcomes
National (Controlling for Grade Range Distribution) 2014-2016

Regression Coefficient

Difference in Dollars per Pupil Relative to
a) Labor Market Mean, or
b) Predicted Cost of National Mean Outcomes
National (Controlling for Grade Range Distribution) 2014-2016

-0.040
-0.020
0.000
0.020
0.040
0.060
0.080
0.100

Ratio of district pct. in poverty, 5-17 to labor market
Pct. Hispanic
Pct. Black, not Hispanic

State & Local Revenue
Current Spending
Spending Relative to "Adequacy"
Difference in Spending Relative to Cost of National Average Outcomes

-2.814*** -1.564*** -0.377***
-2.097*** -0.149*** -0.373***
-2.494** -0.761*** -0.375***
-2.428** -0.121** -0.182***
-0.149*** 0.351*** 0.182***
-0.200 0.020 0.068
0.373*** 0.142*** 0.121** 0.519*** 0.783***
0.783*** 0.569*** 0.572 0.080 0.020

Connecticut Colorado Nebraska Virginia New Jersey Pennsylvania New York Illinois

Adjusted Poverty % Hispanic % Black
CONSISTENT FRAMEWORKS FOR “WITHIN” VS. “BETWEEN”

And for sorting out how charter school expansion influences within-district equity/progressivity
We must use appropriate models to distill progressiveness both across and within districts.

### Across New York State Districts

<table>
<thead>
<tr>
<th>Student Needs</th>
<th>Coef.</th>
<th>Std. Err.</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Poverty (Census)</td>
<td>$11,783</td>
<td>$1,876</td>
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<tr>
<td>% ELL</td>
<td>$8,938</td>
<td>$2,864</td>
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<tr>
<td>% Special Education</td>
<td>$16,365</td>
<td>$4,272</td>
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<tr>
<td>Competitive Wage Variation</td>
<td>$9,081</td>
<td>$987</td>
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<tr>
<td>Population Density</td>
<td>-$335</td>
<td>$131</td>
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<td>&lt;100</td>
<td>$21,779</td>
<td>$15,164</td>
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<td>101 to 300</td>
<td>-$1,337</td>
<td>$5,284</td>
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<td>201 to 600</td>
<td>$563</td>
<td>$4,626</td>
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<td>601 to 1200</td>
<td>-$1,617</td>
<td>$1,989</td>
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<td>1201 to 1500</td>
<td>-$418</td>
<td>$2,443</td>
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<td>1501 to 2000</td>
<td>-$3,679</td>
<td>$1,946</td>
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<tr>
<td>Unified K-12 District</td>
<td>$368</td>
<td>$944</td>
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<tr>
<td>Interaction with Population Density</td>
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<tr>
<td>&lt;100</td>
<td>$1,620</td>
<td>$2,886</td>
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<tr>
<td>101 to 300</td>
<td>$3,044</td>
<td>$1,147</td>
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<tr>
<td>201 to 600</td>
<td>$742</td>
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<td>601 to 1200</td>
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<td>$378</td>
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<td>1201 to 1500</td>
<td>$296</td>
<td>$424</td>
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<td>1501 to 2000</td>
<td>$688</td>
<td>$317</td>
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<tr>
<td>Constant</td>
<td>$5,349</td>
<td>$1,445</td>
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<td>R-squared =</td>
<td>0.4538</td>
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</table>

### Within New York City

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>Coef.(Difference)</th>
<th>Std. Err.</th>
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</thead>
<tbody>
<tr>
<td>% in Grades 6-8</td>
<td>-$779</td>
<td>$163</td>
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<tr>
<td>% in Grades 9-12</td>
<td>-$757</td>
<td>$142</td>
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<tr>
<td>Student Need</td>
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<td></td>
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<tr>
<td>% Subsidized Lunch</td>
<td>$2,008</td>
<td>$297</td>
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<tr>
<td>% Special Education</td>
<td>$25,159</td>
<td>$1,174</td>
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<tr>
<td>School Size (ln of Enrollment)</td>
<td>-$2,635</td>
<td>$85</td>
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<tr>
<td>Constant</td>
<td>$34,319</td>
<td>$653</td>
</tr>
</tbody>
</table>

Spending across schools is progressive with respect to low income shares!

