

How State Funding Models Can Cause Educational Inequality

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Abstract: *Money matters in education. The method in which public schools are funded and how resources are allocated all impact the quality of education. Inequality in education is a persisting problem, and these inequalities go beyond money. Many critical educational services are systemically unavailable to students in low-income districts, which ends up hurting these students in the long run. Inequalities exist regarding the difficulty of the curriculum, instructional quality, and the number of educational resources available. This paper discusses the different sources of public education at the local, state, and federal levels. Then, it will examine will how various state funding models may lead to educational inequality and propose financing strategies to address this issue.*

Keywords: *Educational Inequality, Public Education, Public School Funding, State Education Funding, State Funding Formulas.*

I. INTRODUCTION

1.1 Background and Significance of Study

Baker (2016) states that per-pupil expenditures correlate positively with higher student outcomes. While having more financial resources is essential, the equitable and sufficient allocation of these resources is integral in providing a similar quality of education across demographics. Money has the potential to close the gap between high- and low-income areas. Finance reforms can majorly reduce the inequality between high and low- income school districts, closing nearly one-fifth of the gap (Lafortune et al., 2018). However, why are financial resources not distributed to schools that need them the most? How some states govern and allocate their finances benefits some school districts while hindering others. Many financing strategies in public schools result in stratification and inequality.

1.2 Sources of Public Education Funding

To recognize how financing for public schools can lead to inequality, it is essential to understand how funding works in the first place. Public education comes from different sources at the local, state, and federal levels. According to Education Week, about 48% of a school's budget derives from state resources (e.g., income taxes, sales tax), 44% is from the local level (e.g., property taxes of homeowners), and the remaining 8% is from federal sources (e.g., grants) (Chen, 2022). Each funding level leans regressive (benefiting the rich) or progressive (benefiting the poor). On the local level, funding is usually regressive because each district's wealth is correlated with its property taxes; districts with expensive properties pay more taxes, further funding that local school system. Thus, there is a huge disparity on the district level based on socioeconomic status. According to Chingos & Blagg (2017), nonpoor students are enrolled in districts that receive over \$3,000 more in local funding than their poor counterparts. On the state level, funding methodologies attempt to correct for regressive local funding by being more progressive. In some cases, courts have ordered some states to devise more progressive funding systems, such as in New Jersey, Connecticut, Massachusetts, and Ohio (Chingos & Blagg, 2017). Additionally, funding on the federal level is also more progressive and based on students' income. The most extensive federal funding program, Title I, directs financial resources to low-income students. Eighteen states that are regressive when looking only at state and local funding become progressive with the addition of federal dollars (Chingos & Blagg, 2017).

II. TYPES OF STATE EDUCATIONAL FINANCING MODELS

2.1 Overview

Even with state and federal aid, U.S. public schools have historically been funded locally through local property taxes (Boser, 2018). Disparities in per-pupil expenditures still exist because districts vastly vary in their property tax bases, causing affluent districts to raise significantly more funds. As mentioned, states attempt to correct local regressive funding by diverting resources to low-income districts. To equalize the playing field, the state utilizes some variation of these three financing models: Foundation Grant, Guaranteed Tax Base, and Centralized School Finance (Tilsley, 2017). Each model has various pros and cons and situations that make it favorable or unfavorable.

2.2 Foundation Grant Model

The Foundation Grant model is a method in which the state decides the minimum amount that should be spent per student, calculates each district's ability to pay, and fills in the gap. The advantage of this financing model is that it ensures every district has the same amount allocated to students across the district. Thus, the Foundation Grant method should only be leveraged when the state can afford its contribution. Although these wealthy districts usually do not get foundational funding because they can meet the spending minimum independently, they can still raise their property tax and get more funds. Thus, the major setback of this model is that it depends on what amount the state deems as the minimum amount that should be spent per student and the state's ability to fill this gap between this minimum and what funds are raised by the district. Inadequate estimation and allocation of this amount can still enable property-wealthy districts to spend more per student than the property-poor districts.

2.3 Guaranteed Tax Base

The Guaranteed Tax Base model's strategy is meant to equalize state aid based on property values. Instead of guaranteeing a minimum overall funding threshold, the state commits to providing a minimum amount for each percentage of property tax regardless of how much district tax revenue is raised by that tax (Tilsley, 2017). The advantage of this method is that it helps poorer districts because the same percent increase in property taxes generates the same financial boost in almost every district, regardless of the tax base. Furthermore, property-poor neighborhoods also have more incentive to raise local taxes, given that each additional percentage yields more funds from the state. However, the Guaranteed Tax Base method is not a complete "equalizer" since the wealthiest that do not need a state contribution can still raise well above the minimum. In the Foundation Grant and Guaranteed Tax Base models, the wealthiest districts do not receive state aid because their property wealth per student is higher than the established minimum level.

2.4 Centralized School Financing

The last model, Centralized School Financing, aims to be a true equalizer. The state controls local contributions by assigning a standard property tax rate to guarantee the same funding per student across districts. This model's controversial and potentially disadvantageous result is that states must decide what to do with the surplus funds from the wealthiest district. For instance, should it recapture these surplus funds and redistribute them to more needy school systems? While Centralized School Financing is the most equalizing model, it must be used with discretion and in scenarios where there is not a high possibility of pushback from districts with surplus funds. In summary, each of these three models has its advantages and disadvantages and thus should be tailored depending on the state's ability to meet its promises, the existing gap between rich and poor districts, and its overall impact in equalizing education.

