

# Special Education Expenditures, Revenues, and Provision in California

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## **Executive Summary**

This paper is in response to a request from the California State Board of Education and the California Advisory Commission on Special Education. Its sections include a national overview of special education funding and provision, special education in California compared to the nation, a more detailed examination of state-level special education spending in California, and variations across the state's Special Education Local Planning Areas (SELPAs). The paper concludes with a discussion of the possibility of doing more with less in the provision of special education, presenting examples from two California districts where this appears to be occurring, and with a discussion of possible policy implications.

**National overview.** Special education is financed through a complex combination of federal, state, and local funds using a variety of formulas. California's special education system is primarily a census-based approach, as is federal special education funding. This approach allocates a specific amount of special education state aid per student (counting all students both in special education and non-special education) in a district. The primary advantage cited for this approach is that it reduces fiscal incentives to identify students as having disabilities and serve them in more costly placements.

California compared to the nation. California identified 10.5 percent of its students for special education services in 2009–10, compared with a national average of 12.5 percent, which ranks 48<sup>th</sup> out of the 50 states and the District of Columbia The state's incidence rate by category of disability is lower than or near equal to the national average in all categories except autism, where the state is somewhat above the national average. Students with disabilities are less likely to spend substantial time in classrooms with their non-disabled peers, and the state's investment in special education staff per student is among the lowest in the nation—as are educational outcomes for students with disabilities.

**Special education statewide**. These data show fairly modest levels of special education provision in California in relation to other states. At the same time, the trend of increasing special education spending<sup>1</sup> in relation to general education spending may be considered a concern.<sup>2</sup> This is especially true given California's currently austere fiscal climate. The next section of the paper presents a broader range of state-level data related to this trend and presents other factors that may be taken into account.

For example, during the period over which special education spending has continued to rise as a percentage of general fund spending, the percentage increases in special education spending per pupil declined substantially, from 10.5 percent in 2003–04 to 3.4 percent in 2009–10. Thus, projections for future special education spending look quite different depending on the measures used.

Rather than special education expansion that is out of control, the virtually flat percentage of students enrolled in special education statewide and the steady pattern of diminishing increases in special education spending indicate a somewhat different fiscal picture. Rather than being "uncontrollable," it

<sup>&</sup>lt;sup>1</sup> A reviewer of this paper noted that "it will be several years before we can make comparisons in special education spending because of ARRA (and) the shift of mental health funding to special education." While this point is valid, because state finances are constantly in flux and projections are imperative, it seems essential to view trends on an ongoing basis and to temper interpretations based on known circumstances.

<sup>&</sup>lt;sup>2</sup> This paper points out that comparisons of special education spending in relation to general education may be considered problematic from several perspectives. First, general education covers grades kindergarten through 12, while special education may cover ages birth through 21. Second, while virtually all students in special education also receive general education services, this balance may vary across districts. Also, it has been noted that districts vary in the exact procedures used in regard to counting a given cost element as special or general education from an accounting perspective. However, while these two sets of services are not fully comparable and appropriate for comparison, it does seem reasonable to observe changes in their relative share of total education spending over time.

appears that spending on special education programs has also been curtailed somewhat in response to statewide fiscal pressures.

In addition, while special education spending per student in special education has continued to rise, overall education spending per student in special education may be steady. For example, when students in special education receive general education services, this is charged against the general education ledger. Thus, as the general education services students in special education receive are cut, more of these services may be provided by special educators, thereby appearing as special education costs. Thus, changes in special education cost per student are subject to where these services are provided and by whom as well as the overall level of services received.<sup>3</sup>

Another perspective is the expected support for students in special education across levels of government. The latest available data reported across the states shows an average of about 41 percent coming from local sources, which is exactly what was reported for California for the 2010–11 school year.

**Special education data within state by site.** California provides special education services by Special Education Local Planning Area (SELPA). The data by SELPA in California show a substantial range of variation in terms of average special education spending, funding, placements and outcomes. From these data, the most predominant factor related to variations in the expenditure impact of special education across SELPAs is the percentage of students identified for service. When larger percentages of students are identified, the cost impact rises. The key factors relating to higher relative percentages of identification are increased numbers of students in the categories of specific learning disability and speech/language impairment.

In addition to how much a SELPA spends on special education, the degree to which general funds are needed to support this program is affected by the amount of state and federal special education revenues the SELPA receives. The best measure of this support in regard to overall cost impact is the amount of special education revenues received per student in total enrollment across SELPAs.

This measure of special education revenues is also of interest in regard to funding equity. As California has adopted a census-based funding system, the goal is equity of special education funding per student in total enrollment. Based on this, we would expect to see a fairly equal distribution of revenues per capita as opposed to the substantial disparities shown across SELPAs in this report.

It may be that California's special education allocations are still largely based on prior patterns of funding based on special education identification patterns and cost through "hold harmless" provisions. However, continuing these patterns of funding appears to interfere with the equity standard associated with census-based systems—equal special education support per total student enrolled.<sup>4</sup>

Arguably, of greater importance than the degree of special education spending is how much is being produced. As is true for the other variables shown in this report, there is broad variation across the state's SELPAs. For example, the average percentage of students in special education scoring proficient

<sup>&</sup>lt;sup>3</sup> Although this statement is largely speculative, the most current data available from CDE on the distribution of teachers by type show a slight percentage increase for teachers coded as special education (7 percent to 8 percent of all teachers) as compared to a decline in those listed as "self-contained" teachers (47 percent to 44 percent) during the period from 2002–03through 2008–09.

<sup>&</sup>lt;sup>4</sup> While equal allocations may not always be considered equitable due to variations in such cost factors as the severity of the students served, population sparsity, and urbanicity that may be specifically included in a funding formula, substantial variations that are idiosyncratic or simply based on history, as appears to be the case in California, cannot be justified over time as fair to all.

or above across language arts and mathematics (2010/11) ranges across SELPAs from 12 percent to 64 percent and 9 percent to 60 percent, respectively.

What factors appear related to these vast differences in student performance? As may be expected, regression results show a strong negative association between academic outcomes for students in special education and the percentage of students in poverty. However, the average special education expenditure per student in special education shows no association with educational outcomes across SELPAs, which are the recipients of state funds. However, a positive relationship is shown based on district-level analyses.

In addition, a positive association is shown for the percentage of students in special education spending 80 percent or more of their school day in general education classes in district-level analyses.<sup>5</sup> This variable is of particular interest because it may be one of the best measures available of the extent to which students with disabilities (and all students) are receiving the social benefits associated with interacting with a diverse student enrollment. In addition, the data above suggest that some academic benefit for students with disabilities may be associated with this variable as well.<sup>6</sup>

**Doing more with less.** Despite California's relative low ranking in special education provision in relation to other states, cost control at this time of austerity is imperative for all public services. However, even in these austere times, public educators across the nation face considerable pressure to improve educational results. Federal accountability provisions under No Child Left Behind, and the state education accountability system, are designed to enforce sanctions on public schools not showing continuous academic improvement. Thus, in California, virtually all districts are faced with the challenge of doing more with less.

Two districts featured in this report, Sanger and Val Verde Unified, arguably provide models for the state in considering how to best face this challenge. Both enroll high percentages of student in poverty, enroll large numbers of English learners, and are in relatively remote areas. In addition, both identify a lower percentage of students for special education than the statewide average and as a result likely have a more concentrated "severity" among those who are identified. Despite this, students in special education in these two districts substantially exceed demographically similar districts in academic performance. In addition, they do this while spending substantially less on special education, on average, per student. How do they provide more for less, resulting in the increased efficiencies needed so badly statewide?

Their approaches have some common characteristics. They both use Response to Intervention (Rtl) to identify students in need of supplemental assistance and to provide needed interventions as early as possible. They argue that this keeps their special education numbers relatively low, reducing the related administrative and other costs associated with this program. Because of the state's census-based funding system, reducing their special education count does not reduce the revenues they receive for this program. Thus, both show relatively low special education spending, which generally does not exceed their state and federal special education revenues.

In addition, both programs minimize placements to nonpublic schools or county programs, which tend to be more restrictive and costly. They also serve students in their neighborhood schools and in general

<sup>&</sup>lt;sup>5</sup> A positive association between special education inclusion and outcomes is also cited in the paper from separate studies examining special education statewide in Massachusetts (Hehir et al., 2012) and Illinois (Parrish, 2010).

<sup>&</sup>lt;sup>6</sup> Concerns are sometimes expressed that including students in special education in general education may adversely affect academic outcomes for students not in special education. However, separate analyses conducted for this paper on the association between the degree of inclusion for students with disabilities and the academic outcomes of all students show no association based on California data for the 2010–11 year.

education classes to the maximum extent appropriate to these students' needs. This reduces transportation costs and extends the benefit from staff with special education training to a broader range of students. These districts infuse special education resources into general education classes, enabling special and general education teachers to work collaboratively to best meet the needs of all students. This approach, as opposed to pulling special education students out of general education classes for separate instruction, means their academic day is less disrupted and that general education students also gain from exposure to special education expertise.

The paper concludes with a summary of observations and possible policy implications:

Better special education expenditure and revenue data are needed. The primary impetus for this paper came from questions about the size of the state's special education expenditure and the degree to which general funds are being used to support special education statewide. However, these measures all come from the state's accounting system and based on the data gathering efforts for this paper, there appears to be no clear agreement about how these measures should be calculated.

Possibly change focus from special versus general education spending. Districts must now focus on the needs of all students to master the core curriculum for which they are held accountable. For this reason, as well as social benefits, efficiencies are likely gained from the increased blending of students and funds. Given this objective, it seems more important to understand how much a district is spending overall in relation to the academic gains realized by all of its students than how much is being spent on one component of the education program as opposed to another.

California's investment in and return from special education appears relatively low. California's special education provision per capita appears to be among the lowest in the nation. Academic results for students with disabilities are also low. In addition, the state's greater reliance on more restrictive placements for students in special education likely decreases opportunities for all students to interact with the diverse populations and environments they will experience as adults.

Special education spending, revenues, and outcomes vary substantially by SELPA across the state. To understand what is occurring statewide, it is essential to examine the individual units that make up these statewide totals. On a per capita basis, some SELPAs show much higher levels of spending on special education services than others. Also, some are receiving substantially more state and federal aid in support of special education programming per capita. Last, the percentage of students in special education demonstrating proficiency or above in language arts and math varies extensively.

Conclusion. The efficiency challenges faced by California may be greater than those of other states. California spends substantially less than other states on public education services. The state's outcomes are relatively weak and it is more likely to place students in separate special education classes than other states. Also, the system for allocating state and federal special education aid to SELPAs appears not to equitably share resources across the state's SELPAs.

The good news is that there appear to be strong examples of highly efficient provision in the state. While these districts do not do all the same things, creating a "recipe" that all can strictly follow, there appear to be overarching themes from which others can learn. In the spirit of education, which is our business, it would seem important for this knowledge to be more broadly disseminated statewide so that other districts, SELPAs, and the state as a whole may benefit.

## Introduction

This paper is in response to a request from the California State Board of Education and the California Advisory Commission on Special Education. It resulted from two meetings held in Sacramento in the latter part of 2011, which were attended by a broad range of special education stakeholders. These meetings focused on special education spending and related issues.

At the second of these statewide meetings, School Services of California (SSC) presented the data shown in Exhibit 1. These data show special education spending increasing modestly as a percentage of total general fund expenditures from 2004–05 to 2007–08 (24.01 percent to 24.82 percent) before rising more rapidly to 27.85 percent by 2009–10.

However, as it turns out, the statewide special education spending amount cited at this meeting is inconsistent with California Department of Education (CDE) data. For example, the amount reported by SSC for 2009–10 was \$11,965,574,905, while CDE data show total special education spending in this year to be \$10,598,585,939. Based on the CDE amount, special education represents 24.7 percent of general fund spending for 2009–10 rather than the 27.85 percent shown above.

Thus, the percentages shown throughout this exhibit may be erroneously high—by nearly \$1.37 billion for 2009–10. This seems to indicate differences of opinion (or understanding) about exactly how special education spending should be calculated statewide. However, the general upward slope of the trend line shown in Exhibit I is likely still relevant.

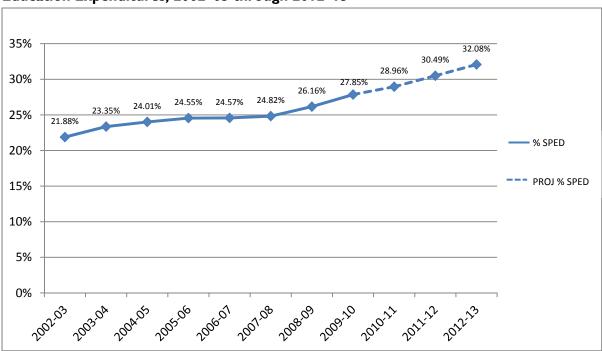


Exhibit I. Special Education Expenditures as a Percentage of Total General Fund Education Expenditures, 2002–03 through 2012–13

Source: SACS Unaudited Actuals as report by School Services of California

<sup>\*</sup>Only 669 LEAs submitted data via SACS for the 2000–01 fiscal year.

<sup>\*\*</sup> Only 968 LEAs submitted data via SACS for the 2001–02 fiscal year.

<sup>-</sup>

<sup>&</sup>lt;sup>7</sup> An analysis of these differing estimates from SSC and CDE was conducted by Ann Hern, of the California Comprehensive Center at WestEd, after the initial release of this report. She concludes, "On balance, although CDE's approach could be argued to overstate program costs (due to the inclusion of peripheral program expenses), it is the most technically sound approach."

Based on these data, SSC projects special education spending will approach one-third of general fund expenditures by 2012–13. Extending this trend line into the future suggests that special education will continue to expand as a share of education spending in the state, perhaps at a fairly rapid rate. These data raise questions about what underlies this observed trend, the degree to which this should be a concern, and whether policy remedies may be needed to improve special education as a component of overall education provision in the state.

This paper attempts to inform these questions and possible policy concerns. Its primary purposes are two-fold. First, it presents analyses of extant data as the basis for the broader consideration of California's special education spending, revenues, and provision. Second, it discusses possible implications of these data for the future of special education in California, citing two districts as examples of possible strategies for reform.

