

# Money Matters: Evidence Supporting Greater Investment in PK-12 Public Education

## Research Talking Points for Advocates

New research finds that increased spending on public education improves student achievement, thereby debunking the notion that “money doesn’t matter” and making the case for greater investment in preschool-12 public education. How money is spent matters, but funding must also be adequate, equitable, and stable from year to year so that districts can be strategic in their spending and not have to cut one school resource to target funding towards another. This was the focus of discussion during a November 30 [webinar](#) co-sponsored by Education Law Center, ETS, and the Learning Policy Institute (LPI), featuring leading school finance experts Dr. Linda Darling-Hammond (LPI), Dr. Rucker Johnson (University of California, Berkeley) and Dr. Jesse Rothstein (University of California, Berkeley), with a welcome address by ETS President and CEO Amit Sevak and moderated by ELC’s Executive Director David Sciarra. The research distilled below was discussed during the webinar and provides policymakers, stakeholders, and advocates with clear and tangible evidence to argue for greater investments in the public schools in their states.

### **1) New research using rigorous methods finds money does matter and identifies flaws in prior research**

Recent studies using rigorous research methods find that students in states that invest more money in their public schools have higher test scores, greater educational attainment, and higher earnings. While money does not eliminate achievement gaps, it can shrink them.

Examples of research findings:

- States that passed major school finance reforms between 1990 and 2011 spent more on schools in low-income districts than states without reforms, which led to increased test scores in those districts.
  - Funding increases tended to be progressive, with low-income districts receiving about \$950 more per-pupil compared to about \$350 per-pupil in higher income districts.<sup>1</sup>

- Increased school spending between 1972-2010 as a result of funding reforms led to positive long-term outcomes for students, including higher wages, higher family incomes, and lower poverty rates, especially for low-income children.<sup>2</sup>
  - For low-income children, a 10% increase in per-pupil spending each year for all 12 years of public schools was associated with 0.46 additional years of completed education, 9.6% higher earnings, and a 6.1 percentage point reduction in the annual incidence of adult poverty. Overall, this increase in spending led to 0.31 more completed years of education, 9% higher earnings, and a 3.2 percentage point reduction in the annual incidence of poverty in adulthood.
- California's Local Control Funding Formula (LCFF), passed in 2013, increased state support to schools by \$18 billion over eight years after a history of low school funding. LCFF-induced increases in school spending increased high school graduation rates and academic achievement, especially for poor and minority students.<sup>3,4</sup>
  - A \$1,000 per-pupil increase for three consecutive years led to a full grade-level improvement in math and reading achievement across all grades.
  - A \$1,000 per-pupil increase across all four years of high school for low-income students increased graduation rates by 5 percentage points.
  - A \$1,000 per-pupil increase between 9<sup>th</sup> and 11<sup>th</sup> grade increased the probability of meeting college readiness standards by 7.6 percentage points in math and 9 percentage points in reading.
- Further research finding positive impacts of LCFF implementation on earlier age academic achievement outcomes and student behavior problems and discipline, as well as positive impacts of transitional kindergarten on later elementary school reading and math achievement for low-income students, is forthcoming.<sup>5,6</sup>
  - A \$1,000 increase across three consecutive years, coupled with a set of legal and educational reforms, reduced suspension/expulsion rates among 9-11<sup>th</sup> grade boys by 4 percentage points, and by 11-12 percentage points among black boys.
  - K-12 spending increases were more effective in increasing achievement when preceded by access to transitional kindergarten (preschool).

Prior studies finding that increased school funding does not improve test scores looked at general patterns and national funding increases from the 1960s to 1970s and 1990s.<sup>7</sup> The main flaw of these studies was that they did not account for contextual factors that are associated with increased spending on education. For example, new accountability goals and requirements expanded the population served by public schools. Spending on supports for students with severe disabilities has increased dramatically, but this spending is not intended to improve test scores. Likewise, declining dropout rates have led to higher enrollments in the older grades, though these students are less likely to be high achievers on state assessments and may actually depress test scores.<sup>8</sup>

## **2) How money is spent matters**

Research has identified the importance of targeting spending on programs and initiatives that improve student achievement, including high quality early education, prepared and experienced teachers, social-emotional supports, and community schools. Funding that is both predictable

and flexible allows school districts to focus spending on the needs of the local community, rather than being dictated by the state through restricted categorical grants.<sup>9</sup>

Examples of research findings:

