The Impact of Census-Based Special Education Funding in Pennsylvania

William T. Hartman
Pennsylvania State University

- In 1991-92 the Pennsylvania Legislature radically changed the state’s system of funding special education from an excess cost formula to a census-based approach, representing a fundamental change in the philosophy of financing special education.

- Over the first five years of census-based funding in Pennsylvania, special education costs have risen at a greater rate than general education costs, and state aid increases have not kept up with these rising costs.

- While the presumed percentages of special education students in the state funding formula appear reasonable, the standardized allocations per student have not kept up with rising costs. As a result, local districts now fund the greatest share of special education in the state.

- This diminishing share of state funds, which can occur under any type of formula, is a likely source of dissatisfaction with the state’s census-based system.

Census-based funding for special education has been a growing phenomenon in the states over the past decade. It has also been incorporated as the basic principle underlying the allocation of federal special education funds. Pennsylvania was one of the first states to adopt this approach, which substantially departs from prior special education funding methods. Unlike virtually all prior approaches to special education funding, census-based funding is not based on

---

1 Research for this paper was supported through funding from the Office of Special Education Programs (OSEP), U.S. Department of Education, through the Center for Special Education Finance at the American Institutes for Research.

2 For more on census-based funding, see Parrish, T. (1997).
a measure of an individual district's estimated need for special education services or the amount of services it is providing. Rather, it is based on some measure of total enrollment. Under such a system, special education funding is independent of such factors as the percentage of students receiving special education services, the relative severity of their disabilities, or the services they receive. In other words, there is no attempt to link funding to an individual district's special education costs. Because Pennsylvania was one of the first states to adopt this type of approach to special education funding, there is special interest in examining its impact over time.

This article examines the trends in special education expenditures, revenues, personnel, and student enrollments for the period 1993-94 through 1997-98, the first five years of full implementation of the census-based approach. Patterns and changes are presented and analyzed to see the impact of the new approach on school districts and the state over time.

**Background**

In 1991-92 the Pennsylvania Legislature radically changed the state’s system of funding special education, moving from an allowable excess cost formula to a census-based approach. The new funding formula represented a fundamental change in the philosophy of financing special education.

Before 1991-92 Pennsylvania utilized a dual delivery and funding system for special education (Hartman, 1991). Two-thirds of the students were served in programs operated by the 29 intermediate units (IUs) in the state, with the rest served directly by school districts. The IUs received funding directly from the state for these services, and districts were charged for the students they enrolled in IU programs through a deduction from their general state aid. Districts that operated their own programs were reimbursed by the state for 100% of the programs’
allowable excess costs.\(^4\) Districts were responsible for funding an amount equal to the average cost per student for basic education in their district. There were few incentives at the district level for cost control since additional costs were paid by the state. As a result, districts’ special education expenditures increased at an annualized rate of over 13\% for the five years prior to changing the funding system.\(^5\)

In the late 1980s, this system, which encouraged district and IU spending beyond state appropriations, approached fiscal meltdown. In 1988-89 the state had a shortfall of $99 million in special education funding obligations that was satisfied by a one-time appropriation in a special legislative session. Two years later, with a new deficit of $148 million, state payments to districts were suspended until additional monies could be appropriated (Hartman, 1995). In the eyes of the legislature and the administration, the system was a black hole with an insatiable thirst for state funds.

**The New Census-Based Funding System**

The solution was to implement a completely new funding system that made the “payer of last resort” the district rather than the state. The new formula raised the total amount of state special education funding and put an annual limit on the state aid for special education. The state aid now went almost entirely to districts, which could either operate programs themselves or contract with IUs to serve their students. Any additional expenditures beyond the state aid became the responsibility of districts (Hartman, 1993). There was a clear expectation on the part

---

\(^3\) Intermediate units are regional educational entities that provide instructional and support services to school districts. Provision of special education programs and services forms a large part of their function.

\(^4\) Allowable excess costs are defined as any costs beyond the average cost per student for basic education in each district.

\(^5\) Calculations based on information from Pennsylvania Department of Education. Selected expenditure data for Pennsylvania public schools. Years 1985-86 through 1990-91.
of state policymakers that this shift would make districts more cost conscious and would slow growing special education expenditures.

