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About the Warren Institute

The Chief Justice Earl Warren Institute on Race, Ethnicity & Diversity is a multidisciplinary, collaborative venture to produce research, research-based policy prescriptions, and curricular innovation on issues of racial and ethnic justice in California and the nation.

GETTING BEYOND THE FACTS: REFORMING CALIFORNIA SCHOOL FINANCE

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SUMMARY

California's school finance system is long overdue for reform. We propose a new system that is more rational, more equitable, and, we believe, politically feasible. At its core, our proposal aims to link district revenue to student needs and regional costs while ensuring that all districts are held harmless at current funding levels.

A reformed finance system is not a complete solution to improving student achievement. Changes in governance, incentives, and accountability are also required. But a rational funding mechanism provides an essential backdrop for discussion of broader reform issues. This policy brief discusses the background of the problems, the principles and concepts that guide our reform, and various simulations of how our reform might work in practice. We show that significant improvement in the finance system can be achieved with modest new investment.

California's current budget woes do not preclude implementation of our proposal. To the contrary, now is an especially good time to pursue a fundamental overhaul of the present system. Experience shows that there is little appetite for reform in rosy budget years, as lawmakers simply use available money to create new programs. A lean budget year provides a critical window of opportunity to create a new framework for school finance that will ensure equity and coherence in funding allocations when new money becomes available.

BACKGROUND

In reviewing the history of California school finance, a good place to begin is 1970, when schools got their money primarily from local property taxes. California was then among the top 10 states in per-pupil spending, but at the district level, spending varied considerably based on local property wealth. In 1971, the California Supreme Court held that the school finance system may not condition district revenue on local property wealth.[1]

The Legislature subsequently enacted a plan to limit the amount per pupil each school district could raise for general spending based on the amount it raised in 1972-73 (SB 90). For each district, this is known as its revenue limit. Revenue limits, today the largest component of the finance system, have been adjusted in complex ways over the past 35 years, most

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1. Serrano v. Priest, 487 P.2d 1241 (Cal. 1971).

The Legislative Analyst's Office predicts that substantial new money for education will become available over the next five years. The time to plan the uses of those funds is now.

notably through equalization efforts. In response to a 1976 court ruling,[2] the Legislature in 1977 created a variable annual inflation adjustment that increased revenue limits for low-spending districts more rapidly than for high-spending districts (AB 65). This "squeeze formula" was designed to equalize spending across districts over time. The equalization was only partial, however, because it applied only to general purpose spending from revenue limits, not to categorical aid or school construction.

In 1978, vigorous demand for property tax relief culminated in the passage of Proposition 13, which limits property taxes to 1% of assessed value and caps annual increases in assessed value to 2% or the rate of growth in the Consumer Price Index, whichever is less. In addition, under Proposition 13, non-ad valorem special purpose taxes such as parcel taxes require the approval of two-thirds of local voters.

The limits on local taxation in Proposition 13 eliminated over 50% of local school revenue, prompting the Legislature in 1979 to devise a permanent plan to compensate school districts with funds from the state budget (AB 8). This marked a major turning point, shifting primary responsibility for school finance from local districts to the state. The 1979 legislation retained the concept of revenue limits and continued the path toward equalization, and a California appeals court in 1986 held that the state had met its constitutional duty to equalize general purpose spending across districts.[3]

By this time, the state share accounted for nearly two-thirds of school funding, and education revenues became vulnerable to the state's volatile sales and income tax receipts. Meanwhile, California's per-pupil expenditure had fallen relative to other states in light of the stringent limits on local revenue-raising and other factors.[4] In 1988, California voters passed Proposition 98 to provide K-12 schools and community colleges with a guaranteed share of the state budget as the economy and enrollment grow each year. Nevertheless, California today lags behind most states in education spending and has far fewer teachers and administrators per student than other states.[5]

Layered on top of revenue limit dollars are more than 80 state categorical aid programs, each requiring the districts receiving aid to spend it on a designated purpose. The proliferation of categorical programs began in the 1960s as state legislators reacted to political pressure to address the needs of disadvantaged children and signaled their lack of confidence in local educators to do so successfully. Over time, categorical programs have also become a vehicle to keep state aid increases from being largely absorbed into higher teacher salaries. State policy intervention through categorical programs has been a habit of Democratic and Republican governors

2. Serrano v. Priest, 557 P.2d 929 (Cal. 1976).

3. Serrano v. Priest, 226 Cal. Rptr. 584 (Cal. Ct. App. 1986).

4. Some commentators attribute the decline in per-pupil spending to the reluctance of white voters to fund schools whose enrollment has become increasingly non-white. *See* PETER SCHRAG, PARADISE LOST: CALIFORNIA'S EXPERIENCE, AMERICA'S FUTURE 15, 124-26 (1998); James M. Poterba, *Demographic Structure and the Political Economy of Public Education*, 16 J. POL'Y ANALYSIS & MGMT. 48 (1997). Others argue that the shift from local property taxes to state personal income and sales taxes as the primary source of school revenue increased the marginal price of education spending to voters and thereby decreased their demand for education spending. Under the property tax, revenue from nonresidential (business) property effectively subsidized the level of education spending desired by local homeowners and renters. By contrast, the incidence of state income and sales taxes falls almost entirely on families and individuals. *See* JON SONSTELIE ET AL., PUBLIC POLICY INSTITUTE OF CALIFORNIA, FOR BETTER OR WORSE? SCHOOL FINANCE REFORM IN CALIFORNIA 98-102 (2000).

5. *See* STEPHEN J. CARROLL ET AL., RAND, CALIFORNIA'S K-12 PUBLIC SCHOOLS: HOW ARE THEY DOING? 44-46, 80-85 (2005); Susanna Loeb et al., Getting Down to Facts: School Finance and Governance in California 3-4 (2007).

alike, and each new program creates a constituency intent on preserving it. Currently, categorical aid accounts for one-third of total education revenue.