This paper is divided into six sections. The first is a national overview of special education funding and provision. The second section presents data on special education in California as compared to other states and the nation. This is followed by a more detailed examination of overall special education spending in California. We then present analyses of variations in special education spending, revenues, and provision across the state's Special Education Local Planning Areas (SELPAs). This leads to a discussion of the possibility of doing more with less in the provision of special education statewide, and presents examples of two California districts where this appears to be occurring. The final section of the paper is presented as a conclusion, which includes the consideration of possible policy implications.

It is also noted that issues related to funding, spending, and provision of special services in charter schools also needs to be addressed. The fact that this paper does not attempt to address these issues is in no way meant to diminish their importance. This is a complex topic, and one that warrants separate examination.

## **A National Overview**

#### **Special Education Finance Across the Nation**

Nationally, special education is financed through a complex combination of federal, state, and local funds using a variety of formulas. Although the federal government does not systematically collect data on special education spending due to the wide range of accounting and reporting procedures used by individual states, there have been several federal-funded attempts to collect such data. Based on the most recent national information available (Chambers et al., 2002), for the 1999–2000 school year, per pupil special education spending averaged \$12,474, as compared with \$6,556 for students not in special education. This is more than double (in constant dollars) the average special education expenditure from the late 1960s, when it was first calculated.

This national study also showed that while spending on educating students in special education has increased substantially over time, the average expenditure per student in general education increased at a comparable rate. As a result, the ratio of total spending per student in special education as compared to a student in general education remained fairly constant over time at about two to one.

Thus, based on these data, increases in total special education spending nationally appear to be due more to the increase in special education enrollment than increased spending per student in special education (Chambers et al., 2002). It should be noted that these data are now over a decade old. However, more current data presented for California later in this paper will reinforce the notion that rising numbers and percentages of students in special education appear to be a more substantial cost driver than rising spending per identified student or increased identification of "high cost" students.

## National Issues in Relation to Special Education Funding

When responding to a national survey about the most crucial issues regarding funding for special education in 2002, the majority of states identified four major themes: inadequate funding overall, inadequate funding specifically for students with high-cost needs, the failure of the federal government to reach the 40 percent funding target specified in the Individuals with Disabilities Education Act (IDEA), and the difficulties local school districts face in providing services to the increasing number of students in special education (Parrish et al., 2003).

## **State Funding Formula Types**

Four primary formula types are most predominantly used as the basis for allocating special education within and across states: pupil-weighted, census-based, resource-based, and percentage reimbursement. These are summarized below. In addition, a listing of the states using each of these formula types as well as language from all states describing their special education funding formulas in greater detail can be found in Ahearn (2010).

Pupil-weighted funding allocates dollars per student based on specified criteria such as category of disability and location of primary placement. The benefit of this type of formula is that it is intended to account for differences in the cost of services across districts. Costs vary depending on factors such as the disability of the child or the setting where most of the child's education services are provided. Possible disadvantages are that higher funding weights for some disabilities or placements may create incentives for over-identification in some categories of disability or for placement of students in highercost (and possibly more restrictive) settings.

Census-based funding assumes a fixed cost differential for the average student in special education and fixed proportions of students with disabilities across all districts. This funding type allocates a specific amount per student (counting all students both in special education and non-special education) in a district. The primary advantage cited for this approach is that because it is detached from any count of students in special education, needs, or services, the census-based approach eliminates or reduces fiscal incentives for identifying more students or serving them in more restrictive or more costly placements. One possible disadvantage is that census-based funding does not account for the differential special education costs districts of comparable size may experience, and could conceivably create a fiscal incentive for reduced identification and scaled-back services. California's special education system is primarily a census-based approach, as is federal special education funding.

Resource funding distributes funds based on the amount of specified resources in a district, such as the number of special education teachers used to serve students with disabilities. An advantage of this type of funding system is its direct link to key special education resources. In theory, allocations would expand with the number of special education teachers needed and employed by a district, thereby adjusting with changes in special education needs and costs. One possible disadvantage is that this type of system may be seen as inflexible in that funding may be received for some types of resources and not others. For example, in some states, a district may receive funding only for special education teachers and not for the instructional aides working with students with disabilities.

Percentage reimbursement funding is based on the state reimbursing districts for a percentage of their actual spending on special education. There may be caps on the total amount eligible for reimbursement to districts or the number of students who can be claimed. One advantage of a percentage reimbursement system is that it directly relates to local variations in actual special education spending across districts. A possible disadvantage is that the cost accounting required to support such a system may be considered overly burdensome, especially if a system for tracking spending uniquely for special education services is not already in place.

## **Federal Funding**

As mentioned, federal special education funding is now primarily based on a census formula. Prior to 1997, federal funding was based on the average special education child count. Starting in 1997, new funding under this system was allocated based on the total population of school-age children in a state and the state's relative poverty. Under this formula, 85 percent of Individuals with Disabilities Education Act (IDEA) funds are distributed to states according to their total school-aged population. The remaining 15 percent of funds are allocated according to the state's relative degree of poverty.

Other components of the 1997 amendments to IDEA are provisions pertaining to state funding formulas based on special education placements. The 1997 and 2004 IDEA reauthorizations included requirements applying to a state's distribution of state special education funds. The 1997 amendments listed "establish placement neutral funding formulas" as one of its purposes, and the 2004 reauthorization further emphasized this. A placement-neutral funding formula is one that allocates special education funds to districts in a manner that is not dependent on where their students receive special education services. This focus on placement neutrality is designed to avoid fiscal incentives for placing students with disabilities in separate settings, which may violate the least restrictive requirements (LRE) of the IDEA.8

Changes in federal funding provisions for special education also came during the 2004 reauthorization of IDEA. Prior to this, districts could not use federal funds to take the place of state and local funds. Now states are permitted to use half of the annual *increase* in federal funding to offset local special education spending. As an alternative, states may use up to 15 percent of their total federal special education funds on such early intervening services as Response to Intervention (RtI).

"Full funding" of special education is a recurrent federal policy issue. IDEA authorized the federal government to appropriate funding for each student in special education "up to 40 percent of the average per pupil expenditure (APPE)." Note that this is not 40 percent of the average cost for students in special education, but rather 40 percent of the average cost of all students, including students in special education. Federal funding has never reached this 40 percent level. While it has increased somewhat over the past decade, federal funding for special education is still estimated to be less than 20 percent of the APPE.

## Special Education In California As Compared To The Nation

In this section, we compare California's special education enrollment, placement, funding, and outcome data to other states and the nation as a whole. Where available, trend data are shown, as well as rankings comparing California to the other states.

### **Special Education Enrollment**

An important statistic in regard to special education is the overall percentage of students receiving these services. As shown in Exhibit 2, the percentage of students in special education has grown only minimally in California over the past 15 years, as is true for the nation as a whole. As a percentage of school age enrollment, this figure rose in California from 10 percent in 1996 to 11 percent by 2010. The 10 percent

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<sup>&</sup>lt;sup>8</sup> From Ahearn (2010): "The LRE provision requires that children with disabilities, including children in public or private institutions or other care facilities, are educated with children who are nondisabled to the maximum extent appropriate, and that special classes, separate schooling, or other removal of children with disabilities from the regular educational environment occurs only if the nature or severity of the disability is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily [34CFR 300.114(a)(2)]."

<sup>&</sup>lt;sup>9</sup> Please see §300.717 in the Federal Register (June 21, 2005) for the official regulations.

to 11 percent rate is most commonly cited for California and the nation. This rate is based on the number of students in special education (ages 3 to 22) divided by the state's public school enrollment (grades K–12).

For comparative purposes across states, however, changing the denominator from public school enrollment to state population ages 3 to 22 is more useful. This makes the age range in the denominator consistent across states and also precludes a state's rate being affected by the number of students in public versus private schools.

On both counts, it can be seen that the national percentages consistently rose every year through about 2004. This trend predates the data shown in Exhibit I, going back to the passage of the IDEA and the first collection of these data in the late 1970s. Thus, the percentage of students in special education nationally had been rising steadily for more than 25 years. While there were no substantial increases in a given year, in every single year prior to 2004 these percentages rose at least somewhat. This very persistent national trend, however, began to reverse in 2004 and has now begun to decline every year since.

Interestingly, while the national percentage of students in special education in relation to total enrollment has been declining, this percentage has begun to rise somewhat in California over the past several years.<sup>10</sup> California's percentages, however, are still well below those for the nation.

16.0 14.0 12.0 % Enrollment: 50 States and 10.0 DC (including BIA schools) -% Enrollment: California 8.0 % Population: 50 States and 6.0 DC (including BIA schools) ►% Population: California 4.0 2.0 0.0 2003

Exhibit 2. Special Education Identification Rates in California and the Nation (Ages 3 to 22), 1996–2010

Source: Data Accountability Center. (n.d.). Part B Trend Data. https://www.ideadata.org/PartBTrendDataFiles.asp.

<sup>10</sup> 

<sup>&</sup>lt;sup>10</sup> For example, a July 5, 2012 article in the Houston Chronicle, "Special education vanishing in Texas," notes that while Texas identified 12 percent of all students as special education in 2000, they are now down to 8.8%. They report that this now places Texas as the lowest identifying state in the nation.

Exhibit 3 further breaks down the percentage of students in special education in relation to state populations, ages 3 through 21, by state. As mentioned, this percentage appears lower due to the use of a state's total 3–21-year-old population as the denominator, and is more useful for comparative purposes. Compared with 49 states<sup>11</sup> and Washington D.C., California ranks 45th in the percentage of students identified as special education based on this measure. The range by states varies, from 6.1 percent in Idaho to 10.6 percent in New Jersey.

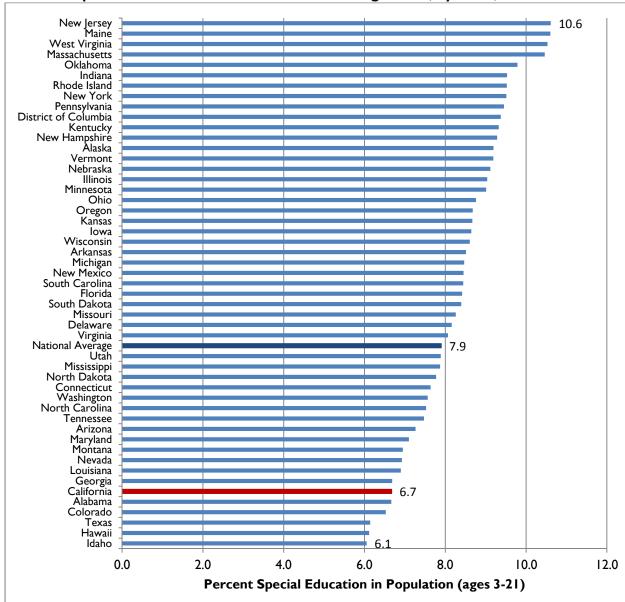


Exhibit 3. Special Education Identification Rates for Ages 3-21, by State, 2009-2010

Source: Derived from longitudinal data files from www.IDEAdata.org.

Note: Data not available for Wyoming.

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<sup>&</sup>lt;sup>11</sup> Data not available for Wyoming.

Related to the percentage of students identified for special education is the breakout of these rates by category of disability. Exhibit 4 lists the percentage of total state population ages 3 through 21 by category of disability. Again, the incidence of identification as a percentage of the total state population in this range is the best measure for comparison purposes.

California is below the national total in the percentage of the population 3 through 21 identified for 8 of the 12 federally specified categories of disability. The categories in which California falls most substantially below the national average are other health impairments (.87 percent identified in the nation vs. .53 percent in California) and emotional disturbance (.51 percent identified in the nation vs. .28 percent in California).

In four categories (hearing, orthopedic, and visual impairment, and autism), California identifies a larger percentage of the resident population compared with the nation. The greatest difference is in autism, where California has .6 percent of the population identified compared with the national total of .48 percent. California shows the ninth-highest rate of identification for autism among all states, but is still substantially below the highest identifying state of Minnesota at 1 percent.

Exhibit 4. Percentage of the Resident Population, Ages 3–21, by Category of Disability, 2009

	National Total	California	Difference	California Rank <sup>a</sup>	Maximum Rate	Minimum Rate
Specific learning disabilities	3.07%	2.91%	-0.16%	29 of 51	5.2%	1.3%
Speech or language impairments	1.79%	1.69%	-0.10%	30 of 51	4.0%	0.3%
Other health impairments	0.87%	0.53%	-0.34%	47 of 50	1.9%	0.0%
Mental retardation	0.58%	0.42%	-0.16%	35 of 51	1.8%	0.2%
Emotional disturbance	0.51%	0.28%	-0.24%	45 of 51	1.3%	0.1%
Autism	0.48%	0.60%	0.12%	9 of 51	1.0%	0.1%
Multiple disabilities	0.17%	0.05%	-0.12%	42 of 44	1.04%	0.05%
Hearing impairments	0.10%	0.12%	0.02%	8 of 51	0.17%	0.03%
Orthopedic impairments	0.08%	0.15%	0.07%	3 of 51	0.17%	0.01%
Visual impairments	0.04%	0.04%	0.01%	12 of 51	0.06%	0.00%
Traumatic brain injury	0.03%	0.02%	-0.01%	45 of 50	0.44%	0.00%
Deaf-blindness	0.002%	0.001%	0.00%	26 of 45	0.0%	0.0%

Sources: U.S. Bureau of the Census. For the 50 states and DC, population data accessed August 2010 from http://www.census.gov/popest/states/asrh/files/SC-EST2009-AGESEX-RES.csv.

U.S. Department of Education, Office of Special Education Programs, Data Analysis System (DANS), OMB #1820-0043: "Children with Disabilities Receiving Special Education Under Part B of the Individuals with Disabilities Education Act," 2009. Data accessed October 1, 2011.

Also of interest are identification patterns by category of disability within a state's special education population (Exhibit 5). In California, students in special education are substantially more likely to be in the disability categories of autism and hearing, orthopedic, and visual impairment than in other states. They are substantially less likely to be in the categories of other health impairment, emotional disturbance, and multiple disabilities.<sup>12</sup>

<sup>&</sup>lt;sup>a</sup>This column shows California's ranking by degree of identification versus other states and the District of Columbia by category of disability.

