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What Are We Spending on Special Education in the U.S.?

Jay G. Chambers, Thomas B. Parrish, Joanne C. Lieberman, and Jean M. Wolman

Abstract

The most recent comprehensive data on special education expenditures in the U. S. are now a decade old. For the 1987–88 school year, states reported these expenditures to total \$19.3 billion. The Center for Special Education Finance (CSEF) has supplemented these data with a 1994–95 state survey, and with analyses of extant cost data that adjust for inflation and consider rising special education enrollments. CSEF estimates the 1995–96 national expenditure for special education to be about \$32.6 billion, which, compared to the 1987–88 data, is not surprising in light of continued rising special education enrollments since implementation of the Individuals with Disabilities Education Act (IDEA) in 1975.

The authors conclude that more uniform, refined data are required for more accurate estimates of special education expenditures, particularly as policymakers and educators are considering more inclusive models for meeting the needs of students with disabilities, as well as those with other special needs.

In addition, the relative shares of federal, state, and local expenditures vary enormously by state. According to data from states reporting high levels of confidence in their data, local districts may now incur the largest share of special education costs. However, half of the 24 states responding to the survey reported that states contribute 50 percent or more to special education expenditures.

Special education enrollment has experienced continual growth in terms of sheer numbers and as a percentage of total school enrollment since the implementation of the Individuals with Disabilities Education Act (IDEA). It is, therefore, not surprising that special education expenditures have also continually risen, and that based on various estimates, it appears that per pupil expenditures for special education are growing faster than for general education (e.g., see Rothstein and Miles, 1995).

The best estimates of what is currently being spent on special education services in the U.S. range from about \$30.9 billion to about \$34.8 billion, depending on the analytical method and some assumptions about the special need enrollment levels and expenditure ratios. These alternative methods and assumptions are described in more detail below.

There are no comprehensive and accurate data sources that indicate what public schools in the U.S. are spending on special education services. The Office of Special Education Programs (OSEP) stopped requiring the collection of these data after the 1987–88 school year because of concerns over their accuracy and the inability of states to provide this information. The Center for Special Education Finance (CSEF) has supplemented the older data with a 1994–95 survey (Parrish, O'Reilly, Dueñas, and Wolman, 1997). However, half the surveyed states were unable to report the statewide cost of their special education programs. Even fewer

states (13) could report a high degree of confidence in their responses.

The most recent comprehensive data—now a decade old—showed the following total expenditures for special education (as reported by the states for 1987–88) school year: \$1,514,009,459 from federal sources; \$10,822,363,560 from state sources; and \$6,996,001,289 from local sources.

According to CSEF's more recent survey, considerable variability exists across the 24 reporting states in the average expenditure per student, ranging from \$2,758 in Indiana to \$8,501 in Connecticut (Table 1, page 2).

Inflating the Data From the Last Federal Survey of States

Based on the last federal survey of the states in 1987–88, the average per pupil expenditure on special education services was \$4,347. If one uses the Consumer Price Index to inflate this figure to current (1995-96) dollars, this would amount to \$5,808.

The most recent estimates obtained from the Office of Special Education Programs indicate that the count of students, ages 3-21, served in special education programs under Part B of the IDEA in 1995–96 was 5,619,000. Multiplying these two figures together produces a current cost estimate of \$32.6 billion.

Using Expenditure Ratios for Special Needs Programs

Another way to estimate the current expenditure on special education makes use of the most recent available data on the relative expenditures on special needs programs combined with existing data on total current expenditures per pupil on educational services. The steps underlying this approach are presented in Table 2. The most recent national study of special education expenditures (Moore, Strang, Schwartz, and Braddock, 1988) suggests that expenditures on the average student with disabilities is about 2.28 times the average expenditure on a regular education student. Moore, et al. (1988) estimated the regular education expenditure to be about \$2,780 per pupil, while the estimated special education expenditure per pupil was \$6,335. The ratio of these two figures is 2.28 (= 6335/2780).

Alternatively stated, the marginal expenditure on the average special education student is about 1.28 (=2.28-1) times (or about 128 percent more than) that spent on a regular education student. An earlier study of special education spending in the U.S. by Kakalik, Furry, Thomas, and Carney (1981) estimated the special education expenditure ratio at about 2.17.