Although many categorical programs are motivated by salutary purposes, as a whole they create enormous complexity and inefficiency. School districts bound by program restrictions have limited ability to shift available dollars to meet local needs. The channeling of state funds through dozens of separate programs generates regulatory overload. The detailed specifications of how funds are to be used—consuming hundreds of pages in the Education Code—produce a compliance mentality focused on accounting for inputs rather than delivery of outcomes. Categorical programs are rarely reviewed for their educational efficacy, and many categorical programs that purport to benefit disadvantaged children neither target their intended recipients nor distribute funds equitably based on actual needs.[6]

As a result of past equalization measures and the historical accretion of revenue streams, state allocations to school districts often bear little relation to educational costs or

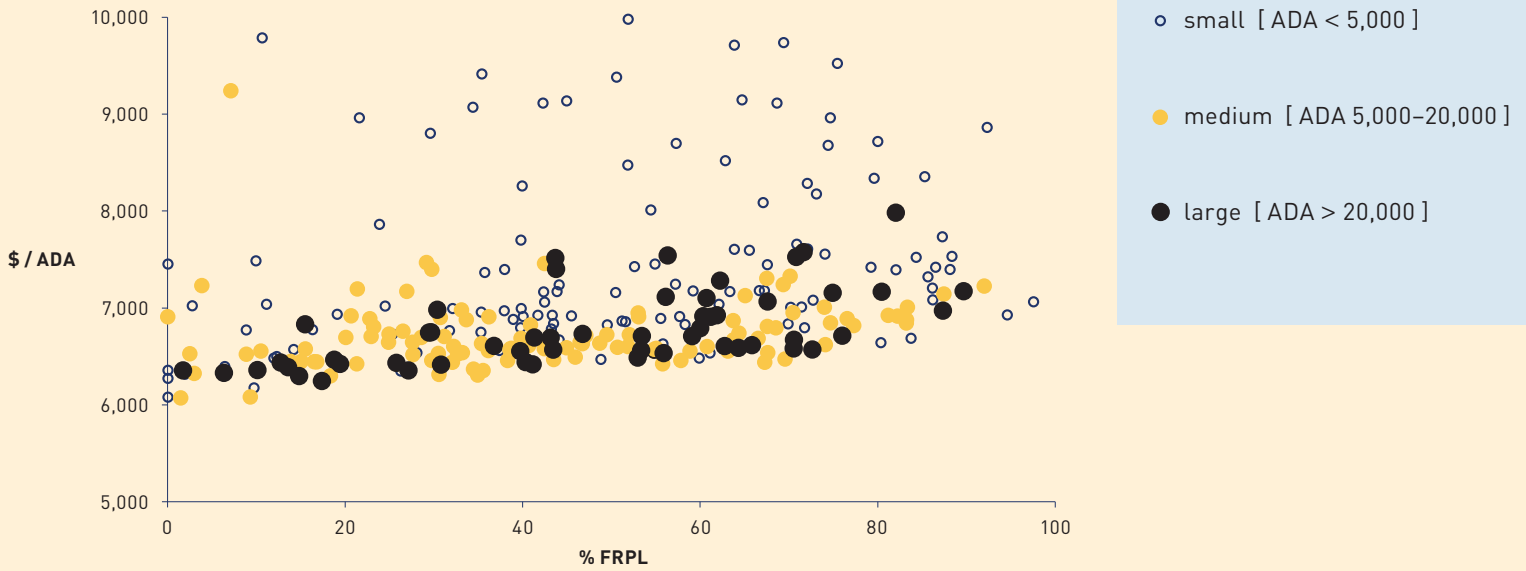
TABLE 1 | State and local revenue per ADA for 35 large unified districts (2004-05)

District	ADA	% FRPL	% EL	Wage index	Revenue per ADA
Montebello Unified	34,214	76	42	1.01	$6,709
Palm Springs Unified	21,457	73	36	0.96	6,572
Fontana Unified	39,425	71	42	0.96	6,581
Long Beach Unified	90,983	71	27	1.01	6,652
Rialto Unified	28,425	66	26	0.96	6,615
Moreno Valley Unified	33,967	64	31	0.96	6,587
Garden Grove Unified	47,865	64	50	1.04	6,624
Colton Joint Unified	23,006	63	24	0.96	6,600
Lodi Unified	26,834	59	32	0.98	6,710
Downey Unified	21,784	57	23	1.01	6,266
Visalia Unified	24,322	56	22	0.92	6,530
Norwalk-La Mirada Unified	22,347	53	20	1.01	6,707
Desert Sands Unified	25,491	53	30	0.96	6,542
Riverside Unified	39,866	53	17	0.96	6,479
Vista Unified	23,132	47	28	0.97	6,727
Glendale Unified	27,604	43	29	1.01	6,688
Abc Unified	21,119	43	19	1.01	6,561
Elk Grove Unified	55,478	41	19	0.93	6,682
Corona-Norco Unified	43,162	41	17	0.96	6,414
Manteca Unified	22,222	40	16	0.98	6,439
Fairfield-Suisun Unified	21,848	40	12	1.03	6,549
Antioch Unified	20,008	39	12	1.09	6,557
Orange Unified	29,966	37	23	1.04	6,601
Clovis Unified	33,212	31	10	0.95	6,420
Mt. Diablo Unified	34,326	30	19	1.09	6,744
Chino Valley Unified	32,299	27	11	0.96	6,357
Placentia-Yorba Linda Unified	25,552	26	16	1.04	6,432
Simi Valley Unified	20,557	19	9	1.01	6,423
Fremont Unified	30,654	19	16	1.09	6,446
Capistrano Unified	48,103	15	12	1.04	6,294
Conejo Valley Unified	21,628	14	9	1.01	6,391
Temecula Valley Unified	24,072	13	7	0.96	6,438
Poway Unified	31,704	10	8	0.97	6,357
Irvine Unified	24,511	6	13	1.04	6,334
San Ramon Valley Unified	22,129	2	2	1.09	6,360

These data are from the School Finance Simulation Model (version 2.3) developed by the Public Policy Institute of California. FRPL refers to students eligible for free or reduced-price lunch. EL refers to English learners. The wage index shows the regional wages of college-educated workers who are not teachers as a fraction of the statewide average, with regions defined as a single county or groups of counties comprising a Metropolitan Statistical Area. Revenue figures include all state and local funding streams except child nutrition, adult education programs, child care and development programs, regional occupational centers and programs, and state mandates.

6. *See* LEGISLATIVE ANALYST'S OFFICE, REFORM OF CATEGORICAL EDUCATION PROGRAMS: PRINCIPLES AND RECOMMENDATIONS (1993); Thomas Timar, How California Funds K-12 Education (Getting Down to Facts, 2006); William Duncombe & John Yinger, Understanding the Incentives in California's Education Finance System 35, 40, 47-48 (Getting Down to Facts, 2006); Thomas B. Timar, Categorical School Finance: Who Gains, Who Loses? (Policy Analysis for California Education, Working Paper Series 04-2, 2004); Thomas B. Timar, *Policy, Politics, and Categorical Aid: New Inequities in California School Finance*, 16 EDUC. EVAL. & POL'Y ANALYSIS 143 (1994)

FIGURE 1 | State and local revenue per ADA by district poverty level for all California unified districts (2004–05)



student needs. To illustrate the point, Table 1 shows large unified districts (ADA > 20,000) receiving $6,250 to $6,750 in nonfederal revenue per ADA in 2004-05. Thirty-five districts fall within this $500 range, and together they account for 19% of statewide ADA. These districts, listed in order of decreasing poverty concentration, span a broad range of student demographics, from high-poverty districts such as Montebello and Fontana to low-poverty districts such as Capistrano and Temecula Valley. They also span a broad range of labor market conditions, with college-educated workers earning higher wages in places like Fremont and Orange than in places like Visalia and Clovis.[7]