<sup>&</sup>lt;sup>12</sup> A reviewer noted, "One of the reasons that may contribute to the lower numbers in multiple disabilities and higher numbers in VH, OH, and Deaf/HOH is that California provides some low-incidence materials and service

Exhibit 5. Percentage of Children with Disabilities, Ages 3–21, by Category of Disability, 2009

	National Total	California	Difference	California Rank <sup>a</sup>	Maximum Rate	Minimum Rate
Specific learning disabilities	39.77%	42.73%	2.96%	17 of 51	60.37%	15.30%
Speech or language impairments	23.16%	24.78%	1.61%	22 of 51	39.36%	4.53%
Other health impairments	11.28%	7.80%	-3.48%	43 of 50	20.31%	0.13%
Mental retardation	7.57%	6.22%	-1.35%	35 of 51	17.81%	2.32%
Emotional disturbance	6.66%	4.05%	-2.60%	43 of 51	16.67%	1.40%
Autism	6.18%	8.84%	2.66%	4 of 51	12.33%	1.13%
Multiple disabilities	2.14%	0.73%	-1.41%	41 of 44	12.67%	0.55%
Hearing impairments	1.28%	1.77%	0.49%	4 of 51	2.14%	0.40%
Orthopedic impairments	1.06%	2.18%	1.12%	2 of 51	12.45%	0.14%
Visual impairments	0.47%	0.61%	0.15%	7 of 51	0.77%	0.04%
Traumatic brain injury	0.41%	0.27%	-0.14%	38 of 50	4.72%	0.01%
Deaf-blindness	0.02%	0.02%	0.00%	21 of 45	0.37%	0.00%

Sources: U.S. Department of Education, Office of Special Education Programs, Data Analysis System (DANS), OMB #1820-0043: "Children with Disabilities Receiving Special Education Under Part B of the Individuals with Disabilities Education Act," 2009. Data accessed October 1, 2011.

### Placement Data in California and the Nation

Another important set of statistics that all states must report in compliance with the IDEA is where students in special education primarily receive their services. These data help the federal government, as well as individual states, to monitor the degree to which students are served in the LRE appropriate to their needs as required by the IDEA.

Exhibit 6 shows special education placement data over time for California in relation to the nation as a whole. It focuses on the percentage of students in special education in the four major categories of classroom placement as defined by federal law.<sup>13</sup> As shown, the percentage of students in special education served in the least restrictive setting (80 percent time or more in a regular education classroom) has risen over the past decade across the nation. While less than 50 percent of all students in special education in the U.S. were served in this type of placement in 1998, 10 years later this had reached slightly above 60 percent.

funds. However, to receive the low-incidence dollars the identification must be in one of the three areas listed, and multiple disabilities does not qualify for these funds. Therefore, if you combined the multiple disabilities category with the other three low-incidence categories and compare California to the nation—the overall number is much closer between the two."

<sup>&</sup>lt;sup>a</sup>This column shows California's ranking by degree of identification versus other states and the District of Columbia by category of disability.

<sup>&</sup>lt;sup>13</sup> The federal educational environments for children served under IDEA are: 80% or more time spent inside a regular classroom; between 40%-79% of time spent in a regular classroom; less than 40% of time spent in a regular classroom; and external placements, which include special schools, residential facilities, parentally placed in private schools, correctional facilities, and home/hospital environments.

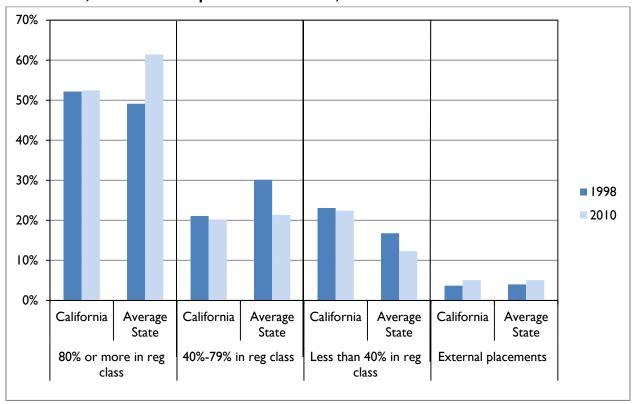


Exhibit 6. Percentage of Students in Special Education (Ages 6-21) in Alternative Placements, California Compared to the Nation, 1998-2010

Source: Derived from longitudinal data files from www.IDEAdata.org.

Note: External placements in this exhibit include public or private separate or residential facilities and home/hospital placements.

California reported a slightly higher percentage of students placed in this least restrictive setting than the national average in 1998. However, over time, California's percentage of students in special education served in this least restrictive placement remained fairly flat, with the 2010 rate closely mirroring that in 1998 (53 percent vs. 52 percent, respectively).

In regard to the next, more restrictive category of placement, where students in special education spend between 40 percent to 79 percent of their time in regular education classes, the placement percentage in California has remained steady over time, while the use of this category of placement by the average state has dropped substantially (from 30 percent to about 21 percent). By 2010, the percentage of students in special education in this category of placement in California and the nation was largely the same.

In terms of the next placement category, which is the most restrictive for students in special education served in general education schools—those spending less than 40 percent of their school day in regular education classes—California's practice has once again remained fairly constant at about 22 percent. In contrast, a lower percentage of students in special education were in this restrictive form of placement in 1998 in the average state as compared with California, and this percentage further dropped to about 12 percent by 2010.

California's percentage of students in special education served in external entities, at 5 percent, is the same as the national average. Both California and the nation experienced a small increase in this type of placement from 1998 to 2010.

Thus, while national practice regarding the placement of students in special education by the restrictiveness of their education environment has changed over time, California's has not. California's students in special education are educated in more restrictive settings, on average, than in all but a few other states. This may be a philosophical difference, or California's population of students in special education may be somewhat different than the national average. For example, with a lower overall identification rate, it may be argued that the students in special education in California may have somewhat more intensive needs, on average, than those nation-wide.

On the other hand, the percentage of students identified for special education in California over time has always been lower than the national average. Over this time period, greater emphasis has been placed nationally on serving students in the LRE. Arguments underlying this increased emphasis center on the expected social and academic benefits afforded all students through increased interaction between students with disabilities and their non-disabled peers.

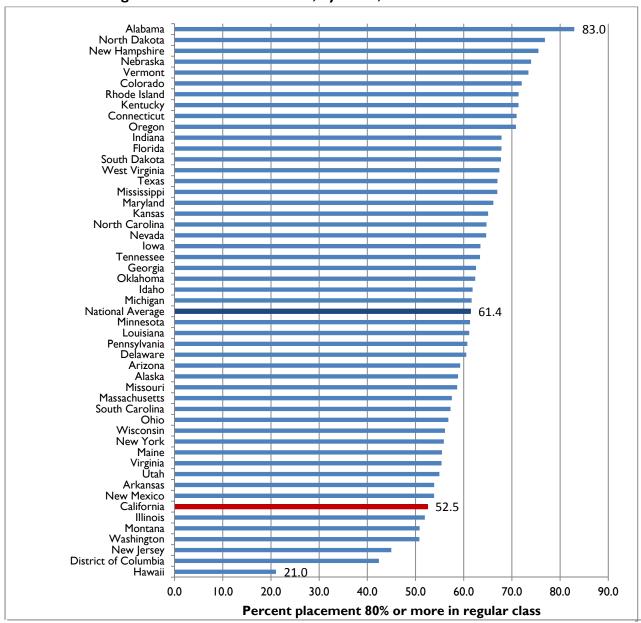
In addition, the hypothesis of the presence of a relationship between lower rates of identification—and therefore a greater concentration of "severity" or special education needs—and the degree of inclusion found in a state is refuted by the data reported across the states. For example, if true, one would expect higher rates of inclusion in states with higher rates of identification. In fact, the opposite seems to be the case, with a strong negative correlation found across the states between the percentage of students identified and the percentage of students spending 80 percent or more of their school day in general education settings (R=-43.5).<sup>14</sup>

Exhibit 7 provides additional breakdowns by state. California ranks 44th among the states in regard to the percentage of students spending 80 percent or more time in regular education classrooms. Alabama reports the highest percentage of students in special education in regular classrooms (83 percent), while Hawaii shows the lowest (21 percent).

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 $<sup>^{14}</sup>$  A similar association is found across California school districts although the negative association is less striking at R=-7.9.

Exhibit 7. Percentage of Students in Special Education (Ages 6–21) Spending 80 Percent or More Time in Regular Education Classrooms, by State, 2010–11



Source: Derived from longitudinal data files from <a href="www.IDEAdata.org">www.IDEAdata.org</a>.

Note: Data not available for Wyoming.

## The Intensity of Special Education Provision in California and the Nation

While analysis comparing special education spending in California to other states and the nation would be useful, especially given the often expressed concerns, unfortunately, national data do not exist. Some states have much more detailed special education expenditure tracking systems than others, and even in the states with fairly detailed accounting of special education expenditures, there are no federal accounting guidelines to ensure comparable expenditure estimates. Lacking these data, one way to estimate the relative level of special education resources across states is to use allocations of special education staff to special education enrollments.<sup>15</sup>

Multiplying nationally standardized salary estimates by the number of special education staff reported by each state, which is federally required annually, provides a standardized cost estimate based on these counts of personnel. Dividing this amount by the number of students in special education in the state provides a standardized special education personnel cost estimate per student in special education. Comparing these state-level cost estimates to the national average produces the personnel-based special education expenditure index shown in Exhibit 8. As salaries account for approximately 85 percent of special education costs, this may provide the best available proxy measure of relative special education expenditures by state.

Because the base is the national average, each of the index amounts shown by state can be compared to a national average index value of 1.00. At .67, California is well below the national average in this estimate of relative special education personnel spending per student in special education, with a ranking of 47th.

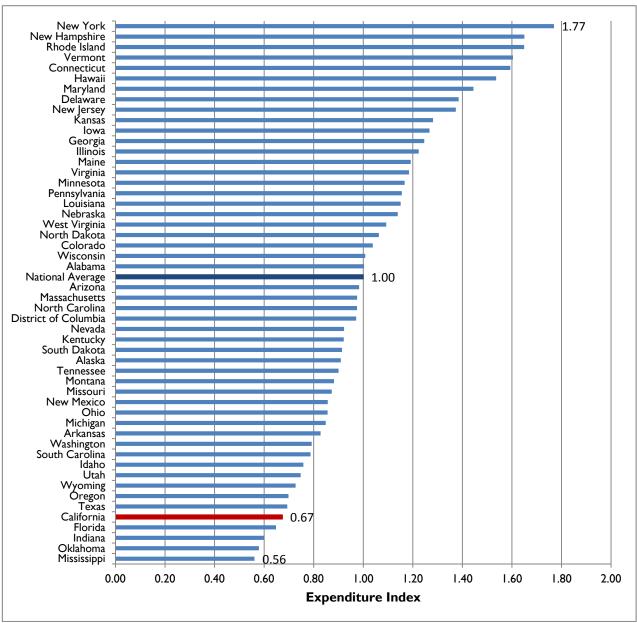
This index of personnel spending per student in special education may provide the best proxy measure of average spending per student in special education, but it does not fully address the overall relative cost impact of special education across states. This is because, as shown in Exhibit 3, the percentage of students served in special education varies substantially. Thus, while a state may have relatively high spending per student in special education, if the percentage of students identified is relatively low, their total special education cost impact will adjust down accordingly.

Thus, to best address the question of the relative overall special education cost impact across states, an index can be created based on the total personnel-based special education expenditure estimate divided by a state's total school-age population. Again, multiplying standardized salary estimates by the number of special education staff reported by each state provides a standardized cost estimate for total special education personnel. Dividing this amount by the total number of children in the state ages 3 through 21 provides a standardized special education personnel cost estimate across all of the state's citizens in this age range.

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<sup>&</sup>lt;sup>15</sup> Every state must report numbers of full-time special education teachers, therapists, and aides serving special education students as well as the numbers of special education students being served. According to the 2009–10 Part B data collection instructions, these counts are also supposed to include all staff, contracted or employed, including those in separate schools and facilities.

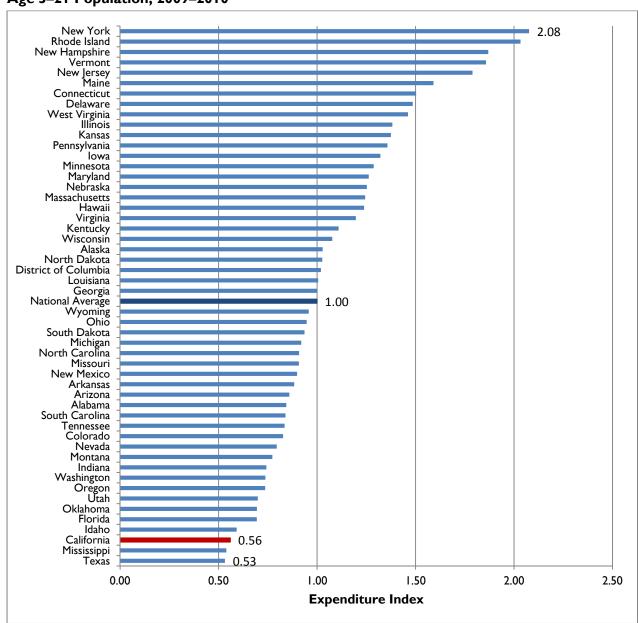
Exhibit 8. Personnel-Based Special Education Expenditure Index by State, Based on Total Special Education Population, 2009–2010



Source: Number of special education staff data derived from <a href="http://nces.ed.gov/programs/digest/d08/tables/dt08\_079.asp"><u>www.ideadata.org</u></a>. Salary data derived from <a href="http://nces.ed.gov/programs/digest/d08/tables/dt08\_079.asp"><u>http://nces.ed.gov/programs/digest/d08/tables/dt08\_079.asp</u></a>

Comparing these state-level cost estimates to the national average produces the personnel-based special education expenditure index shown in Exhibit 9. Similar to the previous index, the national average index value is 1.00. On this index measure, California drops to a ranking of 49th with an index of .56. California shows lower overall special education spending based on this measure relative to other states because of its relatively low percentage of students identified for special education.