Table 2 begins with basic information on the special education enrollments (age 0-21) from the Office of Special Education Programs for 1995–96 (row A), total current expenditure for all children (row B, including regular education, special education, and other special needs programs), and information on total K–12 enrollments (row C).

The next six rows (D through I) present data on the enrollment rates (i.e., percentages and counts)

Table 1. Special Education Expenditures as Reported by States: 1993–1994*

State (n = 24)	Total Expenditure*	Associated Student Special Education Count**	Average Special Education Expenditure per Student	Percentage of Support by Source			Confidence In Data
				Federal	State	Local	
California	\$3,070,700,000 ^A	550,293 ^A	\$5,580	5%	71%	24%	SC
Colorado	\$260,337,092 ^A	76,374 ^B	\$3,409	9%	31%	60%	HC
Connecticut	\$627,331,211	73,792	\$8,501	4%	37%	59%	HC
Florida	\$1,470,186,078 ^B	290,630 ^A	\$5,059	6%	56%	38%	C
Indiana	\$350,430,294 ^B	127,079	\$2,758	17%	63%	20%	NC
Iowa	\$277,700,000 ^B	65,039 ^B	\$4,270	11%	70%	19%	HC
Kansas	\$326,106,608 ^B	47,489	\$6,867	7%	54%	39%	HC
Louisiana	\$427,924,416	108,317 ^B	\$3,951	6%	94%	0%	C
Maine	\$145,000,000 ^B	30,565	\$4,744	8%	59%	33%	HC
Maryland	\$757,328,777	95,752	\$7,909	5%	26%	69%	HC
Massachusetts	\$1,065,523,416	149,431	\$7,131	6%	30%	64%	HC
Michigan	\$1,334,000,000 ^B	188,703 ^C	\$7,069	6%	34%	60%	HC
Minnesota	\$689,656,932 ^A	96,542 ^A	\$7,144	6%	70%	24%	NC
Missouri	\$436,778,659	121,419 ^D	\$3,597	10%	30%	60%	C
Montana	\$54,865,132	17,881	\$3,068	14%	60%	26%	HC
Nevada	\$202,369,114	24,624	\$8,218	4%	40%	56%	C
New Mexico	\$250,000,000 ^B	45,364	\$5,511	9%	90%	1%	SC
North Carolina	\$344,809,332 ^C	142,394	\$2,422	15%	76%	9%	HC
North Dakota	\$54,560,122	12,180	\$4,479	10%	31%	59%	SC
Rhode Island	\$147,300,000	25,143	\$5,858	5%	36%	59%	HC
South Dakota	\$61,618,034	15,208	\$4,052	13%	49%	38%	HC
Vermont	\$79,155,945	10,131 ^E	\$7,813	5%	39%	56%	HC
Virginia	\$608,692,266	129,498 ^A	\$4,700	9%	23%	68%	C
Wisconsin	\$630,000,000 ^A	95,552	\$6,593	6%	62%	32%	C
All Reporting States	\$13,929,607,674	2,581,905	\$5,395	7%	53%	40%	
Highly Confident or Confident States	\$9,514,260,326	1,750,477	\$5,435	7%	44%	49%	

*States reported for the 1993–94 school year except as designated below:

^A 1992–93
^B 1994–95
^C 1990–91

**Count of students reported by the state associated with the reported total expenditure. Includes age range 3–21 except as designated below:

^A Includes age range 0–22
^B Includes age range 0–21
^C Includes age range 0–26
^D Includes age range 3–22
^E Includes age range 5–22

Confidence in Data:

HC: Highly Confident
C: Confident
SC: Somewhat Confident
NC: Not Confident

in the three major special needs programs: special education, compensatory education, and programs for limited English proficient students. These other special needs programs are selected as they were excluded in determination of the regular education expenditure used in the Moore, et al. (1988) study on which the 2.28 expenditure ratio is based. While all of the alternatives in Table 2 use identical enrollment rates for special education and bilingual/English as a second language (ESL) students, alternatives 1 through 4 and 5 through 7 use differ-

ent enrollment rates for compensatory education. The first four alternatives use counts of children living in poverty, while alternatives 5 through 7 use estimates of the percentages of Title I students served.