Yet revenue per ADA varies little across these districts. The average revenue per ADA among the districts in Table 1 with more than 50% low-income students is only $109 greater than the average among the districts with less than 50% low-income students. Moreover, in many instances, districts with similar demographics but different labor costs receive similar revenues. As one Getting Down to Facts (GDTF) study observed, "districts with high concentrations of poor children or of English learners and districts in high-wage labor markets do not currently receive enough funds to reach the same API targets as other districts. This situation is fundamentally unfair."[8]

Figure 1 illustrates the point more systematically by plotting revenue per ADA against poverty concentration for all unified districts in California. Unified districts account for 71% of statewide ADA, and the medium and large districts in Figure 1 account for 66% of statewide ADA.[9] Although revenue tends to increase with poverty among medium and large districts, the slope is quite modest. In other words, high-poverty districts receive only slightly more revenue per ADA than low-poverty districts. We observe a similar pattern when we plot revenue per ADA against district concentration of English learners (not shown here). Finally, other research confirms that, across the state, district revenue per

7. The regional wage index in Table 1 is from Heather Rose et al., Funding Formulas for California Schools: Simulations and Supporting Data 25-26 (Public Policy Institute of California, 2008). We discuss regional wage variation in the text accompanying notes 13 and 27.

8. Duncombe & Yinger, *supra* note 6, at 45.

9. Twenty-nine small districts with revenue exceeding $10,000 per ADA are not shown in Figure 1. These districts account for 0.2% of statewide ADA.

ADA does not reflect the regional cost of hiring school personnel.[10]

Reforming the finance system may seem a tall order in a lean budget year. However, we believe conditions of fiscal austerity are conducive to reform if only because there is little appetite for the task during good economic times. When new money for education was available in 2006-07, for example, the Governor and Legislature devoted much of it to one-time uses and several new categorical programs. Although each expenditure may have had a worthy purpose, altogether the new funding streams added to the rigidity and fragmentation of the finance scheme. As this example and others confirm, "[t]he wrong time to plan the expenditure of new funds is when the new funds suddenly appear." [11]

The Legislative Analyst's Office (LAO) predicts that, over the next five years, $7 billion in new money for education will become available under Proposition 98 as statewide K-12 enrollment stagnates or declines.[12] The time to plan the uses of those funds is now.

PRINCIPLES FOR REFORM

In recent years, California has made important strides toward aligning instruction, assessment, and accountability to academic standards for student performance. But few if any aspects of the finance system are aligned to improving student achievement. As the history above suggests, a variety of powerful forces, including court-ordered equalization, voter demand for tax relief, and centralization of governance, have shaped the current system in ways that impede its ability to support the performance goals to which our students and schools are held accountable.

What we propose is, in many ways, an organic next step in the evolution of the finance system. A generation ago, concepts of equalization did not integrate our present understandings of differential student needs and educational costs. Nor was centralization of governance rooted in an education reform strategy that (at least in theory) combines a strong state role in setting standards and enforcing accountability with local autonomy and flexibility in educational practice. Our proposal seeks to update the finance system by aligning it with our contemporary education policy framework and with lessons learned from experience and research. In so doing, our proposal sets a useful stage for future policy debate and programmatic discussion on issues of adequacy, equity, and local control.

Because the problems with the finance system are complex and multifaceted, they are unlikely to be solved in one fell swoop. We have chosen as our angle of incision a reform approach anchored in the following four principles.

1. Revenue allocations should be guided by student needs. School finance should be aligned with the overarching goal of enabling all students to meet state standards for academic achievement. Because not all students come to school with the same individual, family, or neighborhood advantages, some need more resources than others to meet a given achievement standard. In allocating education dollars, the finance system should systematically account for differing student needs.

2. Revenue allocations should be adjusted for regional cost differences. California is a large state with tremendous diversity from region to region in the cost of living and labor market conditions. This variation directly affects the quality of education that schools can provide with each dollar. Indeed, high-wage regions of the state tend to have higher student-teacher ratios and a higher percentage of teachers with emergency credentials.[13] A rational school finance system should strive to ensure that education dollars have the same purchasing power from region to region, especially when it comes to hiring and retaining high-quality teachers.

3. The system as a whole should be simple, transparent, and easily understood by legislators, school officials, and the public. The complexity of the current system carries many costs: school officials must spend time on paperwork and bureaucracy that otherwise could be spent on improving instruction; legislators cannot explain to their constituents (much less defend) how education dollars are allocated; and the public cannot understand how additional revenue for education will affect their local

10. *See* Rose et al., *supra* note 7, at 30.

11. Editorial, *Year of Education, Still*, L.A. TIMES, Jan. 12, 2008, at A20 (recounting statewide imposition of class-size reduction "in the budget-boom days of 1996").

12. ELIZABETH G. HILL, LEGISLATIVE ANALYST'S OFFICE, CALIFORNIA'S FISCAL OUTLOOK: LAO PROJECTIONS 2007-08 THROUGH 2012-13, at 35-40 (2007).

13. *See* Rose et al., *supra* note 7, at 28-29, 32; Heather Rose & Ria Sengupta, Teacher Compensation and Local Labor Market Conditions in California: Implications for School Funding at v (Public Policy Institute of California, 2007) ("[A]s external wage pressures grow, districts not only cut back on the number of teachers they hire but also reduce the ratio of other certificated staff (such as counselors and nurses) to students.").

schools. In order to foster public confidence and accountability, a rational system should be simple enough that all stakeholders can readily understand its essential elements and underlying principles, and can easily see how and why each district gets what it gets.

4. Reforms should apply to new money going forward, without reducing any district's current allocation. In reforming the existing system, we recognize the importance of ensuring a measure of stability and maximizing political feasibility. Thus we envision that a reformed allocation system would apply only to new money available after the year of enactment, thereby holding all districts harmless. Over time, the resulting allocations will increasingly approximate the ideal allocations in a fully reformed system.

To be sure, the problems with the finance system go beyond those addressed by our four principles. There are serious concerns, for example, about the volatility of education revenue from year to year, the lateness of the budgeting process, and the overall adequacy of education spending in California. We do not address those issues here, and we leave intact the education budget framework of Proposition 98—not because those issues are unimportant, but because we believe the best starting point for addressing them is to establish a rational, fair, and transparent system of allocation. Until education dollars are allocated in response to student needs and regional costs, and until revenues reach districts in ways that promote efficient use of funds, putting more money into the system is unlikely to produce significant achievement gains. Creating a rational system of allocation will facilitate meaningful discussion of how, and how much, money should be spent.