Spending is predictable as a function of rational factors (and in the “right” direction)

Spending across districts is highly regressive with respect to child poverty rates!

Spending is not very predictable as a function of rational factors (or in the “right” direction)
When we model per pupil spending across schools, not treating charters as a special subset, it appears that school spending is marginally lower in schools with higher low income shares (regressive).

When we treat charter schools as a separate subset, we find that they, on average spend marginally more than otherwise similar district schools (while serving generally lower need populations). This creates the overall “regressive” pattern. District schools without charters are marginally “progressive”.

### Modeling per Pupil Spending in Baltimore City

<table>
<thead>
<tr>
<th>Grade Distribution</th>
</tr>
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<tbody>
<tr>
<td>% in Grades 6-8</td>
</tr>
<tr>
<td>% in Grades 9-12</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Student Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Non-Severe Special Ed</td>
</tr>
<tr>
<td>% All Special Ed</td>
</tr>
<tr>
<td>% ELL</td>
</tr>
<tr>
<td>% Low Income</td>
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</table>

<table>
<thead>
<tr>
<th>Charter School Year</th>
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<tbody>
<tr>
<td>Year=2014</td>
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<tr>
<td>Year=2015</td>
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<table>
<thead>
<tr>
<th>Constant</th>
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<tbody>
<tr>
<td>$10,071</td>
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<table>
<thead>
<tr>
<th>R-Squared</th>
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<tbody>
<tr>
<td>0.486</td>
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RELATIONSHIPS AMONG INDICATOR TYPES

Cutting through the Clutter
## Correlations among Equity Indicators

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<tbody>
<tr>
<td>Poverty Gap (%) Ed Trust</td>
<td>0.9512</td>
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<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Racial Gap ($) Ed Trust</td>
<td>0.6847</td>
<td>0.6013</td>
<td></td>
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<tr>
<td>Racial Gap (%) Ed Trust</td>
<td>0.6187</td>
<td>0.5742</td>
<td>0.9719</td>
<td></td>
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<tr>
<td>Progressiveness ($) Urban Institute</td>
<td>0.8009</td>
<td>0.6982</td>
<td>0.7193</td>
<td>0.6681</td>
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<tr>
<td>Neutrality - Ed Week</td>
<td>-0.0776</td>
<td>-0.0395</td>
<td>0.036</td>
<td>0.0134</td>
<td>-0.1593</td>
<td></td>
<td></td>
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<tr>
<td>Coefficient of Variation - Ed Week</td>
<td>0.0314</td>
<td>0.0363</td>
<td>-0.0364</td>
<td>-0.0565</td>
<td>0.1364</td>
<td>0.0414</td>
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<tr>
<td>Restrict Range - Ed Week</td>
<td>-0.056</td>
<td>-0.1311</td>
<td>0.0749</td>
<td>0.0824</td>
<td>0.2011</td>
<td>-0.0644</td>
<td>0.4628</td>
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<tr>
<td>Progressiveness Ratio - SFID</td>
<td>0.508</td>
<td>0.5824</td>
<td>0.0832</td>
<td>0.0521</td>
<td>0.3002</td>
<td>0.0254</td>
<td>0.1885</td>
<td>-0.1731</td>
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</table>
# Effort and Adequacy Measures

