Rapid Response
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EDUNOMICS LAB The Study of Education Finance

Funding for Students' Sake: How to Stop Financing Tomorrow's Schools Based on Yesterday's Priorities

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One of a state's primary responsibilities is to divvy up the public funds for K-12 schooling. In each state, a set of finance policies determines how the state and local funds are apportioned so that districts and other providers can then apply them to schools and classrooms. Different states use a host of variables and formulas to determine how much each district and school receives. Depending on the state, the allocations may factor in a district's distinctive assortment of student needs, or the district's size, cost of living, degree of urbanicity, and so on. And in some cases, the allocations are dependent on whether students are taught in district schools, charter schools, or online schools.

As important as state allocation formulas are, they don't change much over time, even as what we know about education evolves. While states might tweak their models from year to year—layering new program funds on the old model, or adding ways for districts to retain funds as they lose students—states tend to make major changes only about once every two decades.

Some leaders have come to realize that allocation formulas have big implications for whether a state's education system promotes or inhibits increased productivity in schools. With many states seeing some black in their balance sheets after years of highly constrained state funding, and districts asking for a share of the new money, forward-thinking state leaders are calling for something in return—namely, that districts and schools make sure the money does more to improve student outcomes[2]. As one-time Colorado State Senator Michael Johnston stated: "Student performance depends not only on the amount of money we have for education, but also on how those funds are used."[3]

This focus on getting a greater return on funds has implications not just for districts but also for states. To get better outcomes for the money—an imperative given today's budget strictures and urgency for better student results—districts will have to use funds differently going forward.[4] Student-based allocation, also known as weighted student

1. An earlier version of this paper, by Larry Miller, Marguerite Roza, and Suzanne Simburg, was published by the Building State Capacity and Productivity Center in *The SEA of the Future 3* (May 2014): 19-31.
2. Edunomics Lab analyzed implementation of California's Local Control Funding Formula five years after its passage in 2013. The three-part analysis found an improved relationship between spending and student outcomes: In other words, money appeared to matter more in the wake of student-based funding.
3. Michael Johnston, opening remarks to the School Finance Partnership Dinner hosted by the State Board of Education, March 19, 2012.
4. Marguerite Roza, "Leveraging Productivity for Progress: An Imperative for States," The SEA of the Future 2 (November 2013): 8–17.

funding, where funds are attached to each student and move with students wherever they go to school, provides the most equitable, efficient, and flexible path toward increased productivity.[5] This brief explains why it is a good idea to allocate resources on the basis of students, and measures several states' progress toward doing so.

How Do State Formulas Affect District Spending?

Education finance formulas not only determine the level of funding a district gets from state and local sources, but also affect the choices districts make regarding how to spend their funds.[6] Funds are often deployed on the basis of purchased inputs (for example, money to fund one teaching position for every 20 students) or historic funding levels (where each district receives some percentage more than it received the previous year). Some allocation formulas link funds to a specific delivery model or program (for example, funds are directed to tutoring, or to keeping Advanced Placement courses small, or to providing anti-bullying initiatives, or to subsidizing smaller schools).

The specifics of state funding formulas vary widely. But what many states have in common is layer upon layer of rules and provisions that limit districts' flexibility, create inequities among districts, and hinder productivity. As states urge districts to try to get more bang for their buck, they will want to take stock of the ways their allocation policies matter for districts:

EQUITY AND ACCOUNTABILITY

If some districts are given more funds than their peer districts with similar student needs, or if the formulas do not recognize districts with greater student needs, then district and school leaders might rightly see the finance system as inequitable. They might then question how they can be held to the same accountability standards as better-funded places. For accountability systems to work, district and school leaders need to believe they operate on a level playing field.