Rows J through L display the expenditure ratios for each of the programs: the Moore, et al. (1988) and Kakalik, et al. (1981) ratios of 2.28 and 2.17 for special education, and hypothetical ratios based on previous analyses by Parrish, Chambers, and Matsumoto (1994) for compensatory education and

programs serving limited English proficient (LEP) students. These estimates for other special needs programs imply that school districts are spending anywhere from 10 to 60 percent more on students in compensatory or LEP programs. The index of pupil need (row M) reflects a composite index of special need relative to regular expenditures based on the estimated composition of student enrollments in rows D through F (see footnote 3 to the table for the formula used to calculate this index) and the expenditure ratios in

Table 2. Alternative estimates of the expenditures on special education and other special needs programs in the U.S. for 1995-96

Row	Item	Alternative estimates of program expenditures based on various alternative expenditure ratios and enrollment rates						
		Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
A	Special Education Enrollments (Age 0-21)	5,619,000	5,619,000	5,619,000	5,619,000	5,619,000	5,619,000	5,619,000
B	Total current expenditure for all children \1\	\$5,738	\$5,738	\$5,738	\$5,738	\$5,738	\$5,738	\$5,738
C	Total enrollments \1\	44,662,000	44,662,000	44,662,000	44,662,000	44,662,000	44,662,000	44,662,000
<i>Enrollment rates — i.e., percentage of children who are:</i>								
D	Eligible for special education (Calculated)	12.58%	12.58%	12.58%	12.58%	12.58%	12.58%	12.58%
E	In compensatory education programs \2\	22.00%	22.00%	22.00%	22.00%	13.17%	13.17%	13.17%
F	Served in bilingual or ESL programs \2\	4.05%	4.05%	4.05%	4.05%	4.05%	4.05%	4.05%
<i>Estimated numbers of children who are:</i>								
G	Eligible for special education	5,619,000	5,619,000	5,619,000	5,619,000	5,619,000	5,619,000	5,619,000
H	In compensatory education programs \2\	9,825,640	9,825,640	9,825,640	9,825,640	5,879,765	5,879,765	5,879,765
I	Served in bilingual or ESL programs \2\	1,808,354	1,808,354	1,808,354	1,808,354	1,808,354	1,808,354	1,808,354
<i>Ratio of expenditure on each special needs program to regular education:</i>								
J	Special education	2.28	2.28	2.17	2.17	2.28	2.28	2.28
K	In compensatory education programs \2\	1.10	1.30	1.10	1.30	1.20	1.40	1.60
L	Served in bilingual or ESL programs \2\	1.10	1.20	1.10	1.20	1.10	1.10	1.20
M	Index of pupil needs based on all counts \3\	1.1871	1.2351	1.1732	1.2213	1.1914	1.2177	1.2481
N	Base expenditure per pupil (regular education only)	\$4,834	\$4,646	\$4,891	\$4,698	\$4,816	\$4,712	\$4,597
<i>Marginal expenditure (i.e., excess over regular education) per child served by program:</i>								
O	Special education	\$6,187	\$5,947	\$5,722	\$5,497	\$6,165	\$6,032	\$5,885
P	In compensatory education programs \2\	\$483	\$1,394	\$489	\$1,410	\$963	\$1,885	\$2,758
Q	Served in bilingual or ESL programs \2\	\$483	\$929	\$489	\$940	\$482	\$471	\$919
<i>Total estimated expenditure in the U.S. by program (billions)</i>								
R	Special education	\$34.8	\$33.4	\$32.2	\$30.9	\$34.6	\$33.9	\$33.1
S	In compensatory education programs \2\	\$4.7	\$13.7	\$4.8	\$13.8	\$5.7	\$11.1	\$16.2
T	Served in bilingual or ESL programs \2\	\$0.9	\$1.7	\$0.9	\$1.7	\$0.9	\$0.9	\$1.7

\1\ The total current expenditure figures are derived from the 1996 Digest of Education Statistics, (Table 166), while the total enrollment figures are from Table 3.

\2\ The first six columns above use the estimated percentage of children living in poverty (The 1996 Digest of Education Statistics, table 20, col 11). The last three columns in this table show an estimate of the percentage of children served in Chapter 1 (now Title I) programs. The Chapter 1 estimate is derived from weighted statistics from the Schools and Staffing Survey, school questionnaire.