THE BASIC PROPOSAL

We propose a reformed finance system with five components: (1) base funding, (2) special education, (3) targeted funding for low-income students and English learners, (4) regional cost adjustments, and (5) a hold harmless condition. In this section, we sketch the conceptual basis for these components, and in the next section, we provide simulations of how the system might work in practice.

1. Base funding. Base funding is an amount per pupil to cover the basic costs of education. It provides general support to buy textbooks and materials, to maintain safe and clean facilities, and to employ qualified teachers and other school personnel. Base funding would be adjusted for regional cost differences.

Ideally, base funding would reflect the level of resources that enables an average child to meet California's academic performance standards. The GDTF adequacy studies agree that current spending levels are insufficient, but the studies offer varying estimates of the additional resources required.[14] We do not attempt to resolve the adequacy issue here. In our proposal, the concept of base funding simply establishes a frame for legislative inquiry and policy judgment on that issue within the context of a more equitable and coherent finance system.

Base funding may be designed to vary across districts by grade span. Although this issue is often treated as one of relative costs (e.g., how much more does it cost to operate high schools compared to elementary schools?), our view is that varying base funding by grade span inevitably reflects policy judgments about how education dollars should be spent.[15] For example, we could assign higher base funding to the elementary grades if it seemed especially important to have small classes in those grades. Or we could assign higher base funding to the high school grades if the desired curriculum included specialized electives or small classes in advanced subjects. We leave these programmatic judgments to educators and policymakers. Here, for simplicity, we set base funding at a uniform level for all districts in simulating our proposal.

14. An important limitation of these studies is that they assume the continuation of existing educational policies and practices. They do not estimate adequacy within a system that has undergone potentially efficiency-enhancing reform, including school finance reform along the lines we propose.

15. We thank Allan Odden for helping to clarify this point.

16. Within each SELPA, the member districts may each have a different arrangement for receipt of services or revenue from the SELPA. We make the simplifying assumption that every district within a SELPA receives services or revenue (or a combination) whose value per ADA is equal to the revenue per ADA for the SELPA as a whole. In other words, while revenue per ADA varies across SELPAs, we assume that revenue per ADA is the same for all districts within a SELPA. This assumption applies to the district-level data shown earlier in Table 1 and Figure 1 and later in Table 6 and Figure 2.

2. Special education. Federal and state laws guarantee students with disabilities a free and appropriate public education in the least restrictive environment. In 2004-05, 10% of California's K-12 students received special education services ranging from language and speech assistance to transportation to adapted physical education.

Special education services in California are coordinated by 124 Special Education Local Planning Areas (SELPAs). Each school district belongs to a SELPA, and each SELPA has a governing board comprised of representatives from its member districts. Each SELPA receives special education revenue from the state and then, based on agreements reached by its governing board, either provides special education services to member districts or allocates revenue to member districts so that they can provide services themselves.

California allocates special education revenue to SELPAs based on the average daily attendance of regular students. The amount per ADA varies across the state's 124 SELPAs.[16] We propose a continuation of the funding equalization process initiated by the Special Education Reform Act of 1997 (AB 602) with the goal of allocating equal funding per ADA in each SELPA within five years. In addition, special education money, like base funding, would be adjusted for regional cost differences.

> Until dollars are allocated in response to student needs and regional costs, and until revenues reach districts in ways that promote efficient use of funds, more money is unlikely to produce significant achievement gains.

3. Targeted funding. Outside of special education, many students face disadvantages that call for additional educational resources if they are to meet the same academic standards as their more advantaged peers. We propose a single program of targeted funding based on an unduplicated count of low-income students and English learners ("targeted students") and on the concentration of such students in a given district. Targeted funding would also be adjusted for regional cost differences.

a. *Low-income students.* We define "low-income" as eligibility for free or reduced-price lunch (FRPL). This includes all students from households with income below 185% of the federal poverty line. In 2004-05, the FRPL eligibility threshold was $34,873 for a family of four, and nearly 50% of California schoolchildren qualified.[17]

The negative relationship between poverty and achievement is one of the most well-documented findings in educational research. In California, the highest API scores of high-poverty schools tend to be lower than the lowest API scores of low-poverty schools. In other words, there is virtually no overlap between the performance distributions of high versus low-poverty schools.[18]

Importantly, students in high-poverty schools face a double disadvantage arising not only from their own poverty but also from the poverty of their peers.[19] Numerous studies of high- and low-poverty schools find that, in high-poverty schools, a student's peers have had fewer opportunities to develop vocabulary and cultural capital, and tend to have lower aspirations, more negative attitudes toward achievement, and higher

17. Although FRPL eligibility covers a wider range of household income than the federal poverty line, the choice of poverty measure is unlikely to affect state-to-district allocations very much because the percentage of students below poverty and the percentage of students eligible for FRPL are strongly correlated at the district level. Across California districts, the FRPL percentage is roughly three times the percentage of students below poverty. *See* Rose et al., *supra* note 7, at 13.

18. *See* Jon Sonstelie et al., Aligning School Finance with Academic Standards: A Weighted-Student Formula Based on a Survey of Practitioners 20 (Public Policy Institute of California, 2007).

19. The evidence is reviewed in RICHARD D. KAHLENBERG, ALL TOGETHER NOW: CREATING MIDDLE-CLASS SCHOOLS THROUGH PUBLIC SCHOOL CHOICE 47-76 (2001). A recent longitudinal study of Chicago families finds a strong negative relationship between concentrated neighborhood poverty and children's verbal ability. *See* Robert J. Sampson et al., *Durable Effects of Concentrated Disadvantage on Verbal Ability Among African-American Children*, 105 PROC. NAT'L ACAD. SCI. 845 (2007).

Poverty concentration is an important factor in allocating resources because poor students in high-poverty schools face greater educational challenges than poor students in low-poverty schools.

levels of disruption and mobility. In addition, parents are less likely to be involved in the school, to hold teachers accountable, and to be able to provide financial or other support. Thus poverty concentration is an important factor in allocating resources, as poor students in high-poverty schools face greater educational challenges than poor students in low-poverty schools.

b. *English learners.* English learners comprise 25% of California's K-12 students, and nearly 30% of the nation's English learners attend school in California. Large achievement gaps between EL and non-EL students are well-documented, and many studies show that EL students face special challenges in school, especially a lack of teachers appropriately trained to teach EL students.[20] The special needs of EL students include bilingual support personnel, appropriate materials for language development, and additional instructional time to learn English and subject-matter content. In light of these needs, the Legislative Analyst's Office has recommended that "the state adopt a clear strategy for funding EL students," including "an explicit weight at which EL students should be funded."[21]

Appropriate funding for EL students must take into account the fact that 85% of California's EL students are low-income. The available evidence indicates that low-income English learners have different instructional needs than low-income students who are not English learners. But it is unclear whether meeting those needs requires a greater level of resources than what is needed to educate low-income students regardless of EL status.[22] At the same time, there is evidence that English learners who are not low-income have special needs associated with language development that are distinct from the needs of low-income students who are not English learners.[23]

For purposes of school finance, we believe a fair count of disadvantaged students requiring targeted resources is the unduplicated sum of low-income students and English learners. In combining these two groups, we note that the differing needs of English learners and non-EL low-income students may call for different uses of targeted funds.

