Children in Special Education

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Twenty-five years ago educational services for children with disabilities were frequently fragmented, underfunded, highly segregated, and unreliable. Public schools were often ill prepared and unwilling to provide special and necessary services to children with disabilities. Over the past two decades, efforts to provide an appropriate education for children with disabilities in America—through a series of state statutes, federal court cases, and federal laws—have led to the development of a large special education system to address the needs of these children. This journal issue focuses on the development of that special education system and examines its components, its strengths and weaknesses, and the areas in which improvement is needed. This Child Indicators article examines some of the key federal statistics on the provision of special education services for children with disabilities.

Statistics have played a part in shaping special education policy. A highlight of congressional hearings in the 1970s was the finding that 2.5 million children with disabilities in this country were not receiving an education appropriate to their needs, while almost 2 million others were receiving no education at all.1 As described by Martin and Martin in this journal issue, congressional response to such statistical evidence of underservice of the disabled included passage of Public Law 94–142, the Education of All Handicapped Children Act, which required that all students with disabilities receive a free public education appropriately tailored to their individual needs. A key element of this statute and its successors was that federal funding be provided to states for special education services based on state reports of the number of students with disabilities receiving special education and related services. This and other aspects of federal legislation have fostered the development of a data collection system to monitor the provision of special education services to disabled students by local and state educational agencies.
This article examines data collected by the federal Office of Special Education Programs (OSEP) on the identification and classification of special education students. These data are used throughout this journal issue, but a key question raised in this article is whether these data can be used to determine if the special education system is adequately and appropriately serving the nation's population of disabled children. The analysis suggests that the OSEP count data, by themselves, do not indicate how many children have disabilities and what types of disabilities they have; and although the data quantify the number of children receiving services, they cannot be used to evaluate whether the services received are appropriate for those children’s needs.

The federal data do, however, show large variations in the numbers and proportions of children who are served in special education programs over time and across jurisdictions. OSEP data indicate a large increase in the number of children served in special education programs since the 1976–77 school year. Much of the increase appears to be the result of an increase in the number of children classified as having specific learning disabilities, a classification that is not well defined and is under considerable debate. Despite the overall growth trend, the proportion of children who are in special education varies by state, from 5% of children in special education in Hawaii to 11% in Massachusetts. In addition, different states use different classification systems to describe children in special education programs. Because of these differences, population-based data on the prevalence of disabilities among children would be helpful in determining the actual number of children who might benefit from special education services. The prevalence data could be compared with the OSEP count data to assess in gross terms the adequacy of special education services delivered to children with disabilities. But because of methodological problems, available national surveys do not provide reliable information on the prevalence of different conditions.

Data on Special Education

Most nationally representative information on identification and classification in special education comes from administrative data collected by the Office of Special Education Programs (OSEP) in the United States Department of Education. Data are collected as part of the requirement under the federal formula grant programs for special education. Until late in 1994, the two major formula grant programs related to special education—the Part B State Grant Program under the Individuals with Disabilities Education Act (IDEA, Public Law 94–142) and Title 1 of the Elementary and Secondary Education Act (ESEA)—were administered separately. As a result, until 1995 federal data on participation in special education were collected in two separate streams, and the data were combined each year in a report to Congress.3

Children in special education, as represented by OSEP data, are those who have individualized education programs (IEPs) and participate in special education programs designated for the disabled under the Individuals with Disabilities Education Act (IDEA). However, the OSEP data do not include children served in Title 1 compensatory education programs for the disadvantaged or those nondisabled low achievers receiving remedial education. Moreover, the data do not include all disabled children because some children who are found to be disabled are determined not to be in need of special education services.3

Federal special education legislation (including the IDEA and ESEA) requires that each state educational agency conduct an annual count of the number of children...
served on December 1 of each year and send the results to the Office of Special Education Programs. Each state collects the data to satisfy this reporting requirement in its own way—Hawaii, for example, routinely keeps information on all children in special education at the state level, while other states receive summary reports from individual school districts or schools. The summary reports generally include the number of children served, broken down by disability category (with the exception of preschool-age children), educational setting, and other related variables. Because federal grants for the following year are allotted based on the count of the number of children in special education programs, states are motivated to count each child who is receiving services. However, the details of the OSEP counts, such as the number of children with specific disabilities discussed below, are not tied to federal funding so reporting is likely to be less consistent across states.