The new census-based formula provided state aid on the basis of a fixed percentage of total district enrollment, not just special education students. State aid for special education for 1993-94 was uniformly calculated as:

- Mild disability allocation = \$1,025 \times 15\% \text{ of total district enrollment}
- Severe disability allocation = \$12,000 \times 1\% \text{ of total district enrollment}

The same formula remained in place through 1998-99, with gradual increases in the per student allocations to \$1,150 for mild disabilities and \$13,450 for severe disabilities in 1997-98.

In essence, this state funding formula allocates a categorical lump sum to each district based on total enrollment. The district is free to use these funds to support special education services for school-age students. In Pennsylvania, both students with disabilities and gifted students are eligible for special education, and both are included in the funding formula and in reported expenditures. Consequently, the reported special education expenditures include gifted as well.\(^6\)

From an administrative perspective, the census-based funding approach is considerably simpler for the state. State aid requirements are predictable, appropriations can be made to match the state’s funding obligation for special education, and all districts get the same amount per student. However, there was, and continues to be, substantial controversy over the new funding approach. Districts objected to the possibility of increased costs previously covered by the state and a concomitant impact on their budget and local tax burden. Coupled with this concern was a

---

\(^6\) Most states, and the federal government, do not include gifted students in special education. However, we believe the inclusion of gifted students in many of these analyses has minimal impact on the findings and conclusions presented in this paper, as its main focus is on comparisons over time.
fear that the state would not maintain its level of commitment to special education funding, and that districts would have to shoulder a larger portion of special education costs over time.

However, the most persistent criticism was that there was no relationship between the state aid received and the number of exceptional students or the cost to educate them. The funding formula assumes a standard percentage of exceptional students in each district. Distribution of exceptional students, particularly the more severely disabled, is unequal across districts, and those districts with larger numbers feel shortchanged by the approach. Further, the per student funding levels were originally created to allocate a specific amount of state aid and were not established with any consideration of the actual cost of serving students in special education. Due to these objections, some supplemental state aid has been provided to districts whose costs are substantially above the state average.⁷

**Impact of the New Formula**

After five years of full implementation, what has been the impact of census-based special education funding in Pennsylvania in areas such as special education spending, revenues, staffing, and enrollment?

*Special education spending grew steadily during the first five years of full implementation of the census-based funding formula.* In spite of the districts’ responsibility for costs beyond a fixed state amount, expenditures for special education grew at a substantially faster rate than those for general education or current expenditures for elementary and secondary education. The expectation that increased district responsibility for expenditures in excess of state aid would slow down special education costs was briefly fulfilled during the first two transitional years of implementation—there was a 2% increase in 1991-92 and a 4% increase in
1992-93 (Hartman, 1995). However, since 1993-94 when full implementation took effect, special education expenditures for district-operated programs have grown at an annualized rate of 7.8%, which is higher than the growth rate for general education. However, even this growth rate for special education expenditures is much less than the rate of increase prior to the new formula.

Table 1 provides the annual and five-year changes in special and general education instructional expenditures for school-age students for both districts and IUs.\textsuperscript{8} These expenditures include instructional programs and pupil personnel services. For the first five years of the new formula’s full implementation, school districts’ total special education expenditures have grown substantially, averaging 7.8% per year, a 34.9% increase from the base year. However, some of the reported costs are for district contracts with IUs for services for the districts’ students. Deducting the amount spent on IU contracts, the expenditures for district-operated programs have shown a higher rate of increase, averaging 9.3% over the five years.

\textsuperscript{7} Supplemental state funding has been provided to districts that meet a combination of criteria involving a high ratio of special education expenditures to other instructional expenditures, low wealth, high local taxes, and high poverty levels. The supplemental aid is calculated as a fraction (e.g., 20\%) of the mildly disabled formula amount.\textsuperscript{8} Fiscal data were obtained from the Pennsylvania Department of Education. Adjustments in expenditure and revenue amounts for differences between financial reporting for school districts and IUs, coding errors, and missing data were made in consultation with staff from the department.
Table 1: Special Education and General Education Instructional Expenditures