Finally, over half of California's elementary English learners attend schools where ELs comprise more than 50% of the student body. This linguistic isolation limits the exposure of English learners to native English speakers who can serve as language role models.[24] As with poverty, EL status presents educational challenges whose severity varies by concentration.

c. *Concentration.* In designing a finance system responsive to concentration of disadvantage, we note there is some evidence that poverty concentration begins to have a negative impact on achievement when FRPL students comprise more than 50% of school enrollment.[25] Until 2002, federal law allowed Title I funds to support "schoolwide" programs in schools where 50% or more students were low-income out of recognition

20. *See* Patricia Gándara & Russell W. Rumberger, Resource Needs for California's English Learners (Getting Down to Facts, 2006).

21. LEGISLATIVE ANALYST'S OFFICE, EDUCATION: 2007-08 ANALYSIS at E-133 (2007).

22. After reviewing several cost studies, Gándara and Rumberger conclude that "some needs of English Learners are indeed *different* from other students with similar socio-economic backgrounds and their needs cannot all be met with the same set of resources, however it is not clear to what extent—if at all—they require more resources than those of poor and low-income children." Gándara & Rumberger, *supra* note 20, at 83.

23. Gándara and Rumberger report that English learners who are not poor start school with lower math and language skills than poor students who are not English learners. *See id.* at 85. In addition, English learners continue to have special needs in academic English language development after they exit EL status. *See* Michael J. Kieffer et al., *Promises and Pitfalls: Implications of NCLB for Identifying, Assessing, and Educating English Language Learners, in* HOLDING NCLB ACCOUNTABLE: ACHIEVING ACCOUNTABILITY, EQUITY, AND SCHOOL REFORM 57 (Gail L. Sunderman ed., 2008).

24. *See* Bernard R. Gifford & Guadalupe Valdés, *The Linguistic Isolation of Hispanic Students in California's Public Schools: The Challenge of Reintegration, in* 105 YEARBOOK OF THE NATIONAL SOCIETY FOR THE STUDY OF EDUCATION

that high poverty concentration has effects throughout a school, not just on low-income children.[26]

We propose a Targeted program that provides a uniform amount per targeted student—call this amount $\$T$—in districts where the unduplicated count of targeted students is 50% of enrollment or less. Where targeted students comprise more than 50% of enrollment, we propose increasing the amount per targeted student according to the formula $\$T \times 2 \times$ % FRPL or EL.

For purposes of illustration only, suppose $\$T$ were set at $2,000. Districts at or below 50% concentration of targeted students would receive $2,000 per targeted student. Above 50% concentration, the Targeted amount would increase linearly as follows:

District enrollment of targeted students	Amount per targeted student
10%	$2,000
20%	2,000
30%	2,000
40%	2,000
50%	2,000
60%	2,400
70%	2,800
80%	3,200
90%	3,600
100%	4,000

As the example shows, our Targeted program directs greater resources to districts with higher concentrations of disadvantaged students.

4. Regional cost adjustment. Education dollars do not have the same purchasing power throughout a state as large and diverse as California. The primary reason is that wages vary by region. As a result, the cost of hiring and recruiting the same teacher or other school personnel is different from place to place. These differences have important educational consequences, as noted earlier.

We propose adjusting 80% of the dollars (roughly the share of district budgets devoted to personnel) in each component of our proposal using a regional wage index developed by Heather Rose and Ria Sengupta as part of the GDTF studies.[27] The index divides California into 30 labor market regions based on U.S. Census Metropolitan Statistical Areas. Controlling for demographic and other labor market variables, the index captures for each region the relative wages of occupations requiring an education level similar to what teachers have. When applied to school funding, the index works to equalize labor purchasing power across metropolitan areas. The highest index values, reflecting the highest wages, are found in the Bay Area and Los Angeles, while the lowest values occur in the northern counties.

5. Hold harmless condition. No district loses money under our proposal. We propose a hold harmless condition ensuring that every district receives at least as much total revenue going forward as it receives now. In the next section, our simulations apply the hold harmless condition to the Base, Special Education, and Targeted programs individually to illustrate the cost of each program. However, our ultimate commitment is to hold districts harmless for the total revenue they receive, not for the amounts they receive under specific programs.

As a practical matter, the hold harmless condition means that our proposed reforms will be phased in gradually as new money becomes available.

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Before simulating our proposed finance system in the next part, we pause here for three observations. First, our proposal invokes design concepts that have already been put into practice in limited ways. For example, consistent with our Targeted program,

125 (2006); Russell Rumberger et al., *Where California's English Learners Attend School and Why It Matters*, UC Linguistic Minority Research Institute Newsletter, Winter 2006, at 1.

25. *See* Michael Puma et al., U.S. Department of Education, Prospects: Final Report on Student Outcomes 12 (1997); Judith Anderson et al., U.S. Department of Education, Poverty and Achievement: Reexamining the Relationship Between School Poverty and Student Achievement 2-5 (1992).

26. Improving America's Schools Act of 1994, Pub. L. No. 103-382, sec. 101, § 1114(a)(1)(B), 108 Stat. 3518, 3535. In 2002, the No Child Left Behind Act lowered the schoolwide threshold to 40% low-income enrollment. 20 U.S.C. § 6314.

27. *See* Rose & Sengupta, *supra* note 13.

Our reform invokes design concepts that have already been put into practice in limited ways. The ideas we propose here are not without precedent.

the current Economic Impact Aid formula (as amended in 2006) allocates funds based not only on a count of economically disadvantaged students and English learners, but also on their concentration when the count exceeds 50% of district enrollment.[28] In addition, the broad outlines of our proposal resemble the relatively straightforward finance system for California's charter schools, whose funds come from three main sources: general purpose money equal to the statewide average amount per ADA received by school districts (with variation by gradespan); a single categorical block grant based on counts of economically disadvantaged students and English learners; and funds or services provided by SELPAs for students with disabilities.[29] Moreover, our proposal bears some likeness to the finance system passed by the Legislature in 1977 (AB 65) before it was eclipsed by Proposition 13.[30] In short, the ideas we propose here are not without precedent.

