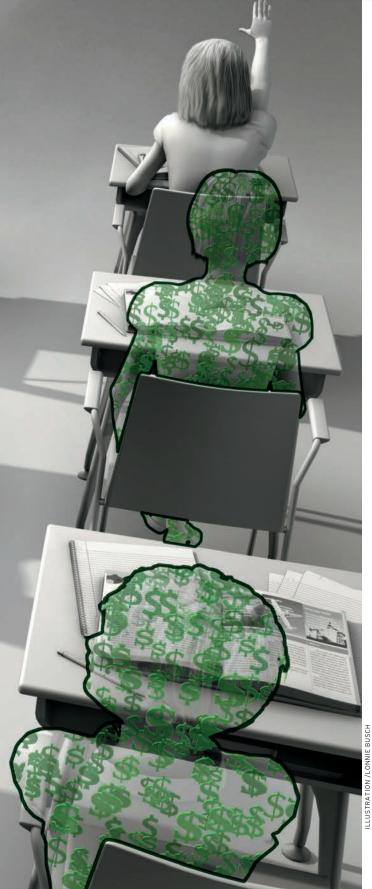
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Phantom Students



State policies insulate districts from making tough decisions

Many state education leaders are taking a fresh look at school finance in hopes of containing costs. Some are reworking transportation formulas, or zeroing in on special education eligibility, or merging districts. Others are investing more in digital learning, charter innovations, and information systems. But state leaders too often overlook a common practice that inhibits both efficiency and productivity, namely, funding students who do not actually attend school in funded districts, herein called "phantom students."

Policies that fund phantom students take several forms:

- protections against declining enrollment
- hold-harmless provisions for districts competing with charters
- small district subsidies
- minimum categorical allocations.

In each case, affected districts receive funds in excess of what they would receive if only the students on their rolls were funded. An obvious downside is that these policies cause less funding to be available for all other districts. But such allocations also insulate district leaders from having to make tough (and often productivity-enhancing) changes in the way they serve the students they have. Policies intended to "protect" districts weaken the incentives that should drive change and adaptation as enrollments fluctuate.

The Economics of Enrollment

While state policymakers often try to base funding allocations to districts on "costs," the fact is that costs and revenues are interdependent. It is true that a district with more funds per pupil than its neighbors can afford to offer more

> by MARGUERITE ROZA and JON FULLERTON



People feel worse about losing something they had than not gaining something they would like. As a result, declines in enrollment can be painful. And so state lawmakers have enacted phantom student-funding policies to help districts cope.

or better services (in the form of extracurriculars, smaller classes, and individualized learning time, for example). It is also the case that the cost of delivering the same services as neighboring districts can increase with revenues, often as the result of concessions extracted by employees as part of the collective bargaining process. Each year, districts are under pressure from constituents and employee organizations to match expenditures to available revenues. If expenditures are projected to be higher than revenues, the district, to avoid running a deficit, will need to reduce spending. But if revenues are projected to come in significantly higher than expenditures, districts will also have a hard time squirreling away the surplus. As one of us has noted in these pages (see "Mounting Debt," forum, Winter 2004), a surplus may suggest to employee unions that a raise is due and to parents that class sizes should shrink. There is immense political pressure for surpluses to be quickly soaked up, often in a manner that raises the per-pupil cost of services without fundamentally changing their delivery.

will receive roughly \$2.1 million in additional revenues for the new students.

Direct costs are unlikely to increase as dramatically. Even assuming that the additional students are all placed into newly created classes with new teachers making the average national salary, the additional costs are likely to be much less than the additional revenues. Assuming that no new schools are built to house these students, the district will have a large surplus to spend on other things, such as new district-wide programs, class-size reductions, and employee raises.

Now consider what happens in the same district when enrollment shrinks by 200 pupils and state and local funding declines accordingly. Assume the district reduces its teaching force by 10 teachers and no longer pays for these students' supplies. It could reduce its expenses by about \$910,000, but *it is losing more than* \$2.1 *million in revenue*. If the \$1.2 million surplus from prior growth is indeed being spent across the district, it will need to make general budget reductions or "cuts due to declining enrollment." With their tendency to

This adjustment works as revenues rise but not so well as they fall. In times of shrinking enrollment, districts can suddenly find themselves with unsupportable cost structures. Many a district leader has found that raising salaries and reducing class sizes is quite a bit more palatable politically than vice versa.