<table>
<thead>
<tr>
<th></th>
<th>Total 5-Year Change</th>
<th>Average Annual Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Special Education:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total District Spending</td>
<td>$349,230,057</td>
<td>34.9%</td>
</tr>
<tr>
<td>Net District-Operated Program Spending</td>
<td>$271,192,246</td>
<td>42.6%</td>
</tr>
<tr>
<td>Intermediate Unit Spending</td>
<td>$72,911,924</td>
<td>14.7%</td>
</tr>
<tr>
<td>Total Instructional Spending</td>
<td>$344,104,169</td>
<td>30.4%</td>
</tr>
<tr>
<td><strong>General Education Spending</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$1,030,105,345</td>
<td>20.3%</td>
<td></td>
</tr>
<tr>
<td><strong>Total Current Expenditures</strong></td>
<td>$2,125,228,025</td>
<td>20.6%</td>
</tr>
</tbody>
</table>

With special education spending for district-operated programs increasing by over 40% in five years, it is useful to compare these increases with other changes in education expenditures. With the exception of 1995-96, the annual percentage increases in special education expenditures were consistently higher than comparable instructional expenditures for general education or for current expenditures for all elementary and secondary education. On the other hand, expenditure growth for IU programs has been less than for general education. The 3.5% annualized growth rate for IUs may be a result of reduced state funding, greater use of district programs, and more careful consideration by districts of arrangements and amounts in their contracts with IUs.

As a result of the higher growth in district-operated programs, the balance between districts and IUs in providing special education programs has shifted. In 1993-94 district-operated programs represented 56% of total special education instructional expenditures, while IUs spent 44% of the program monies. By 1997-98 the distribution had shifted to 61% for district-operated programs and 39% for IUs. The change indicates a steady overall move toward the use of district-operated programs and continues the shift begun with the initiation of the new
funding formula that allocated the bulk of state aid for special education to school districts and away from IUs.

*Special education does not appear to be encroaching on the total education budget.* An ongoing public policy concern is that special education, due to more rapid expenditure increases, may be taking a larger share of, or encroaching on, the total education budget. Encroachment is an issue when special education expenditures represent an increasing share of current expenditures for elementary and secondary education from year to year. In Pennsylvania, the share of current expenditures that special education represents has remained relatively constant over the past five years at about 12%. However, there are signs that encroachment may become an issue in the future. Special education has received increasingly larger shares of additional educational allocations each year. If this tendency continues, then special education will take up more of the total educational budget and encroachment could become more pronounced.

*Local districts now fund a greater share of special education than the state.* The result of increased local spending has been a shift in the sources of support for special education. The local share increased from 44% to 51% over this time, and school districts have again become the largest source of special education revenues in Pennsylvania. Concurrently, the state share declined by an equivalent amount and the federal funding share has remained fairly constant at around 6-7% of total support.

After an early infusion of new state funds in the first three years of the new funding formula, the state has not maintained its share of total special education costs. In 1993-94 the state provided the largest share of funding, at 49%. Since that time, state funding has not kept up with increases in special education expenditures, and districts have been required to fund a growing share of special education costs. As a result, the local share of funding for special
education has steadily increased, while the state share has declined. By 1997-98 the relative share of state support of special education had regressed to where it was before the new formula was initiated, with 52% from districts, 42% from the state, and 6% from the federal government.

As shown in Table 2, during first five years of full implementation, three-quarters of the new funding for special education came from districts. The districts increased their funding by almost $263 million, while the state added nearly $58 million and the federal amount rose by $27 million. The districts’ initial fear of assuming a larger burden of funding has proven to be true.

Table 2: Change in Sources of Funding for Special Education in Pennsylvania Five Years After Special Education Finance Reform

<table>
<thead>
<tr>
<th>Funding Source</th>
<th>Funds Added</th>
<th>Percentage Growth</th>
<th>% Share of New Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>School Districts</td>
<td>$262,627,512</td>
<td>51%</td>
<td>76%</td>
</tr>
<tr>
<td>State Funding</td>
<td>$57,636,326</td>
<td>10%</td>
<td>17%</td>
</tr>
<tr>
<td>Federal Aid</td>
<td>$27,037,657</td>
<td>35%</td>
<td>8%</td>
</tr>
<tr>
<td>Total</td>
<td>$347,301,495</td>
<td>30%</td>
<td>100%</td>
</tr>
</tbody>
</table>

However, special education was not singled out in this regard. A similar pattern of reduced state support for general education was also evident. Basic Education Funding (BEF) is state aid for general education. Beginning in 1993-94, it provided 61% of districts’ instructional expenditures for general education. By 1997-98, the level of support had dropped to 56%, which paralleled the decreased state share of special education expenditures.