Second, our proposal allocates revenue in response to student needs without creating perverse incentives to overidentify students as disadvantaged. Low-income status, which we define as eligibility for free or reduced-price lunch, is an indicator of student need outside of school control. We leave intact the state allocation of special education money based on the average daily attendance of regular students. And any incentive to overclassify children as English learners is attenuated by the fact that the vast majority of English learners are low-income. Because our Targeted program relies on an unduplicated count of low-income students and English learners, overclassification would benefit districts only if the classification method were peculiarly geared toward increasing the count of English learners who are not low-income. It seems improbable that this small group could be artificially expanded very much.

Third, our proposal builds on the concept of a weighted student formula by treating poverty and EL status as educationally relevant characteristics not only of individual students but also of entire school systems. A finance system that treats all low-income or EL students alike misses the fact that students whose peers are predominantly low-income or EL typically face greater educational challenges than students whose peers are not. Accordingly, our proposal allocates revenue based not only on the count but also on the concentration of disadvantaged students.

SIMULATING THE REFORMED SYSTEM

Let us now turn to how these ideas might work in practice. We are able to specify various parameters of our proposal and simulate the results using a school finance simulation model developed by the Public Policy Institute of California.[31] The model enables users to define new funding formulas for state-to-district revenue allocations and to compare the results to the actual allocations across 88 separate revenue programs in 2004-05.

28. *See* CAL. EDUC. CODE § 54023. In counting economically disadvantaged students and English learners, however, the EIA formula specifies a cumulative count, whereas our Targeted program specifies an unduplicated count.

29. *See* CAL. EDUC. CODE §§ 47633, 47634.1. Some categorical programs, including Class Size Reduction, remain outside of the categorical block grant, and charter schools, like regular schools, receive such funds separately.

30. *See* John B. Mockler & Gerald Hayward, *School Finance in California: Pre-*Serrano *to the Present*, 4 J. EDUC. FINANCE 386, 393-99 (1977).

31. *See* Public Policy Institute of California, School Finance Simulation Model (version 2.3), *available at* http://www.ppic.org/content/pubs/op/OP_108HROP_Req.pdf.

We intend our reformed system to affect all revenues apart from federal money and local money besides property taxes. In other words, our proposal replaces the existing mechanisms for distributing the funds that comprise revenue limits, lottery funds, and state categorical programs.[32] The sum of these funds was $40.47 billion in 2004-05.

We divide this sum into three parts, each of which provides a funding baseline for one of the three programs in our proposal (Base, Targeted, Special Education). In 2004-05, state revenue in support of special education totaled $3.97 billion, and we apply that amount to our Special Education program. For our Targeted program, we consolidate the following 10 categorical programs that currently target low-income students or English learners:

- Economic Impact Aid
- Targeted Instructional Improvement Grants
- High Priority Schools Program
- After School Education and Safety Program
- Immediate Intervention/ Underperforming Schools Program
- English Learners Student Assistance
- Community-Based English Tutoring Program
- Dropout Prevention
- Corrective Actions
- At Risk Youth

Together these programs comprised $1.71 billion in 2004-05, and we apply that amount to our Targeted program. We apply the remainder, $34.79 billion, to our Base program.[33]

We now examine the revenue required to fund each program under various parameters. Tables 2 through 4 report cost estimates for each program considered separately, and the estimates in each table reflect regional cost adjustments and hold all districts harmless within each program.

1. Base program. Table 2 shows estimates of the additional revenue needed—above the $34.9 billion available in 2004-05—to support a Base program ranging from $6,000 per ADA to $7,000 per ADA while holding all districts harmless. At a funding level of $6,000 per ADA, the entirety of the additional cost arises from holding high-revenue districts harmless. At $7,000 per ADA, less than 5% of the additional cost goes toward holding districts harmless.

TABLE 2 | Base program simulation

Base funding per ADA	Total cost (millions)	Additional cost (millions)
$6,000	$35,832	$1,038
6,200	36,577	1,783
6,400	37,530	2,736
6,600	38,560	3,766
6,800	39,633	4,839
7,000	40,729	5,935

2. Special education. Across Special Education Local Planning Areas, funding levels in 2004-05 ranged from $538 per ADA to $984 per ADA. Table 3 shows estimates of the additional revenue needed—above the $3.97 billion available in 2004-05—to support equalization at levels ranging from $600 per ADA to $900 per ADA. As with the Base program, the portion of the additional cost used to hold districts harmless decreases as the funding level increases.

TABLE 3 | Special Education program simulation

Equalized funding per ADA	Total cost (millions)	Additional cost (millions)
$600	$4,061	$91
700	4,278	308
800	4,720	750
900	5,239	1,269

32. We exclude 17 revenue streams totaling $1.63 billion for child nutrition, adult education programs, child care and development programs, regional occupational centers and programs, and state mandates.

33. This sum combines $30.24 billion in general purpose aid allocated through nine revenue streams and $4.56 billion allocated through 47 categorical programs that do not specifically target low-income students, English learners, or students with disabilities.

TABLE 4 | Targeted program simulation

$T	Lower bound		Upper bound	
	Total cost (millions)	Additional cost (millions)	Total cost (millions)	Additional cost (millions)
$1,500	$5,676	$3,966	$6,367	$4,657
2,000	7,545	5,835	8,474	6,765
2,500	9,422	7,712	10,583	8,874
3,000	11,306	9,596	12,700	10,990

3. Targeted program. As explained above, our Targeted program provides a uniform amount per targeted student ($T) for districts where the unduplicated count of FRPL and EL students is 50% of enrollment or less. For districts enrolling more than 50% targeted students, the amount per targeted student is $T × 2 × % FRPL or EL.

In simulating this program, one difficulty is that we do not have the individual student data necessary for an accurate unduplicated count of targeted students at the district level. Although we know that 15% of English learners statewide are not low-income, we do not know the percentage for each district. One way around this problem is to assume that 15% of English learners in each district are not eligible for free or reduced-price lunch. The unduplicated count of targeted students in a given district would then be the sum of its FRPL students plus 15% of its English learners (FRPL + 15% EL). If this sum exceeds the district's total enrollment, then the unduplicated count is equal to total enrollment.

However, this approach overstates the cost of the Targeted program if relatively few non-FRPL English learners are found in districts with high concentrations of FRPL students. In other words, if the percentage of English learners who are not low-income tends to be lower in high-poverty districts than in low-poverty districts—a reasonable assumption, in our view—then the formula FRPL + 15% EL tends to overestimate the true unduplicated count in high-poverty districts and, given the concentration factor in our Targeted program, inflates the overall cost. Accordingly, we treat this method as setting an *upper bound* on the cost of our Targeted program.

