

## District Revenues and Student Poverty: Implications for Special Education Resources and Services

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### Abstract

This brief discusses issues of school finance equity as they relate to resources and services provided to special education students. It uses information obtained from a recent study of Chapter 1, which examined educational resources and expenditures in schools with high and low levels of poverty in districts with high and low levels of revenue. The findings indicate that district revenues do translate into differences in services for *all* students. For special education students, these differences are reflected in student-teacher/aide ratios and in expenditures for self-contained vs. resource-room instruction, and for speech and physical therapy services.

**W**hat implications do issues related to school finance equity have for the services provided to special education students? More specifically, how do services and resources for special education students vary between districts with high revenues and those with low revenues? How do they vary between schools serving students at high and low poverty levels within districts with comparable levels of revenues?

This brief addresses these questions, using information obtained from a recent study of federal compensatory education programs under Chapter 1.

### Chapter 1 Resource Study

Chapter 1, (now Title I) has been the largest single federal education program in the U.S. It aims to reduce the achievement gap between high and low poverty schools by serving students who are both economically and educationally disadvantaged. At the time of this study, the Chapter 1 program distributed more than \$6 billion to 52,000 schools in 15,000 school districts, providing an allocation of about \$900 per eligible student for more than five million students. Under the 1992 law, *all* schools within the same school district—both Chapter 1 schools and non-Chapter 1 schools—were to receive comparable resources before Chapter 1 funds were added.

In 1991-92, the American Institutes for Research (AIR), under contract to the U.S. Department of Education, conducted a study of Chapter 1 resources in the context of state and local educational resources. Designed to examine the impact of extreme differences in school resources on services provided to Chapter 1 students, the study included a sample of high and low poverty schools in high and low revenue districts. The sample included 95 elementary schools and 25 high schools in 30 school districts across 5 states. *This brief focuses on findings for the elementary schools only.*

Data from the study were used to examine the resources and services that might be available in four different types of schools: the low poverty school in a low revenue district, the high poverty school in that district, the low poverty school in a high revenue district, and the high poverty school in that district. (Poverty levels and rates were measured by the percent of students eligible for the free and reduced-price lunch program.)

Although the findings from this purposive sample are neither nationally representative nor conclusive, they shed light on the resources and services available to students in general and to special education students within varying contexts of district revenues and school poverty levels. Districts and schools were deliberately selected from the extremes of the distribution of district revenue and student poverty to focus attention on these differences.

## General Findings

It is useful first to consider the expenditures for elementary school services in general. All figures presented in this brief are cost-adjusted; that is, they are adjusted for differences in factors affecting costs of living and other factors that make one district more attractive than another as a place to work and live.<sup>1</sup>

■ **Per Student Expenditures.** As might be expected, the low revenue school districts in the study spent considerably less per student on general education than the high revenue school districts. As Table 1 indicates, much greater differences in expenditures are associated with differences in revenues across districts than with differences in poverty levels across

schools within a district. The low poverty schools exhibited more than a 25 percent differential (\$3,054 versus \$2,439) in per student expenditures favoring the high revenue districts; while the high poverty schools exhibited more than an 18 percent differential (\$2,966 versus \$2,505) favoring the high revenue districts.

Differences in per pupil expenditures in high and low poverty schools were much smaller. An average of \$2,505 per pupil was spent on students attending the high poverty school in low revenue districts. Per pupil expenditures for students enrolled in the low poverty school in that district were only \$66 less (\$2,439). Per pupil expenditures for students enrolled in the low poverty school in high revenue districts were

just \$88 higher than that spent on students in the high poverty school. Thus, within districts, school poverty made little difference (less than three percent) in the level of resources flowing to schools.

■ **General Instruction Expenditures.** Expenditures for general instructional services at the four types of schools ranged from \$1,906 to \$2,358. Expenditures for general classroom instruction were about 11 to 14 percent higher in the high revenue district. However, in terms of supplemental resource services such as art and physical education, the schools in high revenue districts spent anywhere from 59 percent more in the high poverty schools (\$264 versus \$166) to 120 percent more in the low poverty schools (\$385 versus \$175) than their low revenue counterparts.

■ **Administration and Support Personnel.** The breakdown of expenditures for administration and support personnel reveals significant differences. In almost every case, the high revenue districts spent more on administrative and support services than the low revenue districts; and high poverty schools outspent their low poverty counterparts in both types of district. The one exception was in the services of psychologists, social workers, and counselors, where the high poverty schools spent considerably less, particularly in the low revenue districts. While special education students in such schools could expect some diagnostic services and the development of an Individualized Education Program (IEP), they would be less likely to receive counseling and social services. Finally, though more prevalent in high revenue districts, health services were relatively scarce in all of the schools in the sample, despite the increased needs reported by school and district staff.

**Table 1**  
**Cost-Adjusted Expenditures Per Student for Elementary School Personnel**

	Low Revenue Districts		High Revenue Districts	
	Low Poverty Schools	High Poverty Schools	Low Poverty Schools	High Poverty Schools
<b>General Instruction</b>				
Classroom instruction	\$1,731	\$1,747	\$1,973	\$1,938
Resource services (e.g., art, music, PE)	\$175	\$166	\$385	\$264
<b>Subtotal</b>	<b>\$1,906</b>	<b>\$1,913</b>	<b>\$2,358</b>	<b>\$2,202</b>
<b>School Administration &amp; Support Services</b>				
Administration & operations	\$398	\$478	\$498	\$572
Library	\$48	\$69	\$83	\$93
Psychologist, social worker, counselor	\$74	\$29	\$82	\$51
Health	\$13	\$16	\$33	\$48
<b>Subtotal</b>	<b>\$533</b>	<b>\$592</b>	<b>\$696</b>	<b>\$764</b>
<b>Grand Total</b>	<b>\$2,439</b>	<b>\$2,505</b>	<b>\$3,054</b>	<b>\$2,966</b>

<sup>1</sup> For a discussion of the methodology for creating cost adjustments, see Jay G. Chambers, *Cost and Price Level Adjustments to State Aid for Education: A Theoretical and Empirical Review*, in *Perspectives in State School Support Programs*, edited by K. Forbis Jordan and Nelda H. Cambron-McCabe, Cambridge, MA (1981), 39-86.