Exhibit 9. Personnel-Based Special Education Expenditure Index by State, Based on Total Age 3–21 Population, 2009–2010



Source: Number of special education staff data derived from <a href="http://nces.ed.gov/programs/digest/d08/tables/dt08"><u>www.ideadata.org.</u></a> Salary data derived from <a href="http://nces.ed.gov/programs/digest/d08/tables/dt08"><u>http://nces.ed.gov/programs/digest/d08/tables/dt08</a> 079.asp</u>

#### **Outcome Data in California and the Nation**

Arguably of greater importance than what is being spent on special education is what these programs produce. It would seem that whether a state is relatively high- or low-spending in regard to special education services must be considered secondary to evidence of whether these students are being well served. One important set of measures in regard to the degree to which students with disabilities are receiving appropriate and adequate education services is the degree to which they show proficiency in literacy and numeracy.

Exhibit 10 ranks the states (and nation) on student achievement as reported in the 2011 National Assessment Educational Progress (NAEP) Mathematics and Science Assessments for grades 4 and 8. NAEP is the only nationally representative assessment that allows direct comparison of achievement across states. NAEP samples a group of students in each state, who are administered parts of the assessment. These sampling and administration procedures limit the interpretation of NAEP data. Still, no other assessment exists that allows comparison across states, and as such, NAEP remains a useful assessment for comparing special education programming across states.

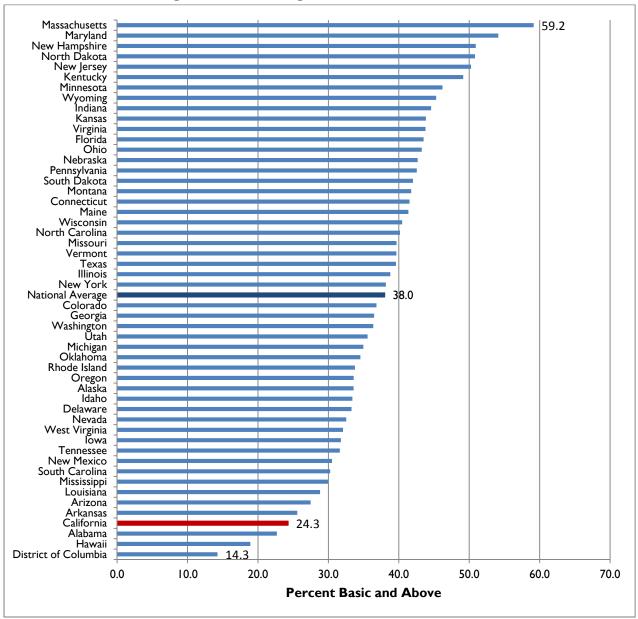
Based on results from NAEP, 38 percent of students with disabilities nationwide have a basic or advanced status in 4th and 8th grade reading and mathematics. California ranks 48th nationwide with 24 percent of students with disabilities having a basic or advanced status in 4th and 8th grade reading and mathematics. Across the other states, comparable measures range from 59 percent in Massachusetts to 14 percent in the District of Columbia. 16

In interpreting academic outcomes for students in special education in California, it is important to consider the relatively low percentage of students identified for special education services in the state (indicating that California's population may be relatively more severe than other states) and the relatively high percentage of students in poverty and students who are English learners. Both of these measures are negatively correlated with student outcomes. Therefore, refined measures for comparing educational results for students with disabilities across states would adjust these measures to better compare what is being produced across states with like populations of students. It may be also noted that California's NAEP rank for all students is comparable to what is shown above for its students in special education.

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 $<sup>^{16}</sup>$  NAEP is designed such that subpopulation samples are of sufficient size and composition to support ranked comparisons across states.

Exhibit 10. The Percentage of Students in Special Education Scoring Basic and Above in Mathematics and Reading on NAEP Testing for Grades 4 and 8, 2011



Source: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2011 Mathematics and Reading Assessments.

## A Broader View Of Special Education Spending In California

The data presented above regarding California special education spending, identification, provision, and academic outcomes do not point to an excessive provision of services, at least in relation to other states. At the same time, Exhibit I illustrates a trend of increasing special education spending in the state in relation to general education spending that may be considered a policy concern. This is especially true given California's current austere fiscal climate. In addition to possible concerns about the accuracy of the information presented in this exhibit, what other information underlies this trend that may assist in better considering its implications? This section of the paper presents a broader range of state-level data related to this trend line and presents other factors that may be taken into account in considering special education spending in the state. It also presents data for considering appropriate support from non-dedicated federal/state funding sources for special education, which is also raised as a special education funding issue in California.

## What Underlies the Trend Line Showing Expanded Special Education Spending in California?

Exhibit I, presented in the introduction to this paper, shows special education spending as a percentage of total general fund expenditures rising modestly from 2004–05 to 2007–08 and then more sharply through 2009–10. What factors relate to these rising percentages?

As shown in Exhibit 11, one is a decline in general fund spending for the last two years shown (column 3). While averaging a 4.7 percent increase per year from 2004–05 through 2007–08, in 2008–09 and 2009–10, general fund spending declined by 1.2 percent and 2.8 percent respectively. During this same period (2002–03 through 2009–10), the overall special education spending per year continued to rise (column 2). However, these percentage increases declined substantially, from 10.5 percent to 3.4 percent, from 2003–04 to 2009–10.

Exhibit II. Percent Changes in Education Spending and Enrollments in California Over Time (Dollars expressed in millions)

School year	Special education spending*	% Change from previous year	General fund spending*	% Change from previous year	Total enrollment**	% Change from previous year	Total students in special education (ages 0-22)***	% Change from previous year	Students
1	2	3	4	5	6	7	8	9	10
2002/03	\$7,777	-	\$35,542	-	6,244,732	-	675,232	-	10.8%
2003/04	\$8,591	10.5%	\$36,481	2.6%	6,298,783	0.9%	681,980	1.0%	10.8%
2004/05	\$9,186	6.9%	\$38,259	4.9%	6,322,141	0.4%	681,969	0.0%	10.8%
2005/06	\$9,814	6.8%	\$39,975	4.5%	6,312,436	-0.2%	683,178	0.2%	10.8%
2006/07	\$10,428	6.3%	\$42,444	6.2%	6,286,943	-0.4%	679,648	-0.5%	10.8%
2007/08	\$11,105	6.5%	\$44,743	5.4%	6,275,469	-0.2%	677,875	-0.3%	10.8%
2008/09	\$11,567	4.2%	\$44,217	-1.2%	6,252,031	-0.4%	678,105	0.0%	10.8%
2009/10	\$11,966	3.4%	\$42,964	-2.8%	6,190,425	-1.0%	680,164	0.3%	11.0%

<sup>\*</sup>Source: School Services of California

<sup>\*\*</sup>Source: http://dq.cde.ca.gov/dataquest/DQ/EnrTimeRptSt.aspx?Level=State&cChoice=TSEnr1&cYear=2011-

I2&cLevel=State&cTopic=Enrollment&myTimeFrame=S

<sup>\*\*\*</sup>Source: California Department of Education

The percentage of students in special education statewide stayed remarkably steady at 10.8 percent through this period before rising to 11 percent in 2009–10 (column 6). Thus, special education spending has risen faster than general fund expenditures during the eight-year period showing actual (versus projected) data in Exhibit 11. This has caused the percentage of special education spending to rise. However, a trend line using a different measure—the declining percent change in special education spending, which dropped from 10.5 percent to 3.4 percent over this seven year period, would project continuing decline and leveling out in special education spending over the next few years.

Thus, projections for future special education spending look quite different depending on the measures used. While one measure seems to indicate substantial future expansion—an increase in special education spending as a percentage of the general fund (Exhibit I), the other based on changes in special education spending over time seems to indicate diminishing growth (Exhibit II, column 2).

Rather than special education expansion that is somewhat out of control, the virtually flat percentage of students enrolled in special education statewide and the steady pattern of diminishing increases in special education spending indicate a somewhat different fiscal picture. Rather than being "uncontrollable," it appears that spending on special education programs has also been curtailed somewhat in response to statewide fiscal pressures.

## Other Factors in Considering Special Education Spending in California

Several other factors may also be considered when reviewing the trends shown in Exhibit 11. One is that students in special education are granted a legal entitlement to programs and services in accordance with their individual needs as specified in their Individualized Education Program (IEP). Given this, it is somewhat surprising that the disparity between special and general education spending has not risen more in this time of severe fiscal constraints for the state. Given the state's fiscal climate over the past several years, with programs and services cut annually, it is not surprising to find a rising gap between general education programs, which can be cut, and special education programs, which for the most part cannot.

Second, it may be that while special education spending per student in special education has continued to rise during this period, overall education spending per student in special education may be holding more steady. The vast majority of students in special education receive general, as well as special, education services. When they receive general education services the services are charged against the general education ledger; when they receive special education services the services are charged against the special education ledger. Thus, as the general education services students in special education receive are cut, more of these services may be provided by special educators, thereby appearing as special education costs.<sup>17</sup>

Some evidence of this may be found in Exhibit 6. While an increasing number of students across the nation have primarily received services in general education classes (80 percent of the day or more) over the past seven years, this appears not to be the case in California. As general versus special education spending are simply accounting conventions, while special education spending per student may be going up, total spending (general and special education combined) for students with disabilities may be holding steady or even declining.

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<sup>&</sup>lt;sup>17</sup>Although this statement is largely speculative, the most current data available from CDE on the distribution of teachers by type show a slight percentage increase for teachers coded as special education (7 percent to 8 percent of all teachers) as compared to a decline in those listed as "self-contained" teacher (47 percent to 44 percent) during the period from 2002–03 through 2008–09.

## **Considering General Fund Support for Special Education**

Another perspective on expected levels of support for students in special education across levels of government comes from what is reported by other states. The data presented in Exhibit 12 are the most current estimates available across all, or a sample, of states. Although they are nearly 20 years old, they span over 10 years of special education spending experience and are derived from two different methods. Although dated, they are surprisingly consistent in the percentage shares of support for special education shown across federal, state, and local sources.

Exhibit 12. Federal, State, and Local Shares of Special Education Spending for Selected Years and Samples of States

	Federal Share	State Share	Local Share
All States			
1982–83 School Year	8%	54%	38%
1987–88 School Year	8%	56%	36%
States Responding to CSEF Survey (N=24)			
1993–94 School Year	7%	53%	40%

Source: Adapted from State Special Education Finance Systems, 1994–95, by T. B. Parrish, F. O'Reilly, I. E. Dueñas, and J. Wolman, 1997. Palo Alto, CA: Center for Special Education Finance, American Institutes for Research, p. 37. Retrieved from http://csef.air.org/publications/csef/state/statsped.pdf.

Note: As cited by original source, the 1982/83 data are from the U.S. Department of Education, Office of Special Education Programs Data Analysis System (DANS). The 1993–94 data are from the CSEF Survey on State Special Education Funding Systems, 1994/95, and the Fourteenth Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act.

The first two estimates are based on analyses from the period when all states were required to submit data to the federal government annually on special education spending by source. As this reporting requirement ended after 1987–88, the federal Center for Special Education Finance attempted to collect comparable information directly from the states on a voluntary basis for the 1993–94 school year. As shown, 24 states responded. This provides a third year of data from a different source. As noted the percentage breakouts from these three years are strikingly similar, with 7 to 8 percent of special education support reported as coming from the federal government, 53 percent to 56 percent from the states, and the rest coming from local sources (38 percent to 40 percent).

This is strikingly close to what the data show for the 2010–11 school year in California, as shown in Exhibit 13. These data, from the California Department of Education, reflect the substantial expansion in federal funding, which has occurred over the past decade. Thus, the federal share of approximately 8 percent of special education support, as shown above, appears as 15 percent based on the more current California data shown in Exhibit 13. State support, based on these data appears to cover 44 percent of special education spending in California, as opposed to the 53 percent to 56 percent averages shown above.

Local support for special education in California is the difference between the total special education revenues SELPAs receive (\$6.3 billion in 2010–11), as shown in Exhibit 13, and their total special education spending (\$10.7 billion in 2010–11). As shown, for 2010–11 this local share is a bit over \$4.4 billion, which makes up 41 percent of the total. Thus, local support for special education in California is remarkably close to what is shown across all states and a sample of states for the earlier periods shown in Exhibit 12.

Exhibit 13. 2010–11 California Special Education Revenues and Expenditures Aggregated from LEA Data from CDE

Revenues			
State Apportionments	\$3,187,841,657		
Revenue Limit Transfers	\$1,019,809,940		
Property Taxes	\$499,902,367		
Sub-Total	\$4,707,553,965		
Federal Revenues	\$1,563,348,709	Federal	15%
Total Revenues	\$6,270,902,674	State	44%
Expenditures	\$10,675,982,899		
Difference	\$4,405,080,225	Local	41%

Source: California Department of Education

The local share of special education spending, which is common across the 50 states, is sometimes referred to as "encroachment" in California. Webster's dictionary defines this term as, "to enter by gradual steps or by stealth into the possessions or rights of another." As seen, the connotation of "encroachment" is not friendly and seems to miss the point that students in special education are all general education students first. Whether the cost of what they are entitled to by law is counted as special, versus general, education services may be partly a function of the degree to which they are included in general education learning environments. It is also to some degree a result of accounting conventions to determine if a given service they receive should be counted in the general or special education ledger. Overall, however, "encroachment" in California seems strikingly in line with what is referred to as the local contribution to special education services in other states.

## **Conclusion Regarding State Special Education Spending**

Overall, the data suggest that California is holding down special education spending to a greater degree than the vast majority of other states, ranking third from the bottom (Exhibit 9). Whether this is viewed as relatively inadequate services or more efficient provision is largely dependent on what is being produced. States producing strong education performance while spending relatively little may be said to be serving students well, and also taxpayers. Unfortunately, the educational outcomes for students with disabilities in California also do not appear strong, at fourth from the bottom (Exhibit 10), which will be discussed in more detail later in this paper.

## Special Education Spending And Revenues By SELPA

To better understand what underlies statewide special education spending, we turn to data from individual sites where special education services are being provided. In most states, this would best be done by comparing data from individual districts. California, however, funds and provides special education services by Special Education Local Planning Area (SELPA). These intermediate units have been formed to allow more efficient provision of special education services. SELPAs are generally composed of multiple districts, although some of the largest districts of the state (e.g., Los Angeles Unified) may serve as their own SELPA. An important rationale for forming SELPAs is that a broader range of special education services can be provided, at a higher quality and lower relative cost than small, individual districts attempting to provide the broad range of services their special education students may require on their own.