Consider a 10,000-student district that has an enrollment increase of 200 students from one year to the next. The district receives \$10,571 in state and local funds per student enrolled, the national average in 2010. As Table 1 illustrates, insofar as state and local revenues are generated on a per-student basis, the school district

Enrollment Boon (Table 1)

New students can cost less than schools receive.

Revenues					
State and local revenue per student \$10,571					
Additional students enrolled200					
Total additional revenues \$2,114,132					
Expenditures					
Students per classroom 20					
Additional teachers needed10					
Total compensation per teacher\$74,543					
Book and supplies per student \$826					
Total cost for new students \$910,427					
Surplus generated by enrollment growth \$1,203,705					
NOTES: Average state and local revenue per pupil in 2010 (NCES) U.S.					

NOTES: Average state and local revenue per pupil in 2010 (NCES). U.S. average public school teacher salary: 2009-10, 35 percent benefit rate assumed. Books and supplies: U.S. average 2008-09, expenditures on supplies per pupil.

spend all that they have, districts create financial asymmetry around enrollment growth and decline.

A similar mind-set has dominated the thinking on small districts, namely that services should be delivered in small districts in much the same way as in large districts. Small districts, the argument goes, still require a full-time librarian, counselor, nurse, physical-education teacher, and so on, and thus some minimum level of fixed costs is unavoidable.

As a result, the discourse around enrollment loss and small district expenses often focuses on high "fixed costs." This reflects a misunderstanding of what costs are fixed. Few in other industries

SOURCE: National Center for Education Statistics (NCES); authors' calculations

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State Sampler (Table 2)

Phantom state funding adds up in states across the country.

Туре	State	Description	Estimate	Percent of state education spending
Finance Formula Protection	CA	Declining enrollment protection	\$436 million† (FY 2011)	1.2%
Finance Formula Protection	MA	State aid held harmless at previous year's total regardless of enrollment changes	\$180 million‡ (FY 2013)	3%
Charter School Hold-Harmless	MA	Tuition reimbursements to districts sending students to charters	\$45 million (FY 2013)	0.8%
Charter School or Transfer Student Hold-Harmless	СТ	Hold-harmless for districts losing students to charters or transfers	\$286 million	4.7%
Small District Subsidies	NM (2009) WA (2009)	Total public funds above the average provided to districts with enrollments of 100 to 1000	\$69 million \$104 million	2.6 % (NM) 1.5% (WA)

NOTES: † Total enrollment decline across districts between 2010 and 2011 was 89,234 students. Authors adjusted for average state attendance rate and calculated revenue per student at \$5,244. ‡ Authors summed positive gaps between Foundation Aid Fully Reduced (what the Chapter 70 Program calculates should be supplied to districts) and actual foundation aid provided to districts in 2013. If Foundation Aid Fully Reduced for a district implied increasing local contribution, the positive hold-harmless gap amount was reduced by the amount of this increase.

SOURCES: California Department of Education; California State Budget 2010-11, Summary Charts; Massachusetts Department of Education, FY13 Chapter 70 and Net School Spending Formula Spreadsheets and Preliminary FY13 Charter School Tuition Payments and Reimbursements for Sending Districts (Q2); Massachusetts Budget and Policy Center; authors' calculations

consider personnel costs (which constitute the majority of district expenditures) fixed. Administrations could shrink, pay raises could slow, and schools could be closed if enrollment declines. In the case of small districts, many services could be purchased in smaller increments with part-time staff or by contracting with service providers (e.g., for online learning).

It does seem to be the case, however, that people feel worse about losing something they had than not gaining something they would like. As a result, declines in enrollment can be painful. And so state lawmakers have enacted phantom student-funding policies to help districts cope.

The annual cost of phantom student funding varies by the types of policies in place across different states. Table 2 highlights provisions in several states and computes their value as the portion of total state education funding to represent the relative scale of these policies. While the dollars at stake are obviously not a major driver of state education expenditures, they are significant, especially during times of tight budgets. At a time when districts may not be receiving funds to cover cost growth, however, even 1 percent of the state's total spending is meaningful.