*The number of special education personnel grew steadily.* Special education teachers and speech therapists increased by about 12%. The new personnel were almost all employed by districts, reflecting both the shift of state aid from IUs to districts and district takeover of programs previously operated by IUs. The new employment pattern represents a substantial change. Previously, the majority of special education programs were operated by IUs, and many
districts served few or none of their exceptional students in their own programs. The new funding formula in 1991-92 directed most of the state funding for special education to districts instead of IUs. Districts still had the option of contracting with IUs for services, but an increasing number took over and ran programs previously operated by IUs. Personnel data clearly indicate that districts have increased their position as the dominant service provider and they have been the ones hiring new staff and providing new programs, not IUs.

Special education enrollments for children with disabilities have grown steadily. Pennsylvania characterizes special education students as either mildly or severely disabled. The assessment is based on a combination of the exceptionality and location of the special education intervention. As shown in Table 3, both groups of students with disabilities have increased in the five-year period, 1993-94 to 1997-98, and their growth rates were substantially higher than the growth rate of total public school enrollments. In terms of percentage increases, the count of students with mild disabilities (8%) grew twice as fast as that of the general school-age population (4%), and the count of students with severe disabilities (25%) grew six times as fast.

---

Table 3: Changes in the Number and Percent of School-Age Special Education Students in Pennsylvania — Five Years After Special Education Finance Reform

<table>
<thead>
<tr>
<th>5-Year Changes</th>
<th>Change in Number of Students</th>
<th>% Change in Number of Students</th>
<th>Share of Increase in Students with Disabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild Disabilities</td>
<td>13,949</td>
<td>8%</td>
<td>81%</td>
</tr>
<tr>
<td>Severe Disabilities</td>
<td>3,239</td>
<td>25%</td>
<td>19%</td>
</tr>
<tr>
<td>Total Special Education*</td>
<td>17,188</td>
<td>9%</td>
<td>100%</td>
</tr>
<tr>
<td>Total Public Enrollment</td>
<td>70,027</td>
<td>4%</td>
<td></td>
</tr>
</tbody>
</table>

*Excluding gifted

Students with mild disabilities comprise the bulk of special education students, making up over 90% of this group (excluding gifted). Their increase of 13,949 students represented 81% of new students with disabilities. Although enrollments for students with severe disabilities have been growing at a much faster percentage rate, their increase in numbers of students (3,239) represented only 19% of the total growth.

Despite the higher overall growth rates shown above, students with disabilities have continued to be just under 11% of total enrollments. Students with mild disabilities have been around 10%, while students classified as severe, even with their higher growth rate, still represent less than 1% of the total student population. This apparent anomaly of higher growth rates for students with disabilities and their relative stability as a share of the total public enrollment was primarily due to the relatively small proportion of students with disabilities compared to the large base and growth of total public school enrollments.

*The assumed funding formula percentage for students with severe disabilities appears high in relation to state counts.* As noted previously, the funding formula for state aid for special education is based on two percentages of special education students in relation to total public school enrollment. The state funds a fixed dollar amount times a standard percentage of total
district enrollment for both mild (15%) and severe (1%) exceptionalities. Consequently, there is
great interest among districts in the actual percentages of these students enrolled in district
programs to see how they compare to the standards used in the funding formula. A strong
objection, voiced by many districts since the introduction of the new formula, is that they have
more exceptional students than the formula standards and, consequently, that they are being
treated unfairly by the formula.