To encourage the pooling of resources and the collective provision of services, state special education funding is allocated from the state to SELPAs rather than individual districts. SELPA members then decide among themselves how these resources are best allocated and services provided. Because of this sharing of special education revenues and the distribution of special education costs across member districts and counties, the special education revenue and expenditure analyses in this paper are presented at the SELPA level, rather than at the level of individual districts or counties.

Data on special education expenditure and revenue data by district and county were provided by the California Department of Education (CDE). Aggregating these data to the SELPA level, 125 SELPAs are identified statewide. Exhibit 14 provides an overview of the variation across SELPAs in the key variables analyzed in this section.

Exhibit 14. Summary Statistics on California SELPAs for Selected Variables — All SELPAs, 2010–2011

				nge o max)	Range (20th to 80th percentile)		
Row	Variable	Average	Minimum Value	Maximum Value	20th percentile	80th percentile	Difference
ı	Special education expenditures per student	\$1,656	\$998	\$5,333	\$1,381	\$1,921	\$539
2	Special education revenue per student	\$1,022	\$635	\$3,566	\$864	\$1,144	\$280
3	Difference in special education expenditures and revenues per student	\$635	\$86	\$1,767	\$396	\$866	\$470
4	Special education expenditures per student in special education	\$15,232	\$9,210	\$53,046	\$12,719	\$17,161	\$4,442
5	Special education revenue per student in special education	\$9,411	\$5,537	\$35,474	\$7,986	\$10,361	\$2,374
6	Difference in special education expenditures and revenues per student in special education	\$5,821	\$740	\$17,572	\$3,614	\$7,759	\$4,145
7	Percentage of students in special education	11%	7%	15%	10%	12%	2%
8	Percent students in poverty	53%	3%	88%	37%	69%	32%
9	Percent autistic	9%	3%	25%	6%	11%	5%
10	Percent mental retardation	6%	2%	18%	4%	8%	3%
- 11	Percent multiple disabilities	1%	0%	6%	0%	1%	1%
12	Percent other health impairment	8%	2%	18%	5%	11%	5%
13	Percent specific learning disability	39%	13%	63%	33%	44%	11%
14	Percent speech or language impairment	27%	2%	53%	22%	32%	10%
15	Percent traumatic brain injury	0%	0%	2%	0%	0%	0%
16	Percent visual impairment	1%	0%	2%	0%	1%	0%

NOTES: Special education variables include students ages 0 to 22.

El Dorado Charter and Los Angeles Court Schools SLEPAs were dropped from the analysis because these SELPAs had atypical data.

SOURCE: California Department of Education

The special education expenditure, revenue, and difference variables are listed above in two forms (rows I-6): in rows I-3, figures are reported as dollars per total number of students in the SELPA; in rows 4-6, figures are reported as dollars per total number of students in special education in the SELPA. For example, the expenditure variable shown in row I is total reported special education spending across all SELPAs divided by the total number of students enrolled in those SELPAs. In row 4, this same total special education spending amount is divided by the total number of students in special education across all SELPAs.

The first of these two measures, special education spending per student in the SELPA (row I), presents the best overall expenditure impact on the SELPA, and on total special education spending statewide. Measuring spending per all students provides a more comparable measure of the resources each SELPA is dedicating to special education. For example, if a SELPA spends a large average amount per student in special education, their total special education spending may be lower than average if they identify a relatively low percentage of students. Conversely, higher-identifying SELPAs may be relatively high spending, even if their average expenditure per student in special education is relatively low.

As shown in row 1, special education spending per all students in the SELPA has a statewide average of \$1,656 with a difference from the 20th to 80th percentile of \$539. The difference indicates that roughly 60 percent of SELPAs have special education spending between \$1,381 and \$1,921 per student. This is a large band of variation, and at the extremes this measure ranges from \$998 to \$5,333.

The amount of special education spending per student in special education also varies considerably across SELPAs (row 4). The average is \$15,232, with a difference from the 20th to 80th percentile of \$4,442. These data indicate that the 60 percent of SELPAs in the middle band of special education spending per student in special education range from \$12,719 to \$17,161.

Although less useful as a measure of overall cost impact, average spending per student receiving special education services is an important alternative measure. For example, for considering questions such as the degree of investment per student in relation to academic gain, special education spending per student in special education will generally be the superior measure.

Special education revenues per all students in the SELPA (row 2) also vary considerably across SELPAs. While the average amount is \$1,022 per student, difference from the 20th to 80th percentile is \$280. This indicated variation among the middle 60 percent of SELPAs from \$864 to \$1,144. Revenues per student in special education (row 5) show a comparable degree of variation.

Special education policy discussions in California appear to often focus on the general fund contribution. This is best represented by the difference between special education spending and revenues per total SELPA enrollment, as shown in row 3 of Exhibit 14. This difference, also interpreted as the degree to which so-called "encroachment" occurs, varies dramatically across SELPAs. This ranges from variations that are more than two-fold among the middle 60 percent of SELPAs (\$396 to \$866) to \$86 to \$1,767 at the extremes. These differences are partly due to variations in state funding (some SELPAs receive quite a bit more special education revenues per student than others, as shown in row 2) and are also due to large variations in special education spending (row 1).

The large disparity between special education revenues and spending per student observed in some SELPAs (row 3) could be mitigated through a combination of more equitable funding across SELPAs and the adoption of more uniform practices related to special education spending. The concern is whether such spending reductions would lead to diminished education quality for students in special education and consequently jeopardize their entitlement to a full and appropriated education (FAPE) as specified in federal and state statutes.

However, if we can find a way to provide special education more efficiently—if special education spending could be held constant or reduced while education outcomes for students in special education are shown to rise or hold constant—this could reduce the large disparities between special education funding and spending observed in some SELPAs, and possibly improve education outcomes for the state's population of students in special education.

A key question is this: What appears to differentiate high-spending SELPAs in relation to those spending appreciably less? For example, broad variation also is shown in Exhibit 14 across key variables that may be related to special education spending, such as the percentage of students in poverty, the percentage of students identified for special education services, and the breakdown of identification by category of disability.<sup>18</sup>

If we can identify relevant factors, we may be able to better understand special education spending statewide, which may provide assistance in considering ways to make the provision of these services more efficient. Efficiency, however, will also be related to the degree to which education outcomes are affected by variations in spending as well as other factors. This will be examined further later in this paper.

## **Special Education Spending**

Two questions seem key to better understanding special education spending in California. First, what appears related to higher special education spending per special education student? Second, to what degree does high special education spending per student in special education as opposed to other factors (e.g., higher percentages of students identified for special education services) appear related to overall special education spending? Overall special education spending is represented by spending per student in total enrollment.

### Special Education Spending per Student in Special Education

The regression equation shown in Exhibit 15 assists in examining the first of these two questions. This shows the results of multiple regression analysis, which allows the simultaneous examination of the degree of association between multiple variables to the amount of spending per student in special education across SELPAs.<sup>19</sup> This analysis shows negative associations between the amount of special education spending per student in special education with the percentage of students in the district participating in the free and reduced-price lunch program (p<.05), the percentage of students in special education identified with speech/language impairment (p<.05), and the percentage of students in special education (p<.05).

These "negative associations" mean that special education spending per student in special education tends to rise as these three other variables go down across SELPAs. The "p" values shown indicate that the analyses estimate that these associations are less than 5 percent likely (p < .05) or less than 10 percent likely (p < .10) to be due to chance.

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<sup>&</sup>lt;sup>18</sup> A reviewer correctly noted that other variables may also affect spending, suggesting that such factors as "rural vs. suburban/urban, number of LCI/out of home placements, number of non-public schools by area, growth vs. decline" could also be considered. If such factors are found to be systematically related to spending in ways that are substantially beyond district control, they state may wish to consider building them into the state allocation formula as cost-based adjustments.

<sup>&</sup>lt;sup>19</sup>Daniel Rubinfeld at the University of California, Berkeley, California defines regression analysis as a statistical technique for modeling and analyzing several variables when the focus is on the relationship between a dependent variable and one or more independent variables: "Multiple regression analysis goes beyond the calculation of correlations; it is a method in which a regression line is used to relate the average of one variable—the dependent variable—to the values of other explanatory variables."

http://www.fjc.gov/public/pdf.nsf/lookup/sciman03.pdf/\$file/sciman03.pdf

Exhibit 15. Estimated Association between Special Education Spending per Student in Special Education and Other Variables, 2010–2011

Special education expenditures per student in special education	Coefficient	p-Value
Percentage of students eligible for free or reduced price lunch	-55.18	0.038
Percentage of students in special education with a specific learning disability	-164.87	0.108
Percentage of students in special education with a speech/language impairment	-214.61	0.030
Percentage of students in special education with autism	-150.75	0.380
Percentage of students in special education in general education class 80% or more	50.04	0.316
Percentage of students in special education	-635.41	0.036
Enrollment (in thousands)	3.78	0.540
Constant	35940.69	0.000

NOTES: This table presents regression coefficients with special education spending per student in special education as the dependent variable and SELPA characteristics as explanatory variables.

Special education variables include students ages 0 to 22, except for percentage of students in special education in general education class 80% or more, which includes ages 6–22.

Source: California Department of Education

Thus, the average expenditure per student in special education appears to decline with increased percentages of students in the generally lower-cost categories of learning disability and speech/language impairment. In some cases, these coefficients appear fairly large. For example, the equation above shows that holding other school characteristics constant, a 1-point increase in the percentage of students in special education with a speech/language impairment is associated (p < .05) with a decline in special education spending per student in special education of \$214.61.

However, these analyses show no systematic increase with higher-cost categories of disability,<sup>20</sup> such as autism.

The observed decline in special education spending per student as poverty rises raises substantial equity concerns given that the need for special services generally rises with poverty.

### Spending per Student Enrolled in the SELPA

While variations in spending per student in special education are important in better understanding state provision to individual students in special education, as mentioned, special education spending per

<sup>&</sup>lt;sup>20</sup> Chambers, J.G., Shkolnik, J., & Pérez, M. (2003). *Total expenditures for students with disabilities, 1999-2000*: Spending variation by disability. Report 5. Special Education Expenditure Project. Submitted to: United States Department of Education, Office of Special Education Programs.

student in total SELPA enrollment is the best indicator of special education spending impact on a SELPA and statewide.

Exhibit 16 shows the results of multiple regression analysis to estimate the degree of association between selected variables and the amount of education spending per student in total enrollment across the SELPA. This analysis shows negative associations between this measure of spending and the percentage of total SELPA enrollment eligible for the free or reduced-price lunch program (p < .05), the percentage of students in special education identified with a specific learning disability (p < .1), and the percentage of students in special education with a speech/language impairment (p < .05).

Exhibit 16. Estimated Association between Special Education Spending per Student in the SELPA and Other Variables, 2010–2011

Special Education expenditures per student in the SELPA	Coefficient	p-Value
Percentage of students eligible for free or reduced-price lunch	-5.41	0.047
Percentage of students in special education with a specific learning disability	-19.09	0.070
Percentage of students in special education with a speech/language impairment	-22.72	0.025
Percentage of students in special education with autism	-16.56	0.348
Percentage of students in special education in general education class 80% or more	5.96	0.245
Percentage of students in special education	80.76	0.010
Enrollment (in thousands)	0.60	0.346
Constant	2223.37	0.006

NOTES: This table presents regression coefficients with special education spending per student in the SELPA as the dependent variable and SELPA characteristics as explanatory variables.

Special education variables include students ages 0 to 22, except for percentage of students in special education in general education class 80% or more, which includes ages 6-22.

SOURCE: California Department of Education

The most powerful predictor variable from this equation is the percentage of students identified for special education in a SELPA. These data show, holding other school characteristics constant, a 1-point increase in the percentage of students identified for special education to be associated (p < .01) with an increase in special education spending per student in the SELPA of \$80.76.

### The Percentage of Students in Special Education

What appears related to increased identification of students in special education? Exhibit 17 indicates positive associations with the percentage of students in special education identified with a specific learning disability (p < .05) and with a speech/language impairment. That is, as the percentage of students identified for special education increases across SELPAs, the percentage of these students identified as

learning disabled or with a speech/language impairment increases, while the percentage identified with autism declines.

Exhibit 17. Estimated Association between Percentage of Students in Special Education and Other Variables, 2010-2011

Percentage of students in special education	Coefficient	p-Value
Percentage of students eligible for free or reduced-price lunch	-0.01	0.463
Percentage of students in special education with a specific learning disability	0.08	0.007
Percentage of students in special education with a speech/language impairment	0.10	0.001
Percentage of students in special education with autism	-0.03	0.550
Percentage of students in special education in general education class 80% or more	0.00	0.826
Enrollment (in thousands)	0.00	0.670
Constant	5.45	0.022

NOTES: This table presents regression coefficients with special education spending per student in special education as the dependent variable and SELPA characteristics as explanatory variables.

Special education variables include students ages 0 to 22, except for percentage of students in special education in general education class 80% or more, which includes ages 6-22.

SOURCE: California Department Education

In summary, these data suggest that while increased spending per student in special education relates positively to the total special education spending in individual SELPAs, and thus statewide, the most predominant factor related to the expenditure impact of special education is the percentage of students identified for these services. When larger percentages of students are identified for special education, the cost impact rises and increased percentages are shown in the categories specific learning disability and speech/language impairment, while a declining percentage is found in the more "severe" category of autism.

Thus, while the increasing numbers of students in such high-cost categories of disability as autism are related to increased special education spending in SELPAs, a greater factor affecting spending appears to be the degree of identification in the generally lower cost categories of specific learning disability and speech/language impairment. SELPAs identifying higher percentages of students in special education face a higher cost impact but these SELPAs also identify more students in the relatively low-cost category of disability, speech/language impairment. That is, the percentage of students identified for special education and those designated as speech/language impaired are positively correlated (r = .18, p < .1).

#### **Special Education Revenues**

In addition to how much a SELPA spends on special education, the degree to which General Funds are needed to support this program is affected by the amount of state and federal special education revenues they receive. As indicated above, the best measure of this support in regard to overall cost impact is the amount of revenues received per student in total enrollment across SELPA districts.

