

Testimony of Danielle Farrie

Basic Education Funding Commission

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Good morning and thank you to the Commission for the opportunity to speak today. As Research Director at Education Law Center (ELC) in New Jersey for the last fifteen years, I have studied and analyzed school funding formulas in states across the country. My research focuses both on the national landscape of school funding fairness and also on state-specific work to improve and reform school funding systems that are inadequate or inequitable. In addition to authoring numerous research reports, I have also testified about school funding before the Maryland Legislature and the U.S. Commission on Civil Rights and have participated in school finance litigation in New Jersey, New York and Florida. I have been asked today to talk about the components of an adequate and equitable school funding formula and share experiences of reforms in other states.

School Finance Reform Works

I would like to start with a brief overview of the evidence that money does matter and the ways in which school finance reforms have improved outcomes for students. I will start with my home state of New Jersey, where the *Abbott v. Burke* school finance litigation led to dramatic funding reforms. Studies of the Abbott-era reforms have shown¹:

- Additional dollars targeted to low-income districts were largely spent on instruction and support services and had a significant impact on achievement.
- Low-income 8th grade students saw significant improvements on the National Assessment of Educational Progress (NAEP) and the Black-white achievement gap narrowed.
- Between 2001 and 2010, the high school graduation rate in the Abbott districts increased at three times the rate of non-Abbotts, a gain of 12 percentage points versus 4.
- Students enrolled in the court-ordered, high-quality Abbott Preschool program for three- and four-year olds sustained achievement gains through 10th grade; achievement gains were doubled for those attending two years of preschool versus one; grade retention was 15 percentage points lower; and special education classification was 7 percentage points lower than for similar students who didn't attend Abbott preschool.²

California, a state that experienced decades of disinvestment in public education and has the low achievement results to show for it, has also produced convincing evidence that their recent finance reforms of sustained per pupil increases over a relatively short period of time led to tangible and impressive outcomes:

¹ Education Law Center. 2016. [Governor Christie's Unfair School Funding Plan: Part III](#). Newark, NJ.

² National Institute for Early Education Research. 2021. [Fact Sheet – New Jersey Abbott Preschool Program Longitudinal Effects Study through Grade 10 \(APPLES-10\)](#). Rutgers University.

- A \$1,000 per-pupil per year increase each year 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 each year across all four years of high school for low-income students increased graduation rates by 5 percentage points.
- A \$1,000 per-pupil increase each year between 9th and 11th grade increased the probability of meeting college readiness standards by 7.6 percentage points in math and 9 percentage points in reading.
- K-12 spending increases were more effective in increasing achievement when preceded by access to transitional kindergarten or preschool.³

Recent rigorous national studies show that increased school spending between the 1970s and 2010s led to positive long-term outcomes for students well into adulthood. For low-income children, a 10% increase in per-pupil spending each year for all 12 years of schooling was associated with:

- An additional half a year of completed education,
- 10% higher earnings,
- 6 percentage point reduction in the annual incidence of adult poverty.⁴

This evidence has helped demonstrate that money matters and that strategic investments can improve both the short- and long-term outcomes for students. Spending is most effective if targeted towards 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 districts to invest in programs that meet their particular needs. With this backdrop, I'd like to turn to the essential components of a fair school funding system.

What is Fair School Funding?

My work at ELC (NJ) is grounded in the belief that a fair school funding system is the central component necessary to guarantee every student's right to a constitutional education. At ELC (NJ) we define a fair funding system as one where all schools are provided with the funding needed to provide qualified teachers, support staff, programs, services and other resources essential for all students to have a meaningful opportunity to achieve a state's academic standards and graduate from high school prepared for citizenship, postsecondary education, and the workforce.

Crucially, fair funding has two basic components: 1) adequacy, or a sufficient level of funding for all students and 2) equity, where funding levels are differentiated to account for the reality that some students require additional resources to reach a common outcome.

Adequate funding means that school districts have the resources to provide students with the programs and services they need to achieve the state's curricular standards. Adequate funding supports everything from a high-quality workforce, up-to-date curriculum, safe and modern school buildings, social and

³ Education Law Center. 2023. [Money Matters: Evidence Supporting Greater Investment in PK-12 Public Education](#).