To investigate this concern, the distribution of school-age special education students in
1997-98 across the school districts in Pennsylvania is examined in Table 4. For students with
mild disabilities and gifted students, over half of the districts (56%) have equal or less than the
assumed rate of 15% used in the formula. Enrollments for students with severe disabilities show
a similar, but more pronounced, pattern, with 75% of districts at or below the standard 1%
utilized in the funding formula. These data suggest that concerns that the presumed percentage
rates used in the formula are too low may be misplaced.
Table 4: Distribution of School District Incidence Rates

<table>
<thead>
<tr>
<th>Mild Disabilities &amp; Gifted</th>
<th>Severe Disabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range of % of SE Enrollments</td>
<td>Districts</td>
</tr>
<tr>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>&lt;10%</td>
<td>31</td>
</tr>
<tr>
<td>10%-12.5%</td>
<td>111</td>
</tr>
<tr>
<td>12.5%-15%</td>
<td>138</td>
</tr>
<tr>
<td>15%-17.5%</td>
<td>132</td>
</tr>
<tr>
<td>17.5%-20%</td>
<td>55</td>
</tr>
<tr>
<td>20%-30%</td>
<td>33</td>
</tr>
<tr>
<td>&gt;30%</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>501</td>
</tr>
</tbody>
</table>

The more accurate concern may be that while census-based funding limits the state’s obligation, it has little relationship to district special education spending. The purpose of Pennsylvania’s census-based funding formula is to provide state aid to school districts to support special education costs. However, the amount of state aid is primarily related to available funds in the state budget, not to any logical, analytical, or policy-driven connection to special education costs, number of special education students, or delivery of services to special education students. Rather, a primary objective of the formula seems to be limiting the state’s financial obligation for special education to a pre-specified amount in the state budget that fits within the state’s economic resources for that year.

Therefore, it appears that the districts’ focus on their actual percentages of mildly and severely disabled students in comparison to the standard percentages in the state formula may be misplaced. The amount of state aid is the product of these standard percentages multiplied by the
standard amounts. However, the standard amounts per student associated with each funding category are not related to the actual costs of educating those students. Therefore, if the formula is to remain in its current form, it is the standardized funding amounts that appear to require adjustment rather than the assumed percentage rates for special education students.

Conclusion

The fiscal impact on school districts of the census-based formula for state support of special education has been considerable. Special education costs have continued to rise at a much greater rate than costs for general education, and state aid increases have not kept up with cost increases. The result has been an increasing burden for school districts to support special education. One response by districts (and a counter-argument by state officials to district complaints) could be for districts to be more cost-effective in their provision of programs and services. However, this can be problematic in view of growing enrollments (particularly in the more costly and severe categories of disability), state and federal mandates, activities of special interest advocacy groups, and parent demands for additional services. In any event, greater district responsibility for special education costs has not substantially lowered expenditure growth rates.

The second, more typical response for districts is to request additional funding from the state to meet their increased costs and higher local tax burdens. Pressure for more aid to meet high district costs has resulted in the allocation of some additional discretionary funds from the state to districts that were able to document their plight. A more lasting and general solution is currently being sought through legislation to change the formula to provide some linkage between state aid and district costs and to establish a minimum state share of special education costs.
It is not absolutely clear what lessons other states that have, or are contemplating the adoption of, census-based funding can learn from Pennsylvania’s experience. The state’s prior system of funding special education, with 100% reimbursement, was unique, as was its very large reliance on IUs for the provision of special education services. In addition, each version of a census-based funding formula varies—for example, the federal system adjusts aid upwards in relation to state poverty.

However, one general finding from Pennsylvania may be universally applicable. A census-based formula alone, or any other state formula that simply fixes state aid to some specified amount designed to control state spending, is likely to be insufficient to hold total special education expenditures in check. While the principle of allocating more of the responsibility for funding special education to districts may help control costs, especially compared to Pennsylvania’s prior system of 100% reimbursement, it is unlikely to fully curb rising costs given the many factors causing them to rise. As seen in Pennsylvania, the result of rigid controls on state spending is often a growing reliance on local funds to support special education.

This increased reliance on local revenues to support special education is perhaps the major factor driving unrest with Pennsylvania’s census-based formula. However, it should be recognized that growing reliance on local revenues to support special education can occur under any type of state funding system, and appears to be happening in many states irrespective of the type of funding system in place. A state commitment to assist districts directly in controlling rising special education costs and in maintaining its fair share of these costs is likely to be a critical element in local acceptance of any approach to state special education funding.
References


10 See Parrish chapter in this volume.