This measure of special education revenues is also of interest in regard to funding equity. The amount of state and federal special education aid allocated per student in total enrollment is at the heart of considering the equity of state special education funding. As California has adopted a census-based funding system, the goal is equity of special education funding per student in total enrollment. Based on this, we would expect to see a fairly equal distribution of revenues per capita as opposed to the disparities seen in Exhibit 14, row 2.

What factors appear related to higher and lower special education revenues per student in total enrollment across SELPAs? Exhibit 18 shows a strong negative association with the percentage of students in special education identified with autism (p < .05) and the percentage of students in special education (p < .01). While the negative association shown with autism is somewhat surprising, the negative association with the percentage of students identified for special education is not. This would be expected given the state's census-based approach to special education funding where the amount of special education revenues received is designed to be independent of the percentage of students identified.

Exhibit 18. Estimated Association between Special Education Revenues per Student in the SELPA and Other Variables, 2010-2011

Special education revenues per student in special education	Coefficient	p-Value
Percentage of students eligible for free or reduced-price lunch	-16.09	0.354
Percentage of students in special education with a specific learning disability	-108.64	0.108
Percentage of students in special education with a speech/language impairment	-104.57	0.107
Percentage of students in special education with autism	-234.70	0.040
Percentage of students in special education in general education class 80% or more	23.49	0.475
Percentage of students in special education	-593.56	0.003
Enrollment (in thousands)	-1.34	0.742
Constant	24844.56	0.000

NOTE: Special education variables include students ages 0 to 22, except for percentage of students in special education in general education class 80% or more, which includes ages 6-22.

SOURCE: California Department of Education

In addition, an extremely strong correlation is shown between special education revenues per student in the SELPA and special education spending per student in the SELPA at (r = .93, p < .001), which is not shown in the exhibit below. This type of positive association is what would be expected in a cost-based special education funding system. That is, when funding is based on factors relative to special education cost, you would expect, as observed, revenues to be positively related to spending. However, you would not expect to observe this in California given its census-based funding system. Such formulas are designed to be independent of special education identification and provision.

A basic concept underlying census-based funding is that special education severity is distributed fairly evenly across the state and that differences in the overall percentage of students identified (which generally ranges from 7 percent to 15 percent across SELPAs),<sup>21</sup> and differences in identification across the various categories of disability (e.g., the percentage of students in special education identified in the category of autism ranges from 3 percent to 25 percent across California's SELPAs) may be based on local discretion and identification practices than true differences in special education need.<sup>22</sup> If census-based funding were fully implemented in California, the numbers shown in Exhibit 14, row 2, above would be largely the same across all SELPAs.

While several studies commissioned by the state seriously challenge the notion that special education "severity" is randomly distributed in California (Parrish et al., 2003, Parrish et al., 1998),<sup>23</sup> these studies also describe the difficulty in accurately measuring these differences. The general inability to distinguish between differences in special education identification rates based on true need as opposed to local practice was one factor leading the federal government, and presumably California, to adopt a censustype funding approach in allocating special education funds. An important rationale underlying such systems is to remove incentives to identify increasing numbers of students for special education and to provide higher-cost services (Greene and Forster, 2002).<sup>24</sup>

It may be that California's special education allocations are still largely based on prior patterns of funding based on special education identification patterns and cost through "hold harmless" provisions. However, continuing these patterns of funding appears to interfere with the equity standard associated with census-based systems (i.e., equal special education support per total student enrolled). While equal allocations may not always be considered equitable due to variations in such cost factors as the severity of the students served, population sparsity, and urbanicity that may be specifically included in a funding formula, substantial variations that are idiosyncratic or simply based on history, as appears to be the case in California, cannot be justified over time as fair to all.

## **Differences between Special Education Spending and Revenues**

The concept that higher special education funding may reinforce continued patterns of higher special education spending is supported by the association between these variables and the differences between funding and spending across SELPAs. For example, it is not surprising that larger gaps between spending and funding are found in the relatively high-spending SELPAs (r = .527 with p < .001). However, it is somewhat surprising that special education revenues are also positively correlated with differences between spending and revenues (r = .182, p < .05). That is, SELPAs facing the largest differences between state and federal special education support and special education spending are not only those spending the most but also those receiving the most state and federal support for these services.

<sup>23</sup> Parrish, T., Harr, J., Kidron, Y., Brock, L., & Anand, P. (2003). Study of the incidence adjustments in the special education funding model, Final Report. Palo Alto, CA: American Institutes for Research.

Parrish, T., Kaleba, D., Gerber, M., & McLaughlin, M. (1998). Special education: Study of incidence of disabilities—Final report. Palo Alto, CA: American Institutes for Research.

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<sup>&</sup>lt;sup>22</sup> California's census-based system has also included a "severity" adjustment that would have been in effect for the year of these analyses, 2010–11. However, it appears that this adjustment has been dropped from the 2011–12 budget.

<sup>&</sup>lt;sup>24</sup> Greene, J. P., & Forster, G. (2002). Effects of funding incentives on special education enrollment. New York: Manhattan Institute for Policy Research.

## Summary of Findings Regarding Special Education Spending and Revenues in California

The most useful measure for considering the spending impact from special education in SELPAs is special education spending per student in total enrollment. Exhibit 14 shows broad variation in this measure across California SELPAs. Some SELPAs are spending considerably more than others on special education on a per capita basis. More than increased numbers of high-cost students, these spending variations seem associated with substantially different total percentages of students identified for special education services. In addition, those SELPAs identifying higher percentages of students in special education show increased proportions of these students in the lower-cost categories of learning disability and speech/language impairment.

Another possible cost concern associated with special education statewide is the percentage of spending for these services in relation to General Fund spending. The degree to which this occurs also varies substantially by SELPA and appears associated with increased special education spending and funding. Thus, there seems to be a pattern of increased spending, which is associated with increased funding and increased identification.

This degree of variation in revenues per student in enrollment across SELPAs also raises equity concerns. Given the state's census-based funding system, a high degree of parity on this measure would be expected. Last, in addition to possibly contributing to increased special education spending in some SELPAs, these differences in funding may also relate to efficiency concerns. In other words, to what degree does increased special education funding and spending appear related to enhanced educational outcomes for students in special education?

## **Special Education Outcomes**

The primary focus of this report is on special education spending. However, vitally important are the outcomes produced through these investments. As noted, some SELPAs spend substantially more per capita than others. Critical to understanding the implications of possibly pursuing greater control over special education spending and creating greater parity in special education funding is the association between these variables and educational outcomes for students in special education.

The importance of primary emphasis on education results was emphasized in 2002, when the President's Commission on Excellence in Special Education recommended that special education focus on the outcomes achieved by each child and not on "process, litigation, regulation, and confrontation" (p. 8). The preamble to this report states, "The ultimate test of the value of special education is that, once identified, children close the achievement gap with their peers" (President's Commission, 2002, p. 4).<sup>25</sup>

While the degree of spending on special education and the amount of services provided are important, educational outcomes must be considered the gold standard for determining program quality. If SELPAs are spending very different amounts per student on special education services, to what extent do educational outcomes for the students receiving these services differ? If educational costs can be stabilized while the outcomes for students for disabilities are enhanced, this would benefit both students and taxpayers.

While a broad variety of outcomes may be considered important in considering the quality of education for all students, for the purposes of this discussion we will simplify them into the broad categories of education and life outcomes. For the former, these analyses are based on the Adequate Yearly Progress

<sup>&</sup>lt;sup>25</sup> President's Commission on Excellence in Special Education (2002, July). A new era: Revitalizing special education for children and their families. Washington, DC: Author. http://www.ed.gov/inits/commissionsboards/whspecialeducation/reports/images/Pres\_Rep.pdf

(AYP) calculations of percent proficient or above, which includes results from the California Standards Tests (CST), California Modified Assessment (CMA), California Alternative Performance Assessment (CAPA), and the California High School Exit Exam (CAHSEE) for students in grade 10. The AYP calculation includes percent proficient caps for the CAPA at about 1 percent and the CMA at about 2 percent, although districts can request to have these caps increased.

Enhanced life outcomes relate to educational outcomes, e.g. literacy and numeracy skills, which may be measured by state-level standardized tests. In addition, preparation for adult life is also seen as resulting from the social aspects of schooling. Thus, federal law requires that students with disabilities be educated in the least restrictive environment (LRE) appropriate to their needs. When done well, LRE can provide full access to the core curriculum received by all students and also afford the social benefits that accrue to all students from interaction with the diverse population found in society at large.

The possible alteration of special education spending in the state cannot be considered apart from what these services produce. Questions about the relative impact of the degree of overall spending as opposed to how funds are used are the basis for long-standing education debate. For example, one recent report discusses these questions in some length and concludes that "of course money matters in producing quality education." However, this does not mean that the relative efficiency of resource use is not also vitally important.

With California's current fiscal climate, featuring cuts in public education support over the past several years that appear to be continuing into the foreseeable future, the question of how to do more with less is especially important. Also, leveling special education revenue disparities to yield more equitable funding for all California students with disabilities would also affect future SELPA-level spending.

Given this, what can be said about special education outcomes in California in relation to special education spending and funding? First, as is true for the other variables shown in this report, there is broad variation across the state's SELPAs. Exhibit 19 features three key measures related to the discussion of outcomes.

The first two show the percentage of students in special education scoring proficient or above in language arts and mathematics in 2010/11 aggregated by SELPA. At the extremes these measures vary from 12 percent and 9 percent to 64 percent and 60 percent of students in special education scoring proficient or above in language arts and math in one SELPA as opposed to another. For language arts, the average is 35 percent proficient or above with two-thirds of the SELPAs reporting between 26 percent and 44 percent. The data for math are comparable.

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<sup>&</sup>lt;sup>26</sup> Baker, B. Revisiting the age-old question: Does Money matter in education? Washington, D.C.: The Albert Shanker Institute. 2012.

Exhibit 19. Summary Statistics for Special Education Outcomes and Least Restrictive Environment — All SELPAs (2010–11)

Row	Variable	Average	Standard Deviation	Minimum Value	Maximum Value
I	Percent Proficient or Above in English Language Arts	35%	9%	12%	64%
2	Percent Proficient or Above in Math	36%	8%	9%	60%
3	Percent in Regular Class 80% or More of School Day	53%	9%	27%	80%

SOURCE: California Department of Education

In addition, aggregating these data to the SELPA level masks the larger degree of variation observed across the state's almost 1,000 school districts. As it makes sense to aggregate fiscal information to the SELPA level because this is where the funds are actually received, for the sake of consistency we show outcome data in this form as well in Exhibit 19.

However, outcome data are arguably better examined by district. These data are attributed to districts for all the students in special education for which they are responsible. For example, districts may send some students to other districts, to county offices of education, or to nonpublic schools for specialized services under the premise that this best meets their educational needs. Ultimately, however, the district of residence for these students is responsible for their educational results. Therefore, as described by CDE, district test results for students in special education include all residing within district boundaries, regardless of where they receive services.

District-level analyses show that of the 783 districts with data showing proficiency levels for both mathematics and English language arts, 92 districts report an average of 20 percent or less of their students in special education scoring proficient or above, on average, between mathematics and language arts. At the other extreme, 102 districts report an average rate of over 50 percent. Thus, students identified for special education services appear to receive needed literacy and numeracy skills at much higher rates in some districts than in others.

What factors appear related to these differences? Exhibit 20 presents regression results at the SELPA and district levels. The first row shows the association between this academic outcome measure for students in special education and the percentage of students in poverty, and it is not surprising to find a strong negative association (p < .001).

Exhibit 20. Estimated Association between Special Education Academic Proficiency and Other Variables, 2010–2011

Variables	SELPA-level Analysis		District-level Analysis	
Average ELA and math proficiency	Coefficient	p-Value	Coefficient	p-Value
Percentage of students eligible for free or reduced-price lunch	-0.22	0.000	-0.24	0.000
Special education expenditures per student in special education (in thousands)	0.08	0.450	0.22	0.011
Percentage of students in special education with a specific learning disability	-0.01	0.920	-0.16	0.004
Percentage of students in special education with a speech/language impairment	0.22	0.044	0.20	0.000
Percentage of students in special education with autism	0.72	0.000	0.27	0.006
Percentage of students in special education in general education class 80% or more	0.04	0.491	0.12	0.000
Percentage of students in special education	-0.77	0.022	0.08	0.463
Enrollment (in thousands)	0.01	0.118	0.02	0.179
Constant	40.05	0.000	35.21	0.000

NOTE: This table presents regression coefficients with special education percent academic proficient as the dependent variable and school characteristics as explanatory variables.

SOURCE: California Department of Education

However, beyond student poverty, what factors appear related to this varying degree of academic success for students in special education across SELPAs and districts? Interestingly, the second variable shown, i.e., the average special education expenditure per student in special education shows no association with educational outcomes across SELPAs, which are the recipients of state funds. However, a positive relationship is shown based on district-level analyses.

Also, no association is shown between the percentage of students in special education identified with a specific learning disability and percent proficiency. However, the percentage of students in special education identified with a speech/language impairment and with autism are shown as strongly related to academic results (p < .05 and p < .001, respectively, at the SELPA level). As mentioned, speech/language impairment is a lower-cost category of disability, which may involve greater discretion in who qualifies for special education services. These analyses show that the higher the percentage of students identified for special education in this category of disability, the higher the academic outcomes for students with disabilities on average. It may not be surprising that identifying a greater percentage of students in special education in a disability category that on average tends to be relatively mild in severity shows a positive association with academic results.

The strong, positive association shown with the percentage of students in special education identified with autism, however, is less intuitive. One possible explanation is the strong negative correlation (not shown above) between the percentage of students with autism in a SELPA and the percentage of students in poverty (r = -.47, p < .001). Even though the percentage of students in poverty is a control variable in the analyses above, there may be other factors associated with SELPAs/districts that enroll/identify relatively high percentages of students with autism that relate to higher levels of academic achievement.

A positive association is also shown for the next variable, the percentage of students in special education spending 80 percent or more of their school day in general education classes. The coefficient for this variable is not particularly large in either the district or SELPA analyses and is statistically significant (p < .001) only in the district-level analysis, which includes many more observations.

At the same time, this type of association has also been found in state-level studies in Massachusetts (Hehir, Grindal, & Hadas (2012)<sup>27</sup> and in Illinois (Parrish, 2010).<sup>28</sup> For example, the former study found that the "degree to which students with disabilities are included in classrooms with their non-disabled peers is substantially related to Massachusetts Comprehensive Assessment System performance, controlling for a host of relevant variables such as income, race and English language proficiency" (p. 1).