Protections against Declining Enrollment

As the 2012-13 school year opened, districts in Tucson, Cleveland, Newark, Philadelphia, and elsewhere were facing steep enrollment declines and a corresponding dip in revenues. Five years before, Baltimore, Seattle, and Portland, Oregon, topped the list of districts in fiscal chaos brought on by falling enrollment.

Enrollment shifts are certainly part of the landscape, and at any given time just as many or more districts may be facing enrollment drops as are seeing enrollment gains. But each time enrollment falls, district leaders seem to be caught off guard, forced to dip into reserves, pare down extracurriculars, and make out-of-cycle pleas for rescue funding in order to avert salary freezes, seniority-based layoffs, or school closures.

And so it goes. States attempt to ease the pain by jumping in with extra funds. In California, core funding for students (known as the Revenue Limit) is made to districts on the basis of average daily attendance (ADA). When district enrollment declines year over year, the allocation is made on the basis of the previous year's average daily attendance. While this provides districts with only a one-year reprieve, the amount spent is substantial. According to the Public Policy Institute

of California, in 2005–06 the total cost of this protection was \$402 million or about \$111 per student in declining-enrollment districts. Taken together, the 89,234 phantom students funded last year by California's declining-enrollment provision would have been California's third-largest district, larger than Long Beach, Fresno, or San Francisco.

Massachusetts distributes state aid to districts on the basis of a complex formula that considers enrollment, student need, and local ability to pay. However, the state legislature usually inserts into the budget a "hold harmless" provision that does not allow total state aid to any district to go down, essentially ignoring the careful rationale behind the state's own formula. Extra payments to select districts are projected to total \$180 million in FY13, more than 3 percent of total state education spending. Districts that are overpaid have no incentive to attract new students, as their state aid would not go up, and, in fact, would be better off on a per-pupil basis if some of their current students left. In other states, protection policies take the form of one-off allocations made to large city districts as students disappear. Pennsylvania, for instance, funds the Pittsburgh and Philadelphia districts according to a different formula than it does all other districts in the state. The effect is to grandfather them in under a higher expenditure structure than their current enrollments warrant.

Holding Harmless Districts Competing with Charters

Buried deep in numerous state charter laws are promises to districts, often made during charter law negotiations, that they will be protected financially when they lose students to charters. Called double funding in some states, these provisions work much like the declining-enrollment protections. The state funds students attending charter schools while still funding districts as though those students had remained.

In Connecticut, districts receive revenues based on the enrollments of students living in their region, regardless of whether those students attend the district schools or attend charters (or technical schools). According to researchers Bryan Hassel and Daniela Doyle, double funding students in 2008 cost Connecticut \$186 million.

In Massachusetts, charter school students take with them the per-pupil net school spending (state and local) from their sending districts. To soften the blow to sending-district finances, Massachusetts provides a partial tuition reimbursement for up to *six years* after the district starts paying charter school tuition. When a district incurs new tuition costs, the state reimburses the district for 100 percent of the cost in the first year and 25 percent of the tuition cost for the next five years. Thus, the state essentially provides districts with 225 percent of a year's tuition for each full-time equivalent student lost!

These allocations could create a disincentive to improve services in an effort to retain more students. When students leave a district to attend a charter school, the district may see an *increase* in per-student revenues.

Subsidies for Small Districts

Although some small districts may have lower salaries and transportation costs than larger districts, and opportunities for creative and cost-effective service delivery certainly exist, it is often assumed that larger districts necessarily enjoy economies of scale from which small districts cannot benefit. The result is that smaller districts in many states receive more funds per pupil than do their larger counterparts.