Each year, states are asked to report the number of children identified in each of the 13 IDEA disability categories and receiving special education services. These categories represent the disabled children who are entitled to special education under the IDEA. The 13 categories are:

1. Specific learning disability
2. Speech or language impairment
3. Mental retardation
4. Serious emotional disturbance
5. Multiple disabilities
6. Hearing impairment
7. Deafness
8. Orthopedic impairment
9. Other health impairment
10. Visual impairment or blindness
11. Autism
12. Traumatic brain injury
13. Deaf-blindness

OSEP provides disability classifications to be used in reporting and in determining eligibility for services. However, federal legislation does not require the use of standard disability categories in states’ internal operations, and there are variations in the operational definitions of disability categories used by states. Massachusetts, for example, does not collect data on which children fall into which disability category because the state uses only a single category for all children with disabilities. The state, however, provides OSEP with estimates for the proportion of children in special education by disability category. Most states use the federal categories only to determine eligibility and use other criteria (such as measurements of the child’s level of functioning in a classroom setting) to determine which services a child receives. Reporting of children in the disability categories may also be inconsistent because of state level financial incentives. Some states provide different amounts of funding to school districts for children in different disability categories. This practice provides the school districts with an incentive to classify children in higher yield groups.

Changes in the Number of Children Served

During the 1993–94 academic year, more than 5.3 million children from birth through 21 years of age received special education, according to data compiled by OSEP. Since 1976–77, the first year for which data on children served in special education under federal statutes was reported by OSEP, the number of children served annually has increased by 1.6 million, almost 45%. Figure 1 presents data on the number of children served in selected disability categories from 1976 to 1993 and illustrates the persistent annual increase in the number of children served in special education programs. The substantial growth in the number of children served cannot be explained by growth in the population of children overall. In 1993–94, approximately 7.7% of all children in school received special education services compared with 4.5% in 1976–77, an increase of about 70%.

The increase in the number of children served is almost completely attributable to the growth in the number of children classified as having specific learning disabilities (SLDs), as shown in Figure 1. The number of children served in the other 12 categories actually declined between 1976–77 and
Figure 1

**Number of Children up to Age 21 in Special Education Programs by Disability Category, 1976 to 1993**

Data on this graph come from the Office of Special Education Programs and show both the increase in the number of children receiving special education services and the change in their classification over time. The decrease between 1986 and 1987 in all of the categories except preschool occurs because, prior to 1987, preschool and younger children receiving special education services were counted in the individual categories, but in 1987 they were assigned a separate category.

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1993–94, while the number of children receiving services for SLD went from just under 800,000 in 1976–77 to 2.4 million in 1993–94, an increase of 1.6 million, or 200%. Students with specific learning disabilities now account for more than half of all disabled children served and more than 5% of all students ages 6 through 17 enrolled in school.11

On its surface, the substantial increase in the number of children served in special education in the years following the enactment of several pieces of key federal legislation suggests that the legislation is working as designed to increase access to special services for disabled students. However, the substantial shifts in the identification of children with different disabilities and particularly the substantial growth in the number of children diagnosed with specific learning disabilities and the decline in the number of children in other categories have led many to view the data with skepticism.

Recent research suggests that reading disabilities may affect as much as 17% of school-aged children.14 If this prevalence estimate is correct, it may be that many are still not being served despite the substantial growth in the number of children in programs for the learning disabled.15 In addition, this research indicates that children with reading disabilities may simply be those who have the most problems reading and that they have only slightly more problems than other children who are not identified as reading disabled. In other words, children with reading disabilities do not aggregate together to form a distinct group separate from the rest of children. Because the decision about where to draw the line demarcating reading disability is a subjective one, identification and provision of services to children with reading disabilities is very much a function of the specific criteria developed to identify children with the disability. Variation in these criteria over time and cross-sectionally can lead to considerable variability in the number of children served.

### Geographic Variation in Identification

Evidence of variability in the proportion of children served in special education programs is found in Figure 2, which shows...
Figure 2

Percentage of Children Participating in Federally Funded Special Education Programs, 1993–94 School Year

This map shows the percentage of children from age 3 to 21 who were served in special education programs with funding from the Individuals with Disabilities Education Act, Part B, and children from birth to age 21 served under Chapter 1 of the Elementary and Secondary Education Act.

- Nearly 8% of children up to age 21 received special education services nationwide in 1993–94, but there is significant variation among the states in the proportion of children who are in special education.

- Massachusetts had the highest proportion of children receiving services, with 11% of children enrolled in special education. Hawaii had the lowest rate, with 5% of children in special education.

for each state the proportion of children up to age 21 receiving special education. Although in the 1993–94 school year 8% of children were served in federally funded special education programs, there was significant variation among the states in the proportion of children participating in special education programs. On the extremes, 11% of children up to age 21 in Massachusetts participated in special education programs, while in Hawaii 5% were enrolled in such programs.

Several reasons have been postulated for these differences. Because education is largely a state concern, states differ in their implementation of the special education laws on factors such as operational definitions of disabilities, referral practices, testing guidelines, the composition of evaluation committees, the strength of special interest groups, the availability and cost of services, and the acceptability of particular classification categories. Because the federal government leaves control of eligibility decisions to the states, states define for themselves which children are eligible for special education services and fit into particular disability categories. Thus, a child who might be identified as both eligible for and requiring special education in one state might not be identified that way in another. These practical differences in implementation are likely to account for a large portion of the variability in the identification of special education children and are to be expected given the decentralization of education in the United States. (See the article by Reschly in this journal issue for further discussion of identification practices.)

Other