To establish a *lower bound*, we can simulate the Targeted program with the assumptions that non-FRPL English learners are found only in districts where FRPL students comprise 50% of enrollment or less and that the unduplicated count in those districts is equal to FRPL + 15% EL. If the share of English learners who are not low-income is generally higher than the state average in low-poverty districts, then this approach undercounts the non-FRPL English learners in those districts. In addition, it neglects non-FRPL English learners in districts with more than 50% FRPL students. Accordingly, this approach sets a lower bound on the cost of our Targeted program.[34]

In determining how much more resources targeted students need in order to meet state performance standards, policymakers can look to a growing empirical literature on funding weights and cost estimates. Using different methodologies, the GDTF studies examining the additional cost of educating a low-income student produced estimates

34. We have also simulated our Targeted program using more complex parameters reflecting the hypothesis that the percentage of English learners who are not FRPL-eligible decreases as a district's FRPL concentration increases. Suppose, for example, that the unduplicated count of targeted students in each district is determined by the schedule shown at the right. Using this schedule, simulations of our Targeted program produce cost estimates roughly in the middle between the upper and lower bound estimates in Table 4.

District FRPL concentration (c)	Imputed count of targeted students
c < 20%	FRPL + 25% EL
20% ≤ c < 40%	FRPL + 20% EL
40% ≤ c < 60%	FRPL + 15% EL
60% ≤ c < 80%	FRPL + 10% EL
80% ≤ c < 100%	FRPL + 5% EL

ranging from $1,500 to $3,000.[35] We apply these estimates to FRPL as well as EL students in our simulation,[36] although further research is needed to establish accurate cost estimates for educating English learners.

Table 4 shows estimates of revenues needed—above the $1.71 billion available in 2004-05—to support a Targeted program with the value of $T ranging from $1,500 to $3,000. The Targeted program is the component of our proposal requiring the most additional revenue because existing programs provide little extra resources for districts with high concentrations of disadvantaged students, as Figure 1 showed earlier.

Having examined each program individually, let us now simulate the proposed system as a whole. Table 5 shows estimates of the total additional revenue needed—above the $40.47 billion available in 2004-05—to support our reformed system at three funding levels that we have labeled Low, Middle, and High. For each simulation, two totals are reported. The first, marked "HH each program," is the total when the hold harmless condition is applied to each of the three programs individually. In other words, no district receives less than what it received in 2004-05 through the combination of revenue streams comprising each program in our proposal. The second total, marked "HH overall," is the total when the hold harmless condition is applied to each district's bottom-line revenue. Under this approach, each district's total revenue is at least as much as it was in 2004-05, even if its revenue under one or another program is less. As mentioned earlier, we adopt this latter approach to the hold harmless condition.

TABLE 5 | Overall system simulation

Parameters	Lower bound		Upper bound	
	Total cost (millions)	Additional cost (millions)	Total cost (millions)	Additional cost (millions)
Low				
Base = $6,000	$35,832	$1,038	$35,832	$1,038
Special ed = $600	4,061	91	4,061	91
$T = $1,500	5,676	3,966	6,367	4,657
Total (HH each program)	45,569	5,095	46,260	5,786
Total (HH overall)	44,407	**3,933**	45,078	**4,604**
Middle				
Base = $6,200	$36,577	$1,783	$36,577	$1,783
Special ed = $700	4,278	308	4,278	308
$T = $2,000	7,545	5,835	8,474	6,765
Total (HH each program)	48,400	7,926	49,329	8,856
Total (HH overall)	47,753	**7,280**	48,677	**8,203**
High				
Base = $6,400	$37,530	$2,736	$37,530	$2,736
Special ed = $800	4,720	750	4,720	750
$T = $2,500	9,422	7,712	10,583	8,874
Total (HH each program)	51,672	11,198	52,833	12,360
Total (HH overall)	51,264	**10,790**	52,424	**11,950**

Table 5 shows that the Low option—$6,000 per ADA in base funding, $600 per ADA for special education, and a starting point of $1,500 per targeted student—would have required $3.9 billion to $4.6 billion

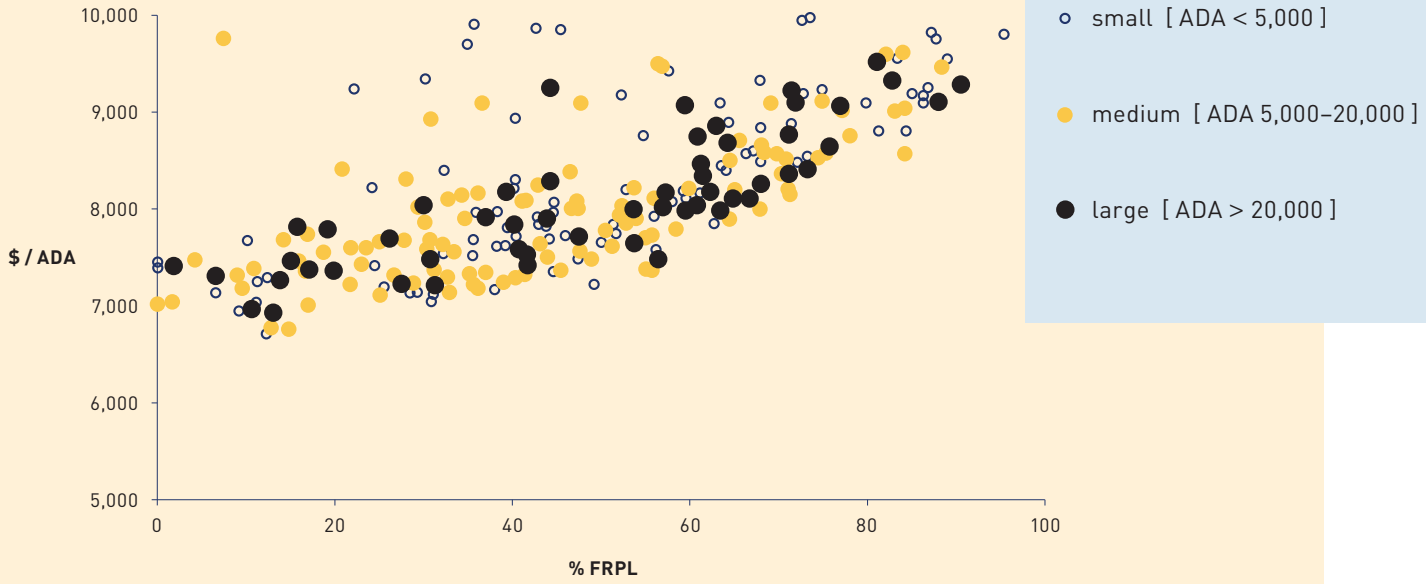
35. *See* Jennifer Imazeki, Assessing the Costs of K-12 Education in California Public Schools (Getting Down to Facts, 2006) (cost function study yielding estimate of $1,500); Duncombe & Yinger, *supra* note 6, at 43-44 (expenditure function study yielding estimate of $1,398 to $1,802 depending on district size); Sonstelie et al., *supra* note 18 (professional judgment study yielding estimate of $2,200); Jay Chambers et al., Efficiency and Adequacy in California School Finance: A Professional Judgment Approach (Getting Down to Facts, 2006) (professional judgment study yielding estimate of $3,000).