⁴ Ibid.

emotional supports for students, access to technology, and more. Schools must be funded so that all buildings can provide these core educational services to their students.

A fair school funding system delivers equity by acknowledging that the cost of providing an adequate education varies according to student and district characteristics. All students do not enter school on the same footing, and students facing family or community poverty often require additional supports to ensure success. We define an equitable funding system as one that has a progressive distribution of funds so that high poverty districts receive additional dollars to support the academic and social needs of students who often face obstacles to learning.

These two features of fair funding are interdependent: funding must be both adequate and equitable to be fair. A funding system cannot achieve adequacy without equity and it cannot achieve equity without adequacy. A progressive distribution of funds is not fair if districts are not provided with the base level of funding needed to deliver the state's curricular standards. And a seemingly well-funded school system is not fair if additional funding is not targeted to those who need it.

Key Features of Fair School Funding Formula

A fair school funding formula is an essential precondition for the delivery of a high-quality education for all students. It is each state's responsibility to develop a modern and equitable formula that clearly defines unique adequacy targets for each district, and then sets reasonable expectations for how the responsibility for raising revenue will be shared between state and local sources.

A good funding formula will ensure that these factors are met by:

- 1) *Aligning funding to state standards through adequacy targets*: Adequacy targets should be aligned with the cost of effectively delivering the standards and curriculum so that all students have the opportunity to succeed. Adequacy targets that are directly linked to the cost of teachers, support staff, administration, curriculum, professional development and more are what ensure that districts are able to deliver a constitutionally sound education. For example, after many attempts, New Jersey's Supreme Court only signed off on a school funding formula after the state developed a formula using this principle.⁵
- 2) *Centering students*: each district should have a unique funding target that is based on both overall enrollment and the characteristics of the student population. Research, and common sense, tell us that students from families near or at poverty, those who are learning English, and those with disabilities need additional resources to be successful, so a good formula will tie funding directly to those characteristics, often with the use of weights, where students in each category receive a percentage increase above the "base cost" for a typical student.
- 3) *Wealth equalization*: The formula must include a way to equitably share costs between the state and local municipalities so that some groups do not bear a greater financial burden simply because their property is worth less. Wealth equalization often uses community factors such as property values and personal income to determine how much each district can afford. These formulas should also consider the overall tax burden faced by communities. For example, urban communities may bear a greater burden because of expensive municipal services that rural or suburban areas do not provide. Wealth equalization will achieve equity only if all districts are able to meet their local revenue targets.

⁵ Education Law Center. [Linking Standards to Resources: New Jersey's School Funding Reform Act of 2008](#). 2014. Newark, NJ.

- 4) *Periodic review*: Formulas must be subject to periodic review to ensure that they keep pace with whatever curricular or policy changes are enacted by the state. Including a formal review period in legislation can help ensure that school finance stays current with education policy and practice. The intensity and scope of these reviews varies. For example, New Jersey internally produces an “Educational Adequacy Report” every three years but has only updated salary and benefit data that informs the base costs and other formula elements. It has never recalibrated the formula to adjust to significant changes in curricular standards over the last two decades. In contrast, Wyoming produces a recalibration report every five years that relies on external researchers to provide in-depth analysis of the resources included in the school funding model.

Implementation

Once a state has a well-designed and equitable funding formula in place, implementation is key to making sure that the policy is successful. State finance reform must include a clear plan to phase in state funding to reach adequacy targets, strategically directing increases to the districts that are most below adequacy.

This can be done by setting a timeline for the state to reach 100% of state funding under the formula. When Illinois implemented their new funding formula they set deadline to reach full funding and targeted increases by creating tiers so that the districts furthest from adequacy received the largest annual increases.⁶ New Jersey’s 2008 formula initially phased-in funding by providing 20% annual state aid increases for all districts below adequacy, until they reached their target, and 10% increases for districts above adequacy. New York recently recommitted to fully funding their Foundation Aid formula by increasing state aid by over \$4 billion in just three years.