FLEXIBILITY FOR NEW DELIVERY MODELS

Sometimes, state leaders want districts to use funds differently, but state formulas do not let them. In some states, allocations come in the form of schooling inputs, and the formula fixes how money is to be spent—how many teachers are funded for a

5. The terms student-based allocations (SBA) and weighted student funding (WSF) are sometimes used interchangeably. SBA is used in this paper to emphasize funding of students as compared to funding of objects or programs and services. This infographic explains SBA.
6. See Edunomics Lab, Analyzing Early Impacts of California's Local Control Funding Formula, including how district spending choices changed with the newfound flexibility and whether they concentrated new state money on their highest-need schools.

certain number of students, how many computers or textbooks are purchased, how many periods are funded in a school day, and so on. This limits the flexibility of district leaders to decide how their funds are spent, and causes them to worry more about complying with rules than about leveraging their funds for greater productivity.

ADAPTABILITY AND EFFICIENCY

When district enrollment drops due to shifting demographics or the growth of charter schools, districts are slow to "rightsize" their operations or shift to contractors in areas where that makes financial sense.[7] Some of the sluggish response is likely the result of state allocation formulas that work precisely to keep districts from adapting. For example, "hold harmless" formulas (which provide extra funds to districts where declines in enrollment would otherwise create a dip in funds) and subsidies that allow small school systems to provide services in the same way that larger systems do both allow districts to maintain levels of service that may not be appropriate for their mix of students. Such allocations remove the incentive to innovate for greater productivity.[8]

In states that are moving toward student-based allocations, part of the thinking is that as delivery models evolve, so should school financing. When schools shift to digital content, it doesn't make sense to lock in spending on textbooks. Funding based on fixed class sizes or rigid compensation structures seems dated in a world where districts are rethinking these parameters.[9]

Given how rarely state allocation formulas are changed, it's likely that any major formulas adopted in the near term will still be around into the 2030s. Consequently, tying funds to schooling inputs or certain delivery models, rather than to students, will hold districts back from making the changes they will need to in the coming years.

How Much Is *Really* Allocated Based on Students?

To meet these challenges, some states are adopting student-based allocations, where a fixed amount of funds is allocated per pupil or per pupil type, and follows the student to whatever school the student attends. The fixed amount includes adjustments for student needs—for instance, a student with limited English proficiency may be funded at a higher level than a native English speaker would be, and similarly, more funds are attached to students with disabilities or those living in poverty. Figure 1 shows how much California allocates for each student by grade level and need.

7. See Marguerite Roza, "Dear Districts: These are the glory days. Are you ready for tomorrow's financial pain?" Thomas B. Fordham Institute's Flypaper blog, January 30, 2019.
8. Hold harmless formulas also create funding inequities that threaten the perceived fairness of accountability systems.
9. For example, this paper details how teachers and school districts could benefit by changing the way pay raises are allocated, examining both the degree to which pay systems for teachers are more heavily back-loaded than for many other professions and the ramifications of this steep salary curve for teachers, states, and school districts.

Figure 1: Per Student Allocations in California

Student Types	Base Allocation**
Grades K-3	$8,235
Grades 4-6	$7,571
Grades 7-8	$7,796
Grades 9-12	$9,269
English Learner*	+20%
Low Income*	+20%
Foster Youth*	+20%

Source: *California Department of Education, Funding Rates and Information, Fiscal Year 2018-19. Accessed June 25, 2019.*

**Concentration funding added at 50% of base weight for any district with a high proportion of EL/low-income students and foster youth (unduplicated count exceeding 55% of total district enrollment).*

***LCFF target rates calculated in 2017-18.*

A student-based allocation model addresses several of the concerns mentioned above. By delivering a set amount per student type, the allocations meet the test of equity. In a student-based allocation structure, funds remain flexible and can be redeployed in new ways as more promising delivery models emerge. A student-based allocation structure means funding is automatically adjusted when enrollment shifts, so districts learn to adapt regularly to changing conditions. As an added bonus, allowing districts to keep the savings associated with more efficient delivery models provides the incentive to innovate for greater productivity.

Some states have student-based allocations as part of their allocation formulas—but then they are smothered by myriad other allocations and provisions. Some states are considering implementing or expanding student-based allocations. Others don't use them at all.