## Findings Related to Special Education

The Chapter 1 study yielded similar results for special education.

■ **Services.** Table 2 shows rather dramatic variations in special education services and resources between high and low revenue districts, despite virtually identical rates of identification of special education children (7 per-

cent). Figures in this table reflect total expenditures on each type of special education service divided by the total special education population in the school. Therefore, these figures do not reflect cost per pupil of the specific service. Expenditures per special education student for special classes in the high revenue districts were *four to six* times greater than those in the low revenue districts (\$2,157-\$3,357 in the high revenue district vs. \$486-

\$557 in the low revenue district). The average per pupil amounts allocated to resource rooms showed less variation, ranging from \$1,757 to \$2,286 in the low and high revenue districts, respectively.

These data suggest that the low revenue districts in the sample were far less likely to use special education resources for special classes than were the high revenue districts. That is, the high revenue districts may tend to place relatively greater proportions of disabled students in special classes as opposed to resource rooms, or they may devote more resources (e.g., through smaller class sizes or more aide time) to special class placements. These results are also consistent with the hypothesis that special education students in low revenue districts spend a greater percentage of their time in regular class placements. Since these data do not reveal the distribution of special education students between special classes and resource rooms, there is no way to determine how much of the observed difference in per pupil expenditures is due to variations in the utilization or the level of resources devoted to the special class placements.

Variations also appear in the services of therapists. Per pupil expenditures on the services of therapists are about *three times* greater in high revenue than low revenue districts. Again, these results are consistent with both a greater likelihood of students receiving therapy services and a use of more intensive services (e.g., through smaller caseloads) in high revenue districts. The *total* expenditures per special education student in high revenue districts were about *double* those in the low revenue districts.

■ **Staffing.** The Chapter 1 data also reveal differences in staffing for special education, as shown in Table 3.

**Table 2**  
**Cost-Adjusted Expenditures for Special Education Personnel Per Total Special Education Enrollment <sup>a</sup>**

	Low Revenue Districts		High Revenue Districts	
	Low Poverty Schools	High Poverty Schools	Low Poverty Schools	High Poverty Schools
<b>Detailed Personnel Expenditures Per Special Education Student for:</b>				
Special classes	\$486	\$557	\$2,157	\$3,357
Resource rooms	\$1,757	\$2,214	\$2,286	\$1,900
Services of therapist	\$329	\$371	\$1,057	\$1,085
<b>Total Expenditure Per Special Education Student</b>	<b>\$2,572</b>	<b>\$3,142</b>	<b>\$5,500</b>	<b>\$6,342</b>

<sup>a</sup> Figures in this table reflect total expenditures on each type of special education service divided by the total special education population in the school. Therefore, these figures do not reflect cost per pupil of the specific service.

**Table 3**  
**Special Education Staffing Per Elementary School**

	Low Revenue Districts		High Revenue Districts	
	Low Poverty Schools	High Poverty Schools	Low Poverty Schools	High Poverty Schools
<b>Full-Time-Equivalent Staffing for Special Education</b>				
Average number of special education students per FTE special education professional	22	16	12.5	9.5
Average number of special education students per FTE special education instructional aide	58	70	23	39

These differences affect the amount of attention that students receive from special education professionals in the four different types of schools. The high poverty schools in high revenue districts enrolled 9.5 students per full-time-equivalent (FTE) special education professional, while the low poverty schools in low revenue districts enrolled 22 special education students for every FTE special education professional. These differences reflect a greater use of special classes in the high revenue districts. The staffing ratios for special education aides to special education students further exacerbates this disparity. Students in low revenue districts would be one of 58 to 70 special education students served by an aide, as compared to one of 23 to 39 students in the high revenue districts.

## Summary and Implications

It is obvious to observers of American education that resources and services vary widely among school districts. Some are wealthy; others are

poor; many are in between. The Chapter 1 study shed further light on these differences. This brief has highlighted some of the study's findings related to issues of funding equity for general as well as special education students.

The findings generally indicated that district revenues *do* translate into differences—for *all* students. For *special education* students, the high revenue districts in the sample tended to provide greater funding for special class placements than for resource room placements. The high revenue districts also invested almost three times as much per special education student for speech and physical therapy. Differences were also reflected in the ratios of professionals and aides to special education students.

These results indicate that fiscal disparities across districts may have significant implications for the services being provided to special needs populations. This suggests that state and federal policymakers need to understand and take into account the linkages between general education

and the education of special needs populations as they think through resolving inequities in school funding mechanisms. The study findings also underscore the need for policymakers to examine the ways in which the funding affects services, both across and within districts.



This brief is based on data reported in *Translating Dollars into Services: Chapter 1 Resources in the Context of State and Local Resources for Education*, by J. Chambers, T. Parrish, M. Goertz, C. Marder, and C. Padilla (Final Report prepared for the U.S. Department of Education, Contract No. LC 91030001, by the American Institutes for Research, Palo Alto, California, April 30, 1993). This report can be obtained from the Office of Policy and Planning, U.S. Department of Education.

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