<table>
<thead>
<tr>
<th>Column 1</th>
<th>Effort (Ed Week)</th>
<th>GSP Effort (SFID)</th>
<th>Aggregate Income Effort (SFID)</th>
<th>McLoone Index (Ed Week)</th>
<th>Spending Index (Ed Week)</th>
<th>Current Spending as % of Target (SFID)</th>
<th>Current Spending Gap to Target (SFID)</th>
<th>Predicted Spending at 20% Poverty (SFID)</th>
<th>Current Outcomes as Ratio to Mean (SFID)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSP Effort (SFID)</td>
<td>0.4884</td>
<td></td>
<td>0.2803</td>
<td>0.8597</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Aggregate Income Effort (SFID)</td>
<td></td>
<td>0.2803</td>
<td></td>
<td>0.8597</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>McLoone Index (Ed Week)</td>
<td>-0.4008</td>
<td>-0.3257</td>
<td>-0.1805</td>
<td></td>
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<tr>
<td>Spending Index (Ed Week)</td>
<td>0.303</td>
<td>0.4555</td>
<td>0.5548</td>
<td>-0.2271</td>
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<td></td>
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<tr>
<td>Current Spending as % of Target (SFID)</td>
<td>0.339</td>
<td>0.4433</td>
<td>0.4659</td>
<td>-0.3096</td>
<td>0.7145</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current Spending Gap to Target (SFID)</td>
<td>0.3146</td>
<td>0.4319</td>
<td>0.4767</td>
<td>-0.2915</td>
<td>0.7263</td>
<td>0.9813</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Predicted Spending at 20% Poverty (SFID)</td>
<td>0.3287</td>
<td>0.5727</td>
<td>0.6385</td>
<td>-0.3436</td>
<td>0.8185</td>
<td>0.8921</td>
<td>0.8949</td>
<td></td>
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</tr>
<tr>
<td>Current Outcomes as Ratio to Mean (SFID)</td>
<td>0.1737</td>
<td>0.1764</td>
<td>0.1313</td>
<td>-0.2453</td>
<td>0.4746</td>
<td>0.7513</td>
<td>0.7489</td>
<td>0.5697</td>
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</tbody>
</table>
TOWARD AN ADEQUATE SYSTEM FOR ALL

Reducing interstate inequality
Adequacy

**Factors**
- Current education spending
- Spending required

**Variables**
- State and local K-12 spending for a given poverty quintile (NECM)
- NECM estimates of spending required to achieve national average testing results in the previous year

\[
\text{Adequacy relative to common outcome goals} = \frac{\text{Current education spending}}{\text{Spending required}}
\]

**FIGURE 4**
Illustrative Model of Adequacy Relative to Common Outcome Goals
Inefficiency

Spending

Cost

Structural/Geographic Constraints
Input Prices
Student Population

Measured Student Outcomes

Efficiency Controls:
Fiscal capacity, competition, & public monitoring

Inefficiency
Inefficiency

Cost

Spending

Inefficiency

Structural/Geographic Constraints

Input Prices

Regional Wage Variations

Student Population

Economies of Scale (Size)
Population Sparsity

Regional Wage Variations

Social Context
Poverty
(Concentration & Density)

Individual Need
Language Proficiency
Disability

Efficiency Controls:
Fiscal capacity, competition, &
public monitoring

Measured Student Outcomes
<table>
<thead>
<tr>
<th></th>
<th>coef</th>
<th>se</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcome Index</td>
<td>8.093***</td>
<td>0.654</td>
</tr>
<tr>
<td>Education Comparable Wage Index</td>
<td>0.617***</td>
<td>0.034</td>
</tr>
<tr>
<td>Adjusted Poverty Rate</td>
<td>2.572***</td>
<td>0.190</td>
</tr>
<tr>
<td>State Mean Centered SWD Rate</td>
<td>2.153***</td>
<td>0.125</td>
</tr>
<tr>
<td>% ELL</td>
<td>0.876***</td>
<td>0.103</td>
</tr>
<tr>
<td>% Enrollment in Pre-k</td>
<td>-0.004</td>
<td>0.128</td>
</tr>
<tr>
<td>% Enrollment in K</td>
<td>-0.465**</td>
<td>0.190</td>
</tr>
<tr>
<td>% Enrollment in Middle Grades</td>
<td>-1.636***</td>
<td>0.145</td>
</tr>
<tr>
<td>% Enrollment in Secondary Grades</td>
<td>-0.328***</td>
<td>0.075</td>
</tr>
<tr>
<td>Less than 100 Students</td>
<td>0.378</td>
<td>0.279</td>
</tr>
<tr>
<td>101 to 300 Students</td>
<td>0.324***</td>
<td>0.048</td>
</tr>
<tr>
<td>301 to 600 Students</td>
<td>0.254***</td>
<td>0.033</td>
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<tr>
<td>601 to 1200 Students</td>
<td>0.153***</td>
<td>0.030</td>
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<tr>
<td>1201 to 1500 Students</td>
<td>0.112***</td>
<td>0.039</td>
</tr>
<tr>
<td>1501 to 2000 Students</td>
<td>0.126***</td>
<td>0.043</td>
</tr>
<tr>
<td>Log of Population per Square Mile</td>
<td>-0.024***</td>
<td>0.006</td>
</tr>
<tr>
<td>enroll_under100_x_density</td>
<td>0.009</td>
<td>0.068</td>
</tr>
<tr>
<td>enroll_101to300_x_density</td>
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<td>0.011</td>
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<td>enroll_301to600_x_density</td>
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<td>enroll_601to1200_x_density</td>
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<td>enroll_1201to1500_x_density</td>
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<tr>
<td>Unified K12 District</td>
<td>0.105***</td>
<td>0.020</td>
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<tr>
<td>% Revenue from State and Federal Sources</td>
<td>0.032</td>
<td>0.034</td>
</tr>
<tr>
<td>Herfindhal Index - Enrollment</td>
<td>-0.083***</td>
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<tr>
<td>% Population between 5 &amp; 17 yrs of age</td>
<td>0.012</td>
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<tr>
<td>year==2010</td>
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<td>year==2012</td>
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<td>year==2013</td>
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<td>year==2014</td>
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<td>_cons</td>
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<td>3.664</td>
</tr>
</tbody>
</table>