III. STATE FUNDING FORMULAS

3.1 Overview

These three models provide a simplified way to understand how state funding works; on top of this baseline model, each state also utilizes a specific aid to calculate the funds given to each district. In recent years, states have shifted from calculations based primarily on property taxes and have implemented state aid formulas

that aim to direct more money to low-income and low-tax-base school districts (Lafortune et al., 2018). While some state funding formulas ultimately help the economically disadvantaged, others exacerbate the gap between high- need and low-need school districts.

3.2 Attendance-Based Funding Formula

As an example, Texas's funding formula unintentionally hurts high-need communities by using ADA, average daily attendance, to calculate how much aid is given. ADA is defined as the total days of student attendance divided by the total days of instruction. When ADA is used to determine funding, districts that serve low-income and chronically ill children are placed at a significant disadvantage compared to districts serving wealthier, healthier children (Baker, 2016). Attendance-based funding models exacerbate inequalities because students from low-income families tend to attend school less often due to lacking reliable transportation, having health conditions, and needing to miss school to work. As exemplified by the attendance-based funding formula, some states still utilize funding calculations that inadvertently worsen inequalities.

IV. POTENTIAL SOLUTIONS

4.1 Importance of a Long-Term Solution

Because problems within the state funding models fundamentally cause educational inequality, solutions must be pursued on the policy-wide level. In the case of Texas's indirectly regressive funding formula, Representative Gina Hinojosa aims to introduce a bill that will shift the funding formula based on student enrollment rather than attendance (Smith & Richman, 2021). Although shifting a state's funding formulas may be politically challenging, systematic and legislative changes must be implemented to ensure educational equality. Changes that states can pursue include utilizing other financing strategies, such as outcomes-based funding, and implementing other financial assistance services, such as state voucher programs.

4.2 Outcomes-Based Funding

According to Boser et al. (2018), outcomes-based accountability can serve as a check on school funding systems. To determine if schools are providing students with a high-quality education, states should use student achievement outcomes to measure the level of financial need. Because some districts need more financial support than other districts, states should not enforce a minimum amount that should be spent per student across districts. Instead, states should use student outcomes rather than dollars to evaluate if schools provide students with the same level of high-quality learning. In school districts that fall short of standards, the state should provide additional funding tied to how well the school district can improve their student achievement outcomes. Under this thinking, educational equality would not solely be based on the same number of dollars input across districts, but the same quality of education provided. Thus, policymakers should use an outcomes-based funding and accountability model to ensure a similar education standard is being met and achieved across districts.

4.3 Financial Assistance Programs

In addition to outcomes-based funding, states can provide financial assistance services through voucher programs to help channel resources into areas of higher need. A common way governments can execute this is through private school voucher programs. Unlike public school, which is funded by local, state, and federal government, private school is funded by students' tuition. The pros and cons of these different types of school systems revolve around the level of autonomy in the school's curriculum, consistency of academic standards, and access to co-curricular opportunities.

Unavoidably, the quality of education varies between private and public schools. Thus, a private school voucher program may be advantageous in some districts where students cannot access a quality public school education in their area. Private school voucher programs provide public money to parents to help pay for tuition at private schools. According to Bayless & Yin (2019), there are currently 62 voucher programs operating in the United States across 29 states that provide state support through direct payments or tax credits for students to attend private schools. The advantage of these vouchers is that they can offer high-need students access to better education and improve education standards by making public schools compete with private schools for students. However, these programs should be used with discretion and in specific instances since they channel public money away from public schools. While there is no "one-size-fits-all" solution, when used appropriately, assistance

services such as voucher programs can help direct funds to those that need it the most.

4.4 Fund Educational Resources Associated with Improved Outcomes

Any school financing reforms should ultimately ensure that the funds support the necessary services, programs, and resources for equal, high-quality education. While having sufficient money is essential, this money also needs to be directed to the right places. Educational resources associated with improved outcomes include smaller class sizes, additional instructional support, and more competitive teacher compensation (Baker, 2018). According to (Chetty et al., 2012), the teacher is the most important in-school factor in a student's academic teacher. Directing funds to support teacher compensation can permit school districts to recruit and retain a higher-quality teaching workforce.

Furthermore, less teacher turnover will create less instability and a better educational experience for students. In addition to teacher compensation, funds should also be used to ensure access to a rigorous curriculum. A study in New York City found that students who struggled academically performed better when placed in a rigorous instructional setting that held them to higher expectations (White, 1996). Therefore, financial reforms should aim to direct funds into these key outcome-improving areas to improve the quality of education.

V. CONCLUSION

Many critical educational services are systemically unavailable to students in low-income districts, which ends up hurting these students in the long run. Educational inequalities exist regarding the difficulty of the curriculum, instructional quality, and the number of educational resources available. State financing models and funding formulas must be revised to help high-needs students. Therefore, solutions at the policy level are needed to help redirect funds to more low-income students. Such solutions include shifting the funding formula to be based on more equitable inputs, utilizing an outcomes-based financing model, and implementing financial service or voucher programs. Ultimately, systematic solutions are needed to address the underlying issue of education inequality by ensuring students have equitable access to the resources for educational success. Other areas of exploration can examine the funding formulas across all fifty states, segment each state by its funding model mechanism, and analyze how successful that mechanism is in identifying and supporting students from low-income backgrounds.

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