- High quality preschool boosts achievement and reduces special education placements and grade retention.<sup>10</sup> For poor children, the long-term effects of K-12 spending double when preceded by access to high-quality preschool. For example, a 10% increase in school spending led to 13% higher adult wages without access to Head Start, and 20% higher wages with Head Start.<sup>11</sup>
- Students experience larger achievement gains when instructed by highly qualified teachers: experience, credentials, and stability matter.<sup>12</sup>
- Social-emotional supports and restorative practices improve achievement, graduation, and mental health.<sup>13</sup>
- Being in a community school with wraparound supports improves achievement and graduation rates.<sup>14</sup>
- 84-95% of the variation in California's LCFF spending effectiveness at the school district level can be explained by reduced class sizes, increased teacher salaries, lower teacher turnover, greater guidance/health services, and teacher professional development.<sup>15</sup>

### **3) Positive examples of policy implementation**

School finance litigation in Connecticut, New Jersey, and Massachusetts resulted in the funding and implementation of significant school reforms that raised student achievement and substantially narrowed achievement gaps.<sup>16</sup>

- Connecticut raised teacher salaries; raised standards for teacher education, entry, and professional licensing; introduced mentoring and performance assessments for beginning teachers and principals; emphasized principals' ability to support instruction; invested in high-quality professional development in reading, writing, math and science; and developed standards and assessments focused on student performance and problem solving.
- Massachusetts introduced a weighted student funding formula and increased funding, invested in preschool and health care for children, raised standards for teaching and teacher education, established student standards with high-quality open-ended assessments, fostered school redesign, and pursued steady policies for more than 15 years.
- New Jersey invested in parity funding and high-quality preschool for high need districts, curriculum and assessments focused on thinking skills, strong bilingual education, teacher and leader learning investments, and whole school reform models that personalize and support instruction with the whole child in mind.

### **4) School funding reform and school integration are intertwined**

Due to historical and persistently high levels of racial and economic segregation, underfunded schools tend to be found in districts with higher segregation concentration by race and poverty, with white students clustering in higher-income school districts, and Black and Latino students clustered in higher poverty schools.

- School funding reform efforts cost more in states where there are high levels of school segregation. In these states, the cost burden of school reform falls more heavily on the state because of the added costs of mitigating concentrated poverty and the reduced ability of poor communities to contribute substantial local funds.<sup>17</sup>
- School desegregation efforts are hindered when schools with the most concentrated poverty (often serving significant numbers of racial and ethnic minorities) are the ones that are under-resourced. Families with financial means that have other options are not going to choose school systems that are under-resourced.<sup>18</sup>
- Integration must involve systemic change that starts early at the preschool level.<sup>19</sup>

## The Need for School Finance Reform

The growing body of research finding that money does indeed matter for improving student outcomes, especially in the case of vulnerable student populations, underscores the urgent need for school finance reform in the states. We know that most states fail to provide fair, equitable, and adequate funding to ensure that all students have access to well-resourced and academically successful schools.<sup>20</sup> State-level school finance reforms are widely needed but notoriously difficult to enact and sustain. School funding campaigns require a long-term commitment from advocates and policymakers to ensure all students have access to their constitutionally guaranteed right to education. The research presented here is an essential component of the multi-faceted approach necessary to sustain these campaigns, along with focused political efforts, grassroots organizing, strategically timed litigation, and an aggressive communications strategy.<sup>21</sup> The ability to clearly and convincingly demonstrate the benefits of increased school funding is essential for moving these campaigns forward.

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<sup>1</sup> Lafortune, J., Rothstein, J., & Schanzenbach, D. W. (2018). [School Finance Reform and the Distribution of Student Achievement](#). *American Economic Journal: Applied Economics*, 10(2), 1–26.

<sup>2</sup> Jackson, C. K., Johnson, R. C., & Persico, C. (2015). [The Effects of School Spending on Educational & Economic Outcomes: Evidence from School Finance Reforms](#). *The Quarterly Journal of Economics*, 131(1), 157-218.

<sup>3</sup> Johnson, R. C. & Tanner, S. (2018). [Money and Freedom: The Impact of California's School Finance Reform on Academic Achievement and the Composition of District Spending](#). Palo Alto, CA: Learning Policy Institute.

<sup>4</sup> Johnson, R. C. (forthcoming). "The Anatomy of School Spending Effectiveness." NBER working paper, Cambridge, MA.

<sup>5</sup> Johnson, R. C. (forthcoming) "School Funding Effectiveness: Evidence from California's Local Control Formula." Palo Alto, CA: Learning Policy Institute, Research Report and Policy Brief.

<sup>6</sup> Education Law Center, ETS, Learning Policy Institute. (2022). [Money Matters: Evidence Supporting Greater Investment in PK-12 Public Education](#) [Webinar].

<sup>7</sup> Hanushek, E. (1998). [Conclusions and Controversies about the Effectiveness of School Resources](#). *Economic Policy Review*, 4, 11-27.

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