36. *See* Chambers et al., *supra* note 35, at 55 (finding that the additional cost of educating English learners to state standards is similar to the additional cost of educating low-income students).

TABLE 6 | Simulated revenue per ADA for 35 large unified districts (Middle option)

District	ADA	% FRPL	% EL	Wage index	Revenue per ADA		
					Actual	Simulated	Gain
Montebello Unified	34,214	76	42	1.01	$6,709	$9,455	$2,747
Palm Springs Unified	21,457	73	36	0.96	6,572	8,698	2,126
Fontana Unified	39,425	71	42	0.96	6,581	8,694	2,113
Long Beach Unified	90,983	71	27	1.01	6,652	9,002	2,349
Rialto Unified	28,425	66	26	0.96	6,615	8,274	1,659
Moreno Valley Unified	33,967	64	31	0.96	6,587	8,325	1,738
Garden Grove Unified	47,865	64	50	1.04	6,624	9,074	2,450
Colton Joint Unified	23,006	63	24	0.96	6,600	8,158	1,557
Lodi Unified	26,834	59	32	0.98	6,710	8,175	1,465
Downey Unified	21,784	57	23	1.01	6,266	8,321	2,055
Visalia Unified	24,322	56	22	0.92	6,530	7,620	1,090
Norwalk-La Mirada Unified	22,347	53	20	1.01	6,707	8,117	1,410
Desert Sands Unified	25,491	53	30	0.96	6,542	7,826	1,284
Riverside Unified	39,866	53	17	0.96	6,479	7,748	1,270
Vista Unified	23,132	47	28	0.97	6,727	7,733	1,006
Abc Unified	21,119	43	19	1.01	6,688	7,882	1,321
Glendale Unified	27,604	43	29	1.01	6,561	7,901	1,213
Elk Grove Unified	55,478	41	19	0.93	6,682	7,397	715
Corona-Norco Unified	43,162	41	17	0.96	6,414	7,482	1,068
Manteca Unified	22,222	40	16	0.98	6,439	7,589	1,150
Fairfield-Suisun Unified	21,848	40	12	1.03	6,549	7,833	1,284
Antioch Unified	20,008	39	12	1.09	6,557	8,186	1,630
Orange Unified	29,966	37	23	1.04	6,601	7,935	1,334
Clovis Unified	33,212	31	10	0.95	6,420	7,208	788
Mt. Diablo Unified	34,326	30	19	1.09	6,744	8,034	1,291
Chino Valley Unified	32,299	27	11	0.96	6,357	7,217	860
Placentia-Yorba Linda Unified	25,552	26	16	1.04	6,432	7,697	1,264
Simi Valley Unified	20,557	19	9	1.01	6,423	7,373	950
Fremont Unified	30,654	19	16	1.09	6,446	7,814	1,368
Capistrano Unified	48,103	15	12	1.04	6,294	7,469	1,175
Conejo Valley Unified	21,628	14	9	1.01	6,391	7,262	871
Temecula Valley Unified	24,072	13	7	0.96	6,438	6,939	500
Poway Unified	31,704	10	8	0.97	6,357	6,968	611
Irvine Unified	24,511	6	13	1.04	6,334	7,309	975
San Ramon Valley Unified	22,129	2	2	1.09	6,360	7,420	1,061

FIGURE 2 | Simulated revenue per ADA by district poverty level for all California unified districts (Middle option)



in additional revenue in 2004-05, a 10% to 11% increase. The High option—$6,400 per ADA in base funding, $800 per ADA for special education, and a starting point of $2,500 per targeted student—would have required $10.8 billion to $12.0 billion in additional revenue, a 27% to 30% increase. The Middle option—$6,200 per ADA in base funding, $700 per ADA for special education, and a starting point of $2,000 per targeted student—would have required $7.3 billion to $8.2 billion in additional revenue, an 18% to 20% increase. The estimated cost of the Middle option is comparable to the amount of new education revenue that will become available over the next five years according to LAO projections.

Table 6 shows how the 35 unified districts listed in Table 1 would fare under the Middle option using upper bound estimates for the Targeted program. As expected, districts with high concentrations of low-income students and English learners gain the most under our proposal, and districts in high-wage regions also receive significant increases. In Table 6, the average revenue per ADA among the districts with more than 50% low-income students is $980 greater than the average among the districts with less than 50% low-income students.

Figure 2 shows the simulated relationship between revenue per ADA and poverty concentration for all unified districts under the Middle option. Comparing Figure 2 with the current allocations shown in Figure 1, it is clear that the Middle option parameters for the Base and Special Education programs raise the minimum funding level across all districts. Further, in contrast to current allocations, revenue per ADA increases strongly with district poverty under our proposed reform. We observe a similar pattern when we plot revenue per ADA against district concentration of English learners (not shown here).

CONCLUSION

The reform we propose would result in a simpler, fairer, and more coherent system of school finance, one that is responsive to student needs and regional costs. Importantly, our proposal can be adopted and implemented even as lawmakers grapple with the state's current budget woes. The imperative, we believe, is to act now to establish a new framework for school finance that can guide rational and fair allocations as new money becomes available in the future.

Several issues remain unresolved under our proposal. We leave to policymakers the important task of choosing the funding parameters that will enable all students to meet California's ambitious academic standards. Moreover, consistent with our approach to allocating state revenue to districts, we believe it is vital that districts allocate their revenue to schools based on student needs and target resources to improve the achievement of the most disadvantaged students. We have not examined what mix of incentives, supports, and accountability mechanisms will ensure that dollars allocated equitably from the state to local districts are in turn spent wisely by local districts to boost performance especially among the neediest students and schools.

However, implicit in our emphasis on simplifying the finance system is a decrease in regulation and an increase in local flexibility. There is some evidence that state accountability mechanisms work more effectively when schools and districts have more local control over resource allocation.[37] Although we do not explore here the proper scope of local control, we note that California's finance system has swung so far in one direction—toward centralized, compliance-oriented control of local resource allocation—that it may be useful, in envisioning a new system, to start from the other direction.

These issues call for further work. But we must begin by recognizing that California's school finance system has become so unwieldy and irrational that basic issues of fairness and institutional design can no longer be addressed from within. Our proposal provides a new framework in which such issues can be transparently debated and thoughtfully resolved.

37. *See* Susanna Loeb & Katharine Strunk, *Accountability and Local Control: Response to Incentives With and Without Authority over Resource Generation and Allocation*, 2 EDUC. FINANCE & POL'Y 10 (2007).