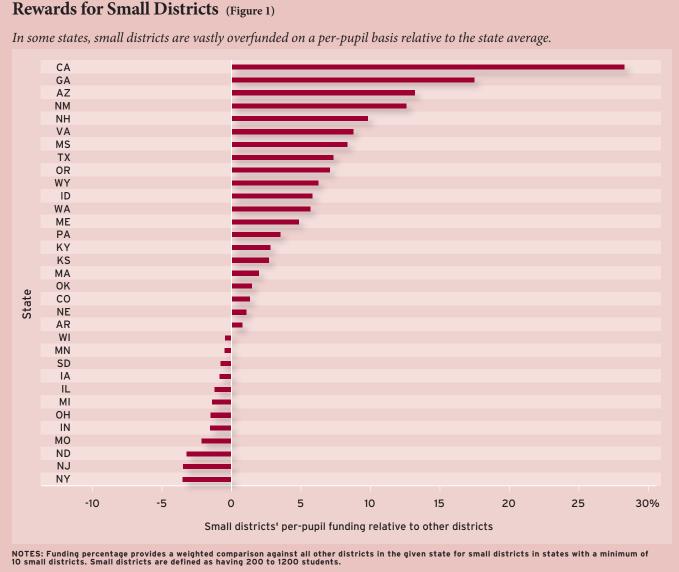
According to a 2010 *Education Week* report, 29 states have an explicit "weight" in their state allocation formula to account for district size. Others fund some items (e.g., staff or programs) in "one per district" amounts such that when the costs of those items are divided by the lower enrollment of smaller districts, per-pupil price tags are quite high.

These small-district subsidies add up. In Washington State and New Mexico, districts with student enrollments between 100 and 1,200 spend \$104 million and \$69 million more, respectively, in total public funds than if they were spending the statewide average per pupil in these districts. In Maine, the largest districts spend, on average, \$8,033 per pupil compared to \$11,027 for the smallest districts. This subsidy amounts to



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SOURCE: Center for American Progress

\$9 million in total, enough to educate almost 40 percent more students than the small districts serve. In California, districts with fewer than 100 students receive, on average, more than \$18,000 per enrolled student, or more than twice as much as districts that enroll at least 1,000 students.

Not all states have bought into the need for small-district subsidies. As Figure 1 indicates, the extent to which small districts (here defined as having 200 to 1,200 students) receive extra funds varies enormously. In states like California and Georgia, smaller districts receive a subsidy of 15 percent or more of the average per-pupil spending levels in their larger-district peers. Minnesota and Wisconsin, in contrast, have small districts that operate at funding levels on par with their larger peers. Even if large districts do enjoy important economies of scale, small-district subsidies discourage merging or sharing services across districts, both potential means for gaining such economies. Charter schools (essentially single-school districts) have learned this lesson and often share purchasing, specialized services, or back-office functions. Even larger districts often share services across areas such as special education provision or vocational education.

Small-district subsidies also reinforce the assumption that there is one best method to deliver schooling: a traditional school building with a principal, a nurse, on-site teachers in all subjects including specialty courses, and so forth. This mind-set has prompted advocacy groups like the Rural School and Community Trust to seek both small-district subsidies and protection against loss of enrollment to charters. In contrast, some small and geographically isolated districts have found that with digital learning technology, they are able to provide students with better course options and at a per-pupil cost that provides for parity with other districts.

Minimum Allotments for Categorical Allocations

Formula minimums for categorical allocations create a fourth type of phantom funding. Forty-nine states target funds to specific programs or types of students, including bilingual education, nutritional programs, drug awareness, and dropout prevention. In some cases, the targeted allocation distributes a fixed-dollar amount for each eligible student (say, each bilingual education student) and then includes a minimum allocation for districts with very low numbers of the targeted population. Under such a policy, a district with only a handful of bilingual education students might receive a vastly inflated spending level for each of them.

Formula minimums usually have their origin in politics. Those proposing legislation for categorical allocations know that before understanding its justification, many legislators affluent Bellevue School District, in which only 18 percent of students qualify for free or reduced-price lunch, receives \$1,371 per poor student in state compensatory funds, while large urban districts received less than half of that for each of their impoverished students (see Figure 2).

The Hidden Costs of Phantom Funding

Declining enrollment, increasing competition, and small size all create financial challenges for school districts. If districts do not adapt by restructuring service delivery, they could go bankrupt. Perhaps funding phantom students is a reasonable state policy response.

We see three primary arguments against the funding of phantom students: First, by continuing to fund phantom students, states ensure that districts won't restructure expenditures for smaller enrollments. If the district has a large professional development department, or too many kindergarten teachers, those positions may stay on the district payrolls because the extra state monies make it possible. A 2010 study of declining-enrollment districts by Pacey Economics Group found that, while districts face real challenges reducing transportation costs, they do have

flexibility on "other categories such as other supporting operations and maintenance, instructional salaries and benefits, food service, and administration." In other words, they can reduce costs when they have to.