Implementation must also include difficult conversations around hold harmless aid and phasing out state support for districts that are receiving more state aid than the formula would provide. In New Jersey, the formula initially included a category of “Adjustment Aid” to ensure that all districts received at least as much state aid as they did prior to the formula reform. Though the expectation was that this aid would eventually phase out over time as costs increased and districts were entitled to more state aid, changes in local share obligations and declining enrollment in some districts meant adjustment aid was actually expanding to more districts. The 2018 formula reform set a timeline to phase-out Adjustment Aid with annual percentage reductions to eliminate Adjustment Aid completely by year six. This change has been difficult for some districts, especially those who are below their local fair share and are prevented from raising revenue through property tax caps. ELC (NJ) has consistently recommended that adjustment aid cuts should not occur in any district spending below adequacy, unless districts are given the tools they need to reach their local funding targets, and thus the ability to reach or maintain adequate spending.⁷

Conclusion

In closing, I would like to stress that creating an equitable and adequate funding system in Pennsylvania is within reach. The research is clear that school finance reform is a wise investment that leads to

⁶ McKillip, M. and Farrie, D. 2022. [How Long Must Illinois Students Wait for Fully Funded Schools?](#) Education Law Center. Newark, NJ.

⁷ Farrie, D. 2018. [Understanding Adjustment Aid in New Jersey School Funding: A Case Study of Jersey City.](#) Education Law Center. Newark, NJ.

significant improvements in both short- and long-term academic and economic outcomes. The state has already laid the foundation for a school funding formula that will reverse decades of inequity that has deprived generations of students of their constitutional rights. Pennsylvania should act swiftly to improve the school funding formula as needed and set clear goals for implementation that prioritizes adequate funding for students who have been shortchanged for decades.

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.¹

- 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.²
 - 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.^{3,4}
 - 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 9th and 11th 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.^{5,6}
 - A \$1,000 increase across three consecutive years, coupled with a set of legal and educational reforms, reduced suspension/expulsion rates among 9-11th 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.⁷ 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.⁸

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.⁹

Examples of research findings:

- High quality preschool boosts achievement and reduces special education placements and grade retention.¹⁰ 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.¹¹
- Students experience larger achievement gains when instructed by highly qualified teachers: experience, credentials, and stability matter.¹²
- Social-emotional supports and restorative practices improve achievement, graduation, and mental health.¹³
- Being in a community school with wraparound supports improves achievement and graduation rates.¹⁴
- 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.¹⁵

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.¹⁶

- 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.¹⁷
- 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.¹⁸
- Integration must involve systemic change that starts early at the preschool level.¹⁹

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.²⁰ 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.²¹ The ability to clearly and convincingly demonstrate the benefits of increased school funding is essential for moving these campaigns forward.

¹ 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.

² 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.

³ 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.

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

⁵ 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.

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

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

⁸ Jackson, C. K., Johnson, R. C., & Persico, C. (2015, July 17). [Money Does Matter After All](#). *Education Next*; *EducationWeek*. (2019, September 25). [Data: Breaking Down the Where and Why of K-12 Spending](#). September 25, 2019.

⁹ Weston, M. (2011). [California's New School Funding Flexibility](#). San Francisco, CA: Public Policy Institute of California; Johnson, R. C., Tanner, S. (2018). [Money and Freedom: The Impact of California's School Finance Reform](#). Palo Alto, CA: Learning Policy Institute.

¹⁰ Heckman, J. J., Seong, H. M., Pinto, R., Savelyev, P. A., & Yavitz, A. (2010). [The rate of return to the HighScope Perry Preschool Program](#). *Journal of Public Economics*, 94(1-2), 114-128; Wechsler, M., Kirp, D., Tinubu Ali, T.,