In addition, this variable is of particular interest to this discussion in that it may be one of the best measures available of the extent to which students with disabilities (and all students) are receiving the social outcome benefits associated with interacting with a diverse student enrollment. In addition, the data above suggest that academic benefit for students with disabilities may be associated with this variable as well.

However, the question is sometimes raised as to whether including special education students in general education classes may be detrimental to the learning of students without disabilities. Analyses of the degree of inclusion for students with disabilities and the academic outcomes of all students show no association based on California data for the 2010–11 year. Thus, these data show no negative (or positive) academic associations for non-disabled students when greater percentages of students with disabilities are placed in their classes.

The inclusion variable is also of interest because it is something districts can, to a large degree, control. As shown in Exhibit 19, at the extremes, while one SELPA enrolls 27 percent of its students in special education in this most inclusive category of placement another places 80 percent of students in special education in this setting.

Last, this variable seems relevant to the primary focus of this paper in that movement to this type of placement does not appear to have special education spending implications. No statistically significant correlation appears between the degree of spending per student and type of placement.

On the other hand, these data should not be interpreted as providing evidence that increased inclusion will automatically result in higher academic outcomes for students with disabilities. The positive associations observed in the three states mentioned above should be seen as correlational and not causal.

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<sup>&</sup>lt;sup>27</sup> Thomas Hehir, Todd Grindal, and Hadas Eidelman, Review of Special Education in the Commonwealth of Massachusetts, Boston, Massachusetts, April, 2012.

<sup>&</sup>lt;sup>28</sup> Thomas Parrish, Policy Alternatives for Special Education Funding in Illinois, American Institutes for Research, San Mateo, CA, June, 2010.

For example, the analyses conducted for this paper clearly revealed individual districts and SELPAs showing relatively high rates of inclusion and low outcomes for students with disabilities, and vice versa. In fact, plotting all districts using axes of percent academically proficient and percent in inclusive settings shows that the highest-performing districts tend to be high inclusion. At the same time, some of the lowest-performing districts also show high rates of inclusion. Across all districts, however, in three states, we see an overall positive association between these two variables.

This seems to suggest that while inserting students with disabilities into general education classrooms without appropriate professional development and support can be one of the worst things that can be done, when students are included with full support it appears that this may be an important element of enhanced academic results for students with disabilities, and enhanced social outcomes for all students.

# **Getting More For Less**

Perhaps the major concern leading to the analyses presented in this paper is that special education spending appears to be rising as a percentage of general funding education spending in California. Analyses presented earlier in this paper raise questions about the degree to which this is occurring in fact and also provides data showing California to be among the lowest-spending states on special education services. At the same time, fiscal pressures continue to rise, with reductions in public education spending over the past several years and more projected for the future.

Despite the reality of special education spending trends and California's place in special education provision in relation to other states, cost control at this time of austerity is imperative for all public services. In addition, if the state were to address long-standing equity concerns in the distribution of special education funds, some SELPAs would face additional shortfalls in special education support.

However, even in these austere times, public educators across the nation face considerable pressure to improve educational results. Federal accountability provisions under No Child Left Behind, and the state education accountability system, are designed to enforce sanctions on public schools not showing continuous academic improvement.

Thus, in California, virtually all districts are faced with the daunting challenge of doing more with less. Coupled with these challenges, however, are opportunities. For example, are there ways to realize special education cost control while continuing to enhance the education received by the state's public school children?

The analyses presented in this paper show a strong association between the percentage of students identified for special education services and the cost impact of this program. Interestingly, the percentage of students identified in the relatively lower-cost speech/language impairment category of disability appears to show a stronger positive association with spending variations than the percentage of students in more severe, high-cost categories such as autism. This is likely because the overall number of students in the category speech/language is much larger than the still relatively small number of children identified with autism. In addition, speech/language is a category of disability in which the potential to serve students effectively without necessarily identifying them for special education services (for example, using alternative types of interventions) may be the greatest.

Programs such as Response to Intervention (Rtl), which is designed to identify students who appear to be struggling academically early and to introduce interventions (often outside of special education), may be especially effective when implemented well in increasing outcomes for students while reducing costs.

It should be noted, however, that Rtl alone is not necessarily a panacea. Information on the full range of activities districts across the nation are performing under the name of Rtl is generally lacking, as are studies of the relative costs and benefits of this program on a large scale.

It should also be noted that the primary purpose of Rtl is not to lower the percentage of students in special education, but rather to provide systematic interventions that benefit all students in a data-driven and accountable way. However, when early intervention is successfully employed, reductions in the number of children ultimately referred to special education may be expected to result.

For example, respondents from the two example districts cited in this paper describe this approach as instrumental in the strong academic outcomes they show for students with disabilities, in their ability to intervene effectively and early for students with special needs, and for focusing their special education revenues effectively on students truly in need of special education services. Conceptually, Rtl seems to provide a strong path to more cost-effective services, and we can find examples where this seems to be happening. This does not mean, however, than any practices a district may employ under this name will produce these results.

In addition, an approach to serving students with disabilities that some districts appear to use to a much greater degree than others is to serve children in general education classrooms. The data suggest that on average, higher costs are not associated with this mode of service, and there is evidence that greater inclusion may relate to improved academic results. Thus, once students are identified for special education, the degree to which they are served in general education classes appears to relate to higher proficiency rates for students in special education but not to higher spending on average.

Thus, the use of approaches like Rtl, which is designed to intervene early for children showing signs of additional education needs, when well implemented, may improve outcomes for students. They may also reduce the number of referrals to special education, which are costly, as well as preclude the need for these services for some students. Serving students effectively outside of special education is likely to be cost-effective because of the relatively high cost of procedures associated with eligibility determination. These include written documentation of exactly what is needed by a multi-disciplinary team of professionals and the monitoring of this plan over time; another source of high costs is the fact that once children are identified as eligible for special education they tend to continue to receive these services throughout their school career. Thus, strategic investments to help students succeed academically as soon as a need is determined may be especially cost-effective.

For the remaining students, for whom it is determined that special education services are needed, careful compliance with federal provisions requiring the placement of these students in the least restrictive environment appropriate to their needs also appears cost-effective. Rising costs do not appear related to such placements, while there is evidence of a relationship between enhanced academic results and the enhanced potential of social benefits through interaction with a diverse set of peers accruing to all children.

# **Examples of Producing More with Less for Students with Disabilities**

Is it possible to control special education spending while improving educational outcomes for students, including those with disabilities? A report released by the California Comprehensive Center at WestEd analyzed data from the 2005–06 through 2008–09 school years in an attempt to identify California school districts with substantially higher-than-predicted achievement for students with disabilities on

statewide performance measures.<sup>29</sup> Publicly available data from the Academic Performance Index (API), Annual Yearly Progress (AYP), CSTs, and California High School Exit Exam (CAHSEE) databases as well as district demographic data for ethnicity, poverty, the proportion of English learners (ELs), and the proportion of students with disabilities were included in these analyses.<sup>30</sup>

Some very strong sites emerged from these analyses. Four districts where students in special education substantially outperformed other districts with similar characteristics across the state were specifically featured. Two of these districts are also discussed below. For each, we summarize how they are producing substantially more in terms of student outcomes for students in special education. In addition, however, we discuss the cost implications of their strategies. In the prior report, the question of funding and revenues was not raised. In revisiting these schools, we are able to further explore whether they are not only able to do more than other like districts, but also to do it for less.

## Sanger Unified School District

Sanger Unified School District is in the heart of California's Central Valley, where the child poverty rate is two to three times the national average. Despite this demographic challenge, the district has made great academic strides. In 2004, seven of the district's schools were designated as Program Improvement (PI) sites under NCLB. Today, five are State Distinguished Schools, and two have been recognized as National Blue Ribbon Schools. In addition, Sanger employees have received local and national recognition, such as the National Superintendent of the Year Award, the Bell Award for Outstanding School Leadership, and Fresno County Administrator and Teacher of the Year awards.

As described by Sanger's superintendent, Marcus Johnson, special education students were one of the first populations the district focused on after he became superintendent.<sup>31</sup> One reason he cited was because it provided a clear opportunity for a "quick win." This population had been largely separated from mainstream instruction and therefore it was not surprising that they did not perform well on state tests based on this material. Reorienting the way students in special education were served in the district produced relatively quick gains on standardized tests. As these students constituted approximately 10 percent of Sanger's students at that time and were among its lowest performers, gains for this population had an important impact on the district's overall performance.

Over time, Sanger introduced more comprehensive reforms to address the unique needs of students in special education, and indeed all students. One example is Rtl. As described by the district's former director of special education, Matt Navo,<sup>32</sup> the district realized it needed a strong Rtl model due to its large percentage of English learners and students qualifying for special services.<sup>33</sup> Combined with everdecreasing budgets, district service providers were stretched to deal with the needs of an ever-increasing special population of students who were already far behind benchmark goals. In addition, general and special educators were not communicating to meet the unique needs of students across the district.

<sup>&</sup>lt;sup>29</sup> Parrish, T., & Huberman. (2011, January). Lessons from California Districts Showing Unusually Strong Academic Performance for Students in Special Education. California Comprehensive Center at WestEd. San Mateo, CA: American Institutes for Research.

<sup>&</sup>lt;sup>30</sup>Scores on the California Modified Assessment (CMA) or the California Alternate Performance Assessment (CAPA) were not considered, as the majority of students in special education take the CST with or without accommodations.

<sup>&</sup>lt;sup>31</sup> This description and corresponding data were presented by Mr. Johnson at the statewide "On the Right Track 6" Conference held in Burlingame on September 29, 2008.

<sup>&</sup>lt;sup>32</sup> Mr. Navo continues to serve at Sanger and has responsibilities for children in special education. The current district Director of Special Education, Kimberly Salomonson, is quoted later in this paper.

<sup>&</sup>lt;sup>33</sup> These observations by Mr. Navo are taken from the California Comprehensive Center report cited above.

He describes Rtl as an approach that brought the general and special education staff together to implement and ensure success. Rtl allowed Sanger schools to begin addressing its special education needs and its general education challenges. Through the use of Rtl, and other interventions, they have reduced the percentage of students requiring special education services to 7 percent. This compares to the statewide average of 10 percent and the national average of over 13 percent.

Despite the fact that this reduced identification means that its special education program is focused only on students with the most severe needs, Sanger's students in special education perform substantially better than the state average and better than other districts with similar demographics. In the 2008–09 school year, based on the AYP calculation of percent proficient, 49 percent of Sanger's students in special education scored proficient or above in mathematics and 38 percent did so in ELA, compared with 33 percent and 32 percent for students in special education statewide, and 28 percent and 26 percent in districts with comparable levels of students in poverty.

Mr. Navo cites the combination of Sanger's commitment to fully include as many children as possible in the general education setting, its Rtl philosophy to meet students' exceptional needs through the use of Explicit Direct Instruction (EDI),<sup>34</sup> and collaboration through professional learning community teams as its recipe for success.

However, the question of cost remains. Did Sanger's implementation of the interventions described above and its substantially improved student outcomes for students with disabilities (and all students) require a substantial added investment in special education?

Acknowledging likely limitations regarding analyses of the special education spending and revenue data at the district level as provided by CDE due to the state's SELPA-based system of special education funding and provision, it is still interesting to note that Sanger shows somewhat higher state and federal special education revenues than expenditures. It is one of 84 districts statewide for which CDE data show "negative encroachment"—special education revenues exceed spending.

While the accuracy of this finding is subject to review, it is not surprising. Sanger identifies one of the lowest percentages of students in special education within its size range in the state. Because the state's census-based special education funding system, at least in theory, allocates special education revenues on the basis of total enrollment and not the counts of students in special education, districts with low identification rates should be receiving relatively substantial allocations of state and federal aid per identified student.

Thus, Sanger has reduced identification for special education services, has produced much higher academic results for all students than statistically predicted, and appears to have precluded the need for general education funds to support its special education program.

#### Val Verde Unified School District

Val Verde Unified, located in Riverside County, is a relatively large district, with an enrollment of approximately 20,000 students. Eighty percent of the district's students are eligible for free or reduced-price lunch, and more than one quarter (26 percent) are ELs. In the 2008–09 school year, 37 percent of

<sup>&</sup>lt;sup>34</sup> Explicit Direct Instruction (EDI) focuses on the use of (a) instructional grouping (using flexible skill grouping as opposed to "tracking"), (b) increased instructional time (increasing academic learning time—the time students are successfully engaged), and (c) continuous assessment (providing ongoing in-program assessments to inform instructional practice). EDI is mostly used at the K–8 level, with weekly monitoring by school and district administrators to ensure consistent implementation.

Val Verde's students in special education scored proficient or above in mathematics for AYP; 33 percent scored proficient or above in ELA.

However, this high level of performance for students in special education is fairly new to the district. For example, Troy Knudsvig, a special education coordinator, described API growth for the district's elementary school students in special education as rising from 488 in 2007 to 706 in 2010.

How did they realize such large gains in such a relatively short period of time? As described by the district's director of special education at the time of the prior report, students in special education are performing well partly because all students in the district are performing well. The philosophy in the district is that special education is not separate from general education; it is treated as part of the whole. Also, special education is deliberately located in the curriculum and instruction department—as opposed to under student services—to avoid "silos" and to bridge the gap between general and special education.

She also mentioned the use of Rtl strategies, which has allowed them to identify and provide services for at-risk students to keep their special education population below the state average at about 9 percent. In addition, Mr. Knudsvig discussed greater inclusion of students with disabilities in general education classes as a way of improving outcomes, reducing the need for special education identification, and reducing costs.

Because the vast majority of students in special education are served in general education classrooms, special education professionals are in these classes working closely with the general education teacher and also with small groups within these classes. Because these small group interactions with special education professionals can include other students at academic risk, their needs may be remediated prior to referral for special education. Thus, a broad range of students receive special assistance, including those who might eventually be found eligible for special education services as well as those who could benefit but might not qualify. Moving most special education services to general education classes also helped Val Verde "get rid of alternative special education curricula": all students are now focused on the same core curriculum, which relates to the standards on which all students will be tested. Mr. Knudsvig described this alignment of instruction to the standards on which students are tested as key to their enhanced performance.