Number of observations: 80,503

Higher outcomes cost more to achieve!

Regional labor costs

Student Needs

Grade Range Distribution

Scale and Sparsity
Graduate School of Education

Current spending (2013-2015) as % of "cost" of achieving national average outcomes (red = lower, green = higher)

Current outcomes (2013-2015) with respect to national average outcomes (red = lower, blue = higher)
Kansas

Required spending and actual spending, by poverty quintile

Colorado

Required spending and actual spending, by poverty quintile

Data from the School Finance Indicators Database | http://schoolfinanceindicators.org/
Outcome Gaps & Spending Gaps Relative to National Average

New Jersey vs. Alabama by Poverty Quintile

2013-2015
Source: Data from Baker et al., The Real Shame of the Nation
Reduction of Spending Gaps (to cost of average outcomes) at Required State Effort Rates

Spending gap (average outcomes) median poverty

Spending gap at 4% Gross State Product effort

Spending gap at 5% Gross State Product effort
THE ROAD AHEAD
The Road Ahead

• We need to rally our forces around core principles. Many (most) of us largely agree on the core principles:
  – Proper funding is a necessary condition for educational success: Competitive educational outcomes require adequate resources, and improving educational outcomes requires additional resources.
  – The cost of providing a given level of educational quality varies by context: Equal educational opportunity requires progressive distribution of resources, targeted at students and schools that need them most.
  – The adequacy and fairness of education funding are largely a result of legislative policy choices: Good school finance policy can improve student outcomes, whereas bad policy can hinder those outcomes.
The Road Ahead

• We need to clear the clutter when it comes to indicators of state school funding systems
  – Indicators should address core principles:
  – Indicators involving spending measures must sort out “good” (equitable, cost-based) variation from “bad” (inequitable) variation
    • Address regional variation in labor costs
    • Address economies of scale and population sparsity
    • Address student need related cost factors

• We need to work as a team to help state policymakers understand the relationships among our indicators, and what they say collectively about state school finance systems!
The Road Ahead

• **Redefined Federal Role**
  – Funding: National School Foundation Aid Model
    • Pool all federal aid – allocate through a national foundation aid formula using “cost to average outcomes” as target
      – Required minimum state effort
      – Would translate primarily to more competitive wages & staffing ratios
    – Regulation: Oversight and Guidance (not “competitions” or specific policies/preferences)
      • Feds should focus on oversight, guidance (regs) and enforcement where necessary, pursuant to federal statutory protections
  – Research Advancement/Technical Support
    • Federal data collections (and research access to them!)
    • Renewed role in federal research support! And reporting!

• **State Role**
  – Funding: States must step up, reinstate equitable and adequate state aid formulas (and fund them) where they previously existed, design and adopt new ones where they did not previously exist
  – SEAs: State education agencies should be in the business of collecting/organizing and aggregating data on schools and may/should work with major public research institutions to mine/evaluate those data
Additional Thoughts

• Use economic good times to catch up!
  – Much of the recent/current recovery has been squandered

• Maintain balanced portfolio of revenue sources
  – Property taxes have their place in the system, offering a stability not provided by alternatives
    • Statewide or regional taxation of non-residential/commercial/industrial property can improve equity while retaining stability

• Traditional investments matter!
  – It really does still come down to staffing quantity and quality... that is... having enough, competitively compensated staff (teachers, administrators, etc.) to get the job done!