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- Gardner, M., Maier, A., Melnick, H., & Shields, P. (2018). [On the Road to High-Quality Early Learning: Changing Children's Lives](#). Teachers College Press; van Huizen, T. & Plantenga, J. (2018). [Do children benefit from universal early childhood education and care? A meta-analysis of evidence from natural experiments](#). *Economics of Education Review*, 66(C), 206-222.
- ¹¹ Johnson, R. C., and Jackson, C. K. (2019). [Reducing Inequality through Dynamic Complementarity: Evidence from Head Start and Public School Spending](#). *American Economic Journal: Economic Policy*, 11(4), 310-349.
- ¹² Clotfelter, C. T., Ladd, H., & and Vigdor, J. L. (2007). [Teacher credentials and student achievement: Longitudinal analysis with student fixed effects](#). *Economics of Education Review*, 26(6), 673-682; Hightower, A. M., Delgado, R. C., Lloyd, S. C., Wittenstein, R., Sellars, K. & Swanson, C. B. (2011). [Improving Student Learning By Supporting Quality Teaching: Key Issues, Effective strategies](#), Bethesda, MD: Editorial Projects in Education; Podolsky, A., Darling-Hammond, L., Doss, C., & Reardon, S. (2019). [California's Positive Outliers: Districts Beating the Odds](#). Palo Alto, CA: Learning Policy Institute.
- ¹³ Darling-Hammond, S., Fronius, T. A., Sutherland, H. et al. (2020). [Effectiveness of Restorative Justice in US K-12 Schools: a Review of Quantitative Research](#). *Contemp School Psychol*, 24, 295–308; Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). [The impact of enhancing students' social and emotional learning: a meta-analysis of school-based universal interventions](#). *Child Development*, 82(1), 405–432; Taylor, R. D., Oberle, E., Durlak, J. A., & Weissberg, R. P. (2017). [Promoting Positive Youth Development Through School-Based Social and Emotional Learning Interventions: A Meta-Analysis of Follow-Up Effects](#). *Child Development*, 88(4), 1156–1171.
- ¹⁴ Maier, A., Daniel, J., Oakes, J., & Lam, L. (2017). [Community Schools as an Effective School Improvement Strategy: A Review of the Research](#). Palo Alto, CA: Learning Policy Institute; Gandhi, A. G., Slama, R., Park, S. J., Russo, P., Winner, K., Bzura, R., Jones, W. & Williamson, S. (2018). [Focusing on the Whole Student: An Evaluation of Massachusetts's Wraparound Zone Initiative](#). *Journal of Research on Educational Effectiveness*, 11(2), 240-266.
- ¹⁵ Education Law Center, ETS, Learning Policy Institute. (2022). [Money Matters: Evidence Supporting Greater Investment in PK-12 Public Education](#) [Webinar].
- ¹⁶ Darling-Hammond, L. (2019). [Investing for Student Success: Lessons from State School Finance Reforms](#). Palo Alto, CA: Learning Policy Institute.
- ¹⁷ Baker, B. D., Weber, M., Srikanth, A., Kim, R., & Atzbi, M. (2018). [The Real Shame of the Nation: The Causes and Consequences of Interstate Inequity in Public School Investments](#). New Brunswick, NJ: Rutgers, The State University of New Jersey; Palardy, G.J. (2008) [Differential School Effects among Low, Middle, and High Social Class Composition Schools: A Multiple Group, Multilevel Latent Growth Curve Analysis](#), *School Effectiveness and School Improvement*, 19(1), 21-49; Verstegen, D. A. (2014). [Policy Brief: How Do States Pay for Schools? An Update of a 50-State Survey of Finance Policies and Programs](#), Association for Education Finance and Policy Annual Conference, San Antonio, TX.
- ¹⁸ Roda, A., & Wells, A. S. (2013). [School Choice Policies and Racial Segregation: Where White Parents' Good Intentions, Anxiety, and Privilege Collide](#). *American Journal of Education*, 119(2), 261–293.
- ¹⁹ Johnson, R. C. (2019). [Children of the Dream: Why School Integration Works](#). Basic Books and Russell Sage Foundation Press; Johnson, R. C., & Jackson, C. K. (2019). [Reducing Inequality through Dynamic Complementarity: Evidence from Head Start and Public School Spending](#). *American Economic Journal: Economic Policy*, 11(4): 310-349.
- ²⁰ Farrie, D., & Sciarra, D. G. (2022). [Making the Grade 2022: How Fair is School Funding in Your State?](#). Newark, NJ: Education Law Center.
- ²¹ Sciarra, D. G., & Dingserson, D. (2021). [From Courthouse to Statehouse – and Back Again](#). Newark, NJ: Education Law Center.