What have this reform and these procedures (which have led to considerably improved outcomes) cost? According to Mr. Knudsvig they have resulted in savings. Like Sanger, Val Verde identifies students for special education at a rate that is lower than the state average (9 percent). This reduces special education costs but not revenues, given the state's census-based approach to funding. Also, in addition to the improved academic outcomes he associates with increasingly mainstreaming students in special education into general education classrooms, he also cites cost savings from this move.

For example, this has allowed students with disabilities to increasingly attend their neighborhood schools. This not only provides social benefits of allowing students to attend school with their siblings, friends, and neighbors, but it also reduces the personal cost to these students of bus rides to schools out of their neighborhood to attend special classes, as well as the related transportation costs accrued by the district. For example, Mr. Knudsvig estimates their annual transportation cost to be \$50,000 per bus route. Thus, moving large numbers of students to neighborhood schools improves outcomes and reduces costs, a truly cost-effective formula.

# Conclusion Related to Producing More with Less

Just because Sanger and Val Verde districts have been able to do this does not necessarily mean all districts statewide can do the same. However, it is worthy of note that Sanger appeared a very unlikely candidate for these accomplishments a decade ago, as well as Val Verde's relatively recent and rapid growth. With relatively high rates of poverty and English learners, one could argue that if these districts can do this others, can as well. At the very least, it would seem that the kinds of practices employed by Sanger, Val Verde, and other districts where students in special education are clearly performing higher than statistically predicted at a reasonable cost should be the basis for training and dissemination efforts statewide.

In response to an earlier draft of this paper, some reviewers commented that Sanger and Val Verde districts should not be commended for using Rtl to "reduce their special education rates of identification." When this comment was posed to Sanger's current Director of Special Education, Kimberly Salomonson, she agreed that Rtl is not a reason to postpone assessment for special education eligibility and should never be used as such. She noted the importance of tight timelines for data reviews and decisions regarding a student's response to intervention, and emphasized that if failure occurs, a prompt referral for special education eligibility assessment is appropriate.

However, regarding Sanger's low special education identification rate, she argues that the use of Rtl has allowed them to identify at a rate more appropriate to their district's true need for special education services. She explains that special education operates under a discrepancy model, which is largely designed to wait until children fail prior to intervening:

Using RTI properly, we can intervene earlier and remediate students through early intervention. When students can be remediated in this way to learn the skills needed to access core instruction and maintain grade level success, they are not special education and should not be labeled as such.

Based on this, she argues that Sanger's rate (7 percent) is not low but rather closer to true special education incidence than the statewide average of somewhat less than 11 percent.

# **Conclusion and Possible Policy Implications**

The paper concludes with a summary of observations and possible policy implications.

# Better Special Education Expenditure and Revenue Data Are Needed

Possible concerns regarding special education spending in California include the overall size of the state's special education expenditure, the fact that it appears to be rising as a percentage of general funds statewide, and the degree to which general funds are being used to support special education in individual districts.

These measures all come from the state's accounting system. However, there seem to be questions and perhaps some disagreement about all of these measures. Based on the data-gathering efforts for this paper, there does not appear to be clear agreement as to how these measures should be calculated.

Using these data to compare and contrast special education expenditures and revenues across districts appears even more problematic. Within districts, for example, there are questions like how a special education teacher's time should be charged when serving a mixed group of general and special education students. Or, how should a general education teacher's time be charged when consulting with a special education teacher regarding strategies to meet the needs of all students in the class, including those in special education?

Perhaps in an earlier era, when children in special education were largely served in totally separate environments, the relative costs of one program as opposed to another were easier to track. Currently, however, more districts are developing overarching approaches to meet the unique needs of all of learners. Given this, and a newly enhanced focus on the core curriculum on which virtually all will be tested and held accountable, neatly parsing out the costs of one program versus another is complex.

In addition, to promote cross-district collaboration and enhance efficiency of provision, all California districts are members of a SELPA. Most SELPAs include multiple districts, and in some cases multiple counties. State and federal special education revenues are allocated to SELPAs, where it is determined locally how these allocations will be shared across member districts. Because some districts within a SELPA may specialize in higher-cost students with relative low-incidence conditions, the special education expenses they show (and revenues they receive) may be higher than other member districts. In addition, some districts may appear to receive higher special education revenues simply because they are the administrative unit for the district.

For example, as described above, Val Verde Unified School District appears quite efficient in the provision of special education services (i.e., relatively low cost in relation to unusually strong educational results). However, it may be questioned whether they are quite as efficient as CDE data suggest. These show special education revenues \$12 million in excess of expenditures in Val Verde for this program for 2009–10. In addition, the data assembled for this report show 35 districts statewide where special education revenues exceed expenditures by over \$1,000 per student in the special education program.

Given the state's census-based funding system, where revenues are allocated based on total enrollment rather than the count of students in special education, it is not necessarily surprising that some relatively low-identifying districts may receive special education revenues in excess of expenditures. However, the concern in California is that it cannot be determined with a high degree of confidence exactly how much districts are receiving and spending through their special education program in relation to other districts statewide.

With such information, districts, SELPAs, counties, and the state as a whole could better assess the relative equity of our distribution system, what they are spending in relation to others, and what is being produced in relation to this investment. Such information would seem vital to recognizing highly efficient practices, learning from the strategies employed, and disseminating information about demonstrated cost-effective practices statewide. While we have attempted to conduct such analyses in this paper, these efforts have been at least somewhat impeded by questions about the data available.

### Possibly Change Focus from Special versus General Education Spending

Districts must now focus on the needs of all students to master the core curriculum on which they are held accountable. For this reason, as well as social benefits, efficiencies are likely gained from the increased blending of students and funds. Given this objective, it seems more important to understand how much a district is spending overall in relation to the academic gains realized by all of its students than how much is being spent on one component of the education program as opposed to another.

As overall spending is more straightforward than attempts to break out spending by program, this would enhance the ability to produce data in which all can have confidence, so that the results can be clearly understood, and comparisons can be made across districts. This would allow all levels of provision to better understand how they are performing in relation to others and to use these data to better assess the areas in which they are excelling or may need to improve.

A focus on total spending may place greater emphasis on the common needs of all students. Special education has arguably suffered in the past through its association as serving a "different" body of students, educated in separate settings, and sometimes taught substantially altered curricula.

# California's Investment in and Return from Special Education Appear Relatively Low

As described above, there are difficulties in attempting to measure special education spending in California based on the state's accounting system. While these can be useful in attempting to track trends over time, even when uniform and clearly understood procedures are used, they are not helpful in considering what is occurring in California in relation to other states. As described above, accounting data by program (e.g., special education spending alone) are not available in a number of states, and even across states where these data are available they are generally not viewed as comparable. For this reason, the federal government stopped requesting these data from the states in the late 1980s.

However, other measures can be used to compare states. For example, states are required to report counts of special education staff annually. Based on these counts and standardized costing procedures, California appears to have one of the lowest levels of special education provision per capita in the nation.

In addition, expenditures are best considered in relation to what is being produced. Arguably, this is much more important than what is being spent. Maximizing program benefits for students served is clearly the goal. If costs can be reduced while student outcomes are raised, this would seem desirable for both students and taxpayers.

Unfortunately, while our costs are low, California's academic results for students with disabilities are also among the lowest in the nation. However, this finding should be at least somewhat tempered by the greater composition of students in California with such learning challenges as living in poverty and/or being English learners. The performance of the state's non-special education students is also among the lowest in the nation.

Last, California's return in regard to the social outcomes expected to accrue from education also may be somewhat lower than the national average. This state's greater reliance on more restrictive placements for students in special education likely decreases opportunities for all students to interact with the diverse populations and environments they will experience as adults.

# Special Education Spending, Revenues, and Outcomes Vary Substantially across the State

Although the exact amount of special education spending statewide appears open to question, the trend of increased spending attributed to this program in relation to total general education funds appears real. The degree to which this measure alone should be a major concern for the state is open to question. However, the need to promote the greatest possible efficiencies in program provision, especially in these very tough fiscal times for the state, is not in doubt. The degree of spending, how state and federal resources in support of special education are allocated, and maximizing what is produced are all factors in considering education efficiency.

To understand what is occurring statewide, it is essential to examine what is happening within the individual units that contribute to these statewide totals. Fiscal measures such as spending and revenues may best be examined at the SELPA level, while outcomes can be examined at the more finite level of individual districts. Across all these measures and at both the SELPA and district levels of analysis, a relatively high degree of variation is found. That is, on a per capita basis, some SELPAs show much higher levels of spending on special education services than others. Also, some are receiving substantially more state and federal aid in support of

special education programming per capita. Last, the percentage of students in special education demonstrating proficiency or above in language arts and math varies extensively.

Spending variations seem most strongly related to the varying degrees to which SELPAs identify students for special education. This appears to be more the case than the percentage of students identified in higher cost categories of disability such as autism.

Interestingly, these outcome variations show no statistical association with spending for students in special education. They do show a positive association with the percentage of students identified as speech/language impaired. That is, the greater the extent to which students with speech/language impairments are included within the special education population, the higher the test results, on average. It is not surprising that SELPAs/districts with greater percentages of students identified as speech/language impaired, which is generally considered a "milder" category of disability, show higher test results, all else equal. The positive association also shown with the percentage of students with autism is less intuitive.

A generally positive statistical association is also found between the percentage of students in special education spending 80 percent or more of their school day in general education classes. This finding is arguably of special interest and is also somewhat intuitive. When served in general education classrooms, students with disabilities may be more likely to be taught the same curriculum as all students, and the curriculum on which they will be tested. In addition, the less these students are "pulled out" of their general education classes, the fewer interruptions in instruction they are likely to face. This variable is also of interest because it is a practice that districts can largely control, shows no clear cost implications from the California data included in this report, and also arguably produces positive social outcomes for all students.

Revenue variations per student in overall enrollment appear strongly related to measures that relate directly to the degree of special education provision. For example, strong positive correlations are shown between special education revenues per capita and special education spending per student and the overall percentage of students identified for service. This association is surprising given the state's basis for allocating special education funds to SELPAs.

Within a census-based system, special education funds, at least in theory, are allocated only on the basis of total enrollment, independent by design from the percentage of students identified for service, their primary placement, or how much is spent on their provision. Under a census-based funding system the most relevant measure for considering the overall equity of funding is the average amount of aid per student in general enrollment. Under an equitable census-based system, with no adjustments for such factors as the percentage of students in poverty, broad variation on this measure would not be seen. Given the broad differences shown for California, the overall equity of the state's special education distributions is subject to question.

### Some Districts Appear to Be Producing More with Less

The two districts featured in this report, Sanger and Val Verde Unified, arguably provide models for the state in considering how to best face the challenge of declining resources and mounting academic expectations. Both districts enroll high percentages of student in poverty, enroll large numbers of English learners, and are in relatively remote areas and therefore likely somewhat removed from a substantial outside network of support. In addition, both identify a lower percentage of students for special education than the statewide average, and as a result likely have a more concentrated "severity" among those who are identified. Despite this, students in special education in these two districts substantially exceed like districts in academic performance.

In addition, they do this while generally spending substantially less per student. How do they provide more for less, resulting in the increased efficiencies needed so badly statewide?

Their approaches have some common characteristics. They both use Rtl to identify students in need of supplemental assistance and to provide needed interventions as early as possible. For the most part, these occur outside of special education. They argue that this keeps their special education numbers relatively low, reducing the related administrative and other costs associated with this program. Because of the state's census-based funding system, reducing their special education count does not reduce the revenues they receive for this program. Thus, both show relatively low special education spending and are not spending well beyond the special education revenues they receive.

In addition, both programs minimize outplacements (e.g., to nonpublic schools or to county programs), which tend to be more restrictive and costly. They also serve students in their neighborhood schools and in general education classes to the maximum extent appropriate to the needs of their students. This reduces transportation costs and extends the benefit from staff with special education training to a broader range of students. These districts infuse special education resources into general education classes, enabling special and general education teachers to work collaboratively to best meet the needs of all students. This approach, as opposed to pulling special education students out of general education classes for separate instruction, means their academic day is less disrupted and that general education students also gain from exposure to special education expertise.

This point was also a major focus of a commentary in EdWeek (July 18, 2012) by Stephen Frank and Karen Hawley Miles, "Improving Special Education in Tough Times." The second of the four "opportunities" they cite is as follows:

Place students in more inclusive settings. Districts often serve a high proportion of special education students in classrooms that segregate them as a group even if their individual needs vary. In research with more than a dozen districts, we have seen the percentage of students served in the most restrictive (self-contained) settings vary widely, from 2.5 percent to 9.9 percent. Not only do overly restrictive placements violate federal law and good educational practice, they are also enormously expensive, costing three to four times as much as serving students in general education settings.

Another recent paper on this subject, written by the former superintendent of Arlington Public Schools, is "Something Has Got to Change: Rethinking Special Education.<sup>35</sup>" He notes, "Districts must tackle the twin challenges of controlling special education costs and improving student achievement. In short, we are asking districts to do more with less" (p. 1). A key strategy he recommends for doing this is as follows: "By vesting more responsibility for special needs kids in the hands of general educators, especially content expert educators, schools can save funds while putting kids in front of the best trained teachers" (p. 7).

#### **Conclusion**

All states can benefit from using the data they collect to better understand the basic elements of efficient service delivery. How much are they spending? Where are their dollars going and on what basis? What are they producing? Armed with these types of data, all levels within the system can self-assess, and be held accountable by others, in regard to the cost-effectiveness of their provision.

<sup>&</sup>lt;sup>35</sup> Nathan Levenson, "Something Has Got to Change: Rethinking Special Education," Future of American Education Project, Working Paper 2011-01.

The efficiency challenges faced by California may be greater than other states. California has, or chooses to spend, substantially less than other states on public and special education services. The state's outcomes are relatively weak, and it is more likely to segregate students in special education than other states. Also, the system for allocating state and federal special education aid to SELPAs does not appear to equitably share resources across the state.

The good news is that there appear to be strong examples of highly efficient provision in the state. While these districts do not do all the same things, creating a "recipe" that all districts can strictly follow, there appear to be overarching themes from which others can learn. In the spirit of education, which is our business, it would seem important for this knowledge to be more broadly disseminated statewide so that others districts, SELPAs, and the state as a whole may benefit.