Second, funding phantom students delivers the message that school districts should continue delivering education the way they have for the last century. If, indeed, we have found the "one best system," this is all to the good. If we have not (which our relative international performance might suggest), or even if we are not sure, this system discourages needed experimentation.

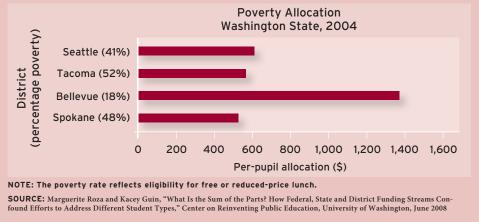
Finally, and perhaps most importantly, funding phantom students diverts public funding

will flip through the bill to see how much money is at stake for their district: the minimums are included to entice legislators to vote in approval.

The result can be windfalls for districts that don't have significant numbers of students who qualify for the funding. In previous work, one of us found that Washington State's 2004 compensatory allocation formula ensured that from other uses. Proponents of protections from declining enrollment or small schools rightly note the challenges of downsizing. In deciding whether to protect decliningenrollment districts, however, policymakers should consider alternative uses for that money. Clearly, the funds could be distributed more evenly across all schools, used for early childhood services or for augmenting children's

Allocating Unwisely in Washington State (Figure 2)

Categorical minimums can yield high per-student allocations in districts with extremely low numbers of students who qualify.





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Funding phantom students diverts public funding from other uses. The funds could be distributed more evenly across all schools, used for early childhood services, or aimed at improving postsecondary options for students from lower-income families.

health care, or aimed at improving postsecondary options for students from lower-income families.

How States Can End Phantom Funding

Ending the funding of phantom students will not be easy politically or from an organizational standpoint. Even so, there are numerous actions states can take to prepare districts and the public for thinking about schooling and education funding differently and effect a fair transition.

Encourage districts to structure allocations in per-student terms. Education funding policy should address the misalignment between what drives revenues and what drives expenditures. On the revenue side, most funds are tied to student counts. For San Francisco, for example, a reduction in one student equates to a loss of \$5,000 in state money.

The expenditure side is a different story. A loss of one student doesn't automatically trigger *any* change in the budget. Districts have staffed their schools by estimating how many classes they'll need and made sure each school has a counselor, a nurse, a parent coordinator, and so on. When a handful of students leave, these same line items cost more in per-pupil terms. Districts consolidate classes where they can, but then imagine that their only option is to pull some staff from the schools and eliminate programs.

Fluctuations in enrollment are inevitable. Knowing this, districts should create more nimble fiscal systems, in which expenditures (like revenues) are tied directly to enrollment. This means reconfiguring budgets so that allocations for schools and services are on a per-student basis. Each school would receive a specified dollar amount for each student so that its allocation automatically rises and falls with enrollment. School districts in Houston, Denver, and Oakland already allocate funds to schools in this manner.

Individual programs, too, might be funded in the same way. A program to create college awareness, for instance, might receive \$100 per eligible student each year, instead of an allocation of some fixed number of staff. This kind of expenditure structure is currently being implemented for central departments in the Baltimore City Schools.

In this model, total spending on district schools and services automatically drifts up and down with enrollment, thereby better matching revenue trends. Within each school, incremental changes can be made on a yearly basis to reflect trends in the size of the student body. The more allocations that districts base on enrollment (not only to schools, but also to departments, services, operations, administration, and other district functions), the more protected the district is from sudden deficits stemming from shifts in the student population.

This kind of allocation model also protects programs from wholesale elimination with a drop in enrollment. College awareness services, for example, may need to be redefined when student counts drop, perhaps by rethinking delivery, or relying on part-time staff, but the program doesn't go away. For each program or service, as enrollments decrease (or increase, for that matter), the per-pupil allocations stay the same. Where middle-school science was a priority, it is still a priority. Where parent engagement is thought to be important, the need may be met in a different manner than assigning a full-time staff person to each school to lead the effort.