\3\ The index of need weights each pupil according to the estimated expenditure ratio and is calculated using the following formula:

$$\text{Index} = (1 - \text{pse} - \text{pce} - \text{ple}) + \text{pse} \times \text{ese} + \text{pce} \times \text{ece} + \text{ple} \times \text{ele}$$
 where pse, pce, & ple = the proportion of students in special education, compensatory education, and limited English proficient programs, respectively, and ese, ece, & ele = the expenditure ratios for special education, compensatory education, and limited English proficient programs, respectively.

1-pse-pce-ple = the percentage of regular education students served.

rows J through L. This composite need index can be used to estimate the base expenditure per pupil for regular education students by dividing total current expenditure by the composite index of special needs. This base expenditure for regular students may then be multiplied by the expenditure ratio to obtain an estimate of the marginal expenditure per special need child served for each program. This per pupil expenditure figure for each program may then be multiplied by the total enrollments in each program to estimate total annual expenditure.

Estimates of the special education expenditures for 1995-96 are presented in row R and range from a low of \$30.9 billion (Alternative 4, column 5) to a high of \$34.8 billion (Alternative 1, column 2). The highest estimate is obtained if one assumes that the minimum additional money is being spent on other special need populations (i.e., compensatory education programs or programs for students with limited English proficiency): just 10 percent additional on each. Under alternative 2 (column 3), if districts are spending 128 percent more on special education students, 30 percent more on students living in poverty, and 20 percent more on LEP students, then the estimated expenditure on special education is \$33.4 billion. Using the Kakalik, et al. (1981) expenditure ratio of 2.17 and these same assumptions about students living in poverty and limited English proficient students, the special education expenditure estimate amounts to \$30.9 billion.

Under alternative 7, if one uses the estimated counts of children receiving Title I services (based on the Schools and Staffing Survey data) combined with the 2.3 special education expenditure ratio and an assumption that 60 percent more is spent on Title I children and 20 percent more is spent on LEP students,

the estimated expenditure on special education is \$33.1 billion.

Conclusion

Clearly, more refined data are required to provide an accurate estimate of what is currently being spent on special education in the U.S. There are no current, uniform data sources that track expenditures for special education services at the federal or state level. While OSEP gathers information annually on the numbers of children with disabilities and the allocation of these children among placements, there is no accurate information currently available on expenditures or costs of these alternative placements from which total expenditures might be estimated. More detailed and refined data will be required to ascertain what kinds of resources are actually being utilized in each type of placement to serve the needs of students with disabilities. This is particularly critical in a period that has seen a growth in interest among policymakers and educators in the implementation of more inclusive service delivery models for meeting the needs of students with disabilities, as well as those with economic or educational disadvantages or limited English proficiency.

Contact

Center for Special Education Finance (CSEF)
American Institutes for Research
1791 Arastradero Road
P.O. Box 1113
Palo Alto, CA 94302-1113
PHONE: (650) 493-3550 x240
FAX: (650) 858-0958
TDD: (650) 843-8166
E-MAIL: csef@air-ca.org
WEB: csef.air.org

References

- Kakalik, J.S., Furry, W.S., Thomas, M.A., and Carney, M.F. (1981). *The cost of special education*. Santa Monica, CA: Rand Corporation.
- Moore, M.T., Strang, E.W., Schwartz, M., and Braddock, M. (1988). *Patterns in special education service delivery and cost*. Washington, DC: Decision Resources Corporation.
- Parrish, T., Chambers, J., and Matsumoto, C. (1994). *Estimating the cost of enabling special needs populations to achieve high standards of learning*. Prepared for the U.S. Department of Education. Palo Alto, CA: American Institutes for Research.
- Parrish, T.B., O'Reilly, F.E., Dueñas, I.E., and Wolman, J.A. (1997). *State special education finance systems, 1994-95*. Palo Alto, CA: Center for Special Education Finance. American Institutes for Research.
- Rothstein, R. and Miles, K.H. (1995). *Where's the money gone? Changes in the level and composition of education spending*. Washington, DC: Economic Policy Institute.

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