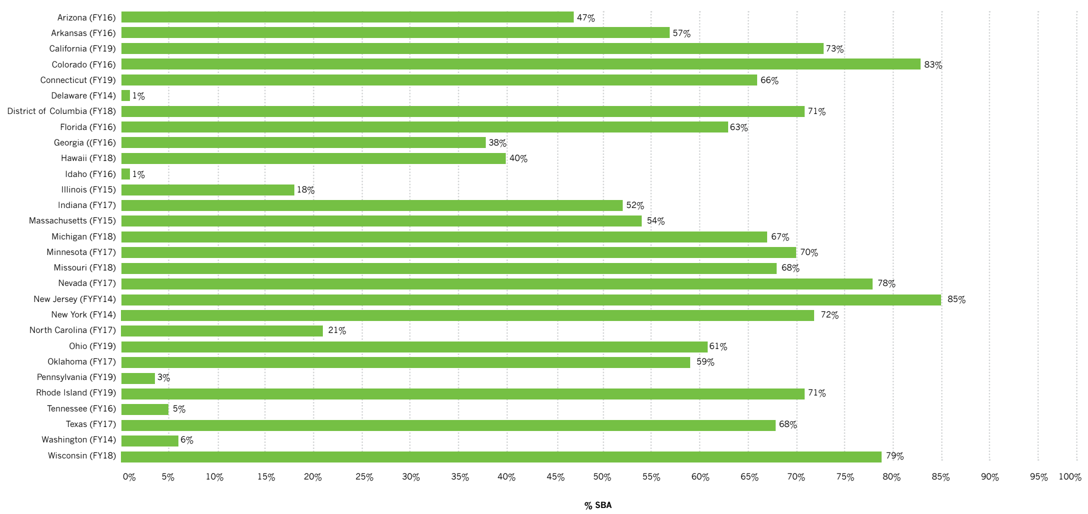
Since 2014, Edunomics Lab has been analyzing the portion of state and local monies delivered via student-based allocation. To be considered student based, the allocation has to deploy a fixed amount of money on the basis of students or student types. The study considers all state and local public funds for K-12 education, excluding any long-term obligations like debt for facilities.[10]

10. Federal funds, which represent some 9-12% of total K-12 revenues, were also excluded from this analysis.

Figure 2 captures the findings for each of the 29 states analyzed to date. Years of analysis range from fiscal year 2014 to fiscal year 2019. Measuring progress toward full student-based allocation can inform state policymakers as they take stock of current finance policies and set goals for future policies.

Figure 2: States Vary in the Portion of Their Monies Deployed via Student-Based Allocations

Percentage of State and Local Monies Disbursed on Basis of Students



Source: *Edunomics Lab %SBA Analysis. Find ongoing updates to this graph at edunomicslab.org.*

Removing Barriers to Student-Based Allocations

Even in states where the basic allocation formula is student based, a substantial portion of the monies may be allocated via mechanisms other than student-based funding. These extra allocations make the state and local revenue structure less transparent, less equitable, and less flexible.[11] Ending or shrinking the following types of allocations can free funds to expand allocations via a student-based formula, and thus make it easier for district and school leaders to apply funds in ways that are efficient and best meet the needs of their students and communities:

11. Transparency, equity, and flexibility are three key rationales districts give for adopting WSF, according to Edunomics Lab's ongoing research for the federal Institute of Education Sciences (forthcoming in Public Budgeting & Finance). Per-pupil expenditures by school are becoming more transparent thanks to federal legislation and can be explored here.