It is true that as districts shrink, some district services will miss out on economies of scale. At this point, the department may need to provide the service jointly with another district or contract out for the service on a per-pupil basis. But rather than having district leaders make those cuts from the top, adjusting to current enrollment becomes the responsibility of each school and program manager. That's where adaptation and adoption of innovations can happen. Leaders of a high-cost speech therapy program, for example, are driven to explore technologies that enable remote speech therapy and decrease staffing costs. In this model of budget management, adaptation happens within each department as it seeks to hold per-pupil costs steady amidst enrollment changes.

Restructure true fixed costs: unfunded liabilities. In education, costs are often assumed to be fixed that actually are not. While it is certainly easier to reduce a teaching position than to merge a school or restructure administrative operations and services, most operational and personnel costs of school districts are variable and could be structured to vary more directly with enrollment and revenues.

Yet there is a critical exception haunting many districts. Lifetime health benefits and defined-benefit pensions, sometimes guaranteed decades ago, have created ongoing costs for districts that are unconnected to revenues and enrollment and cannot be easily reduced. As of 2009, the Los Angeles Unified School District, a shrinking district, had an unfunded actuarial accrued liability of \$10.3 billion for employees' future post-employment health-care costs, more than 200 percent of the active payroll. In 2011, the district paid \$240 million in health and medical benefits for retirees and their dependents. Note that this cost relates only to the number of retirees, not the number of current students or employees. Thus, as the district shrinks, the per-student cost will continue to increase.

One answer to this challenge might simply be "Too bad!" Districts entered agreements to fund these benefits and did not set any money aside—they made their own bed. This is not quite fair. Those who entered the agreements generally did so years ago, and the administrators, voters, and union leaders that allowed this are all long gone. Indeed, one wonders whether knowing that the payment on these promises was going to be someone else's problem rendered them easier to make. Today, in any case, payments are coming due.

A possible way out of this mess is for states to execute a grand bargain. States could assume existing liabilities from school districts, effectively spreading the costs across all current providers. Simultaneously, though, states should adopt strict requirements that, from this point forward, districts (and other providers) must fully fund all employee benefits in the year that those benefits are accrued. Defined-benefit and pension programs could be replaced with defined-contribution programs (a change already taking place in some locales). Tenure systems might be modified to allow for more fiscal flexibility, perhaps by including provisions for declining enrollment, or limiting the portion of the staff that can be tenured. However, it is unlikely that any of this can happen without states providing political cover.

Limit state restrictions on how certain funds can be used. Some state funding policies explicitly assume certain school structures: a specific number of students are expected to be in front of teachers within schools that have principals within districts that each have a superintendent. As a result, small schools or districts *cannot* leverage distance learning or rethink service delivery to maximize student learning and minimize cost. The state essentially *requires* these smaller schools and districts to have high per-pupil cost structures.

Supporting more adaptive district budgets won't be easy, as traditional budgeting practices are deeply rooted in district habits and in local politics. School board members facing reelection may be encouraged to make promises that wreak fiscal havoc in years to come. State legislators will be reluctant to make changes that result in fewer dollars going to their districts. But the benefits of moving to more nimble expenditure structures with multiyear budgets that plan for



Lifetime health benefits and defined-benefit pensions, sometimes guaranteed decades ago, have created ongoing costs for districts that are unconnected to revenues and enrollment and cannot be easily reduced.

Limit districts' short-term ability to make long-term commitments. States should also take additional steps to regulate the ability of districts to make financial commitments they may not be able to fulfill. Several states require districts to show that they will remain fiscally solvent for one or a few years, and some require this as part of collective bargaining agreements. While this is a step in the right direction, districts are required only to show solvency under one set of reasonable assumptions. Instead, districts should be required to consider multiple scenarios and build revenue contingencies into agreements. contingencies are real, not only in terms of long-term fiscal stability, but also in that priorities can be articulated in district spending patterns. Under these conditions, district leaders will be better able to seek out and adopt promising solutions to their cost challenges as scale changes.

Marguerite Roza is director of the Edunomics Lab at Georgetown University and senior research affiliate at the Center on Reinventing Public Education at the University of Washington. Jon Fullerton is executive director of the Center for Education Policy Research at Harvard University.