CATEGORICAL FUNDING FOR PROGRAMS OR DELIVERY MODELS

State legislatures sometimes earmark funds to be used only for a specific program, school type, or delivery model. The initiatives—Advanced Placement classes, computer science classes, charter schools, or online learning programs—may have been justifiable when they were conceived. But by earmarking funds for only certain programs, states tie the hands of district and school leaders. Some states dedicate money specifically for charter schools, some states earmark vocational schools, and some target digital learning. By funding each model separately, the funds tip the scales in favor of some schools or delivery models over others, and prohibit a fair comparison on the merits of one program to another since some delivery models receive more resources than others. For instance, when digital learning is funded by a separate line item, those offerings are not managed under the same performance and cost expectations as other delivery models. A school that might benefit from more digital learning may refrain from adopting it, because leaders have been conditioned to develop these programs only when funds are dedicated to do so.

DEDICATED FUNDS FOR SCHOOLING INPUTS

Funding for specific schooling inputs can also constrain district spending choices and perpetuate inefficiencies. For example, some state finance systems fund salaries for employees instead of delivering funds that are made fully flexible to districts. In many states, smaller amounts of monies are allocated for specific schooling inputs like reading coaches or bonuses for teachers with National Board Certification. Legislatures are often tempted to put limits on how districts can use state monies, but succumbing to this temptation means that districts cannot make smart trade-offs about how to apply their funds. And, it provides perverse incentives. If funds are earmarked for reading coaches, and a school finds that it does better using an approach that does not require reading coaches, it loses those funds—so the principal might be inclined to revert to the (less effective) coaches.

REIMBURSEMENTS

Some states allocate a portion of their funds on a cost reimbursement basis, where districts can submit expenditures for reimbursement for services such as transportation and food services, often up to a certain funding limit. This encourages districts to spend more on reimbursable activities, and discourages them from seeking efficiency improvements from reimbursed activities. Some districts with high transportation bills have been able to rethink the number of school days, increase public or family transportation, and take other measures to reduce their busing bill. In a strict reimbursement model, districts do not save money by making such changes, so they don't bother to try. For example, years ago in Seattle, a new, lower-cost transportation plan was proposed, but after finding that the savings would just result in fewer dollars from the state and no extra monies for the district, the school board determined that the effort involved was not worth it and scrapped the plan.

HOLD HARMLESS PROVISIONS

Hold harmless provisions, also known as phantom student funds, are funds delivered to districts specifically to hold them financially harmless from any changes created by enrollment shifts or other formula modifications. The effect is that districts receive monies for students not enrolled (sometimes called phantom students).[12] This policy ensures that districts do not have to adapt to changing conditions, and dedicates funds to them that could otherwise be made available to all districts to raise the base student allocation.

SMALL-SCALE SUBSIDIES

Some states assume that districts or schools with fewer students have some minimum level of fixed costs that are unavoidable, and thus provide a dedicated allocation to smaller districts or smaller schools, which then receive more per-pupil funds than their larger counterparts do.[13] But research on small districts and schools suggests that the higher costs in fact aren't fixed and that some smaller schools and districts do not cost more than larger ones.[14] For example, Georgia gives smaller districts 15 percent more than the average per-pupil spending levels, while in Minnesota and Wisconsin, small districts operate at funding levels on par with their larger peers. Many states have dedicated funds in their state allocation formula to account for district scale. Others fund some personnel or programs in "one per district" amounts, such that when the costs of those items are divided by the lower enrollment of smaller districts, per-pupil price tags are quite high. Even if large districts do enjoy important economies of scale, small-district subsidies discourage merging or sharing services across districts—both potential means of improving productivity. Charter schools (essentially single-school districts) have learned this lesson and often share purchasing, specialized services, or back-office functions.

UNTAMED LOCAL FUNDS

Local funds have long been identified as a source of significant inequity between districts in many states. Where states permit locales to determine the extent to which they levy funds, those funds may reflect local property wealth, population demographics, or other nonstudent factors.

Many states' formulas now take into account local revenue in some manner. Some deliberately build state monies on top of all or some of the local revenue, such that the local revenue counts toward the student-based allocation. Another strategy is to use equalization funds to ensure that all districts can raise the same level of per-pupil funding at a particular levy rate.

12. Jon Fullerton and Marguerite Roza, "Funding Phantom Students," *Education Next 13*, no. 3 (Summer 2013), accessed February 13, 2014.
13. A forthcoming Edunomics Lab analysis of the WSF landscape finds that of 19 study districts, 13 utilized some small school and/or foundational subsidy to ensure a minimum level of funding for all schools receiving allocations under the WSF formula.
14. See Fullerton and Roza, *Funding Phantom Students*.

Where local monies are not factored into state per-pupil allocations, or are permitted to rise above student-based equalization efforts, these funds contribute to uneven funding across districts. Because local funding is such a large portion of the revenue picture (sometimes more than half the pie), these funds must be factored into the state allocation structure to create a true student-based financing system.

DIRECT STATE PAYMENTS FOR BENEFITS AND PENSIONS

Some states disburse education monies that never actually pass through the districts or schools—by paying directly into a pension fund or benefits provider. Where allocations like these are paid out separately, they distort for districts the true cost of labor and inhibit thoughtful trade-offs at the district level on the costs of services. Say, for instance, that a district is comparing the costs of a nursing service to the costs of hiring nurses for some special education care. If the state is directly paying the benefits tab for the nurse, then the district doesn't factor in total public costs for the hired nursing staff option. Where these separate allocations distort spending decisions, they can create inefficient choices with public funds.[15]

PERFORMANCE FUNDING

Performance funding would award more dollars to districts or providers (sometimes digital providers) if student outcomes meet a specified performance level.[16] While these proposals sound like they might enhance productivity, they do create problems for a system aiming to create equity, flexibility, and accountability.

First, where districts or providers do receive performance funds, those funds create uneven spending on a per-student basis, and thereby confound attempts to create a level playing field for accountability in subsequent years. Second, given the retroactive nature of the allocations, most districts would not be able to apply the funds in ways that benefit the students who generated those funds. Insofar as performance funds are being considered, it is worth understanding how they pose a threat to student-based allocations.

Looking Ahead

Even in states that use a student-based allocation as the primary vehicle for allocating state and local monies, other allocations (as discussed in the prior section) layer on and divert funds in ways that confound the equity and incentives created by student-based allocation.

15. Teachers' final salaries have a big impact on pension debt. But because states own the pension bill, districts are not incentivized to think about the consequences of awarding big raises to teachers just before retirement. Pension systems also can carry counterproductive employment incentives.
16. The comments here address state allocations to districts based on student performance, and should not be confused with district efforts to compensate teachers based on teacher performance or productivity.

For some legislators, the temptation will be to flex their muscles and modify their finance formulas in ways that impose restrictions on districts for how to apply new funds. But where states want improved student outcomes from districts and schools in return for new monies, they will need to remember that district and school leaders can accept that responsibility only if given some flexibility with the resources they are allocated. Moving more funds to a student-based allocation model would set states, and educators, on a path toward greater equity, transparency, flexibility, and productivity.

For states wanting to expand the portion of the funds delivered via a student-based model, one option is to consolidate some of the funding mechanisms discussed here and redirect those funds into their student-based formula. To gauge progress, these states can measure the percentage of state and local monies that is allocated on the basis of students.

No one can know for certain all the different kinds of schooling models that will emerge in the next two decades, let alone which will yield the greatest return for students. For state leaders, designing an allocation system amid such uncertainty is tricky, particularly when modifying such allocation systems can take years. But the one thing we know will still be here in twenty years are the students. Aligning money with the students offers some promise that a finance formula will be able to stand the test of time.

THIS SERIES OF RAPID RESPONSE BRIEFS IS DESIGNED TO BRING RELEVANT FISCAL ANALYSES TO POLICYMAKERS AND EDUCATION LEADERS AMIDST THE CURRENT ECONOMIC ENVIRONMENT.

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Edunomics Lab is a university-based research center dedicated to exploring and modeling complex education fiscal decisions and growing the capacity of education leaders on the topic of education finance. The Edunomics Lab is affiliated with the McCourt School of Public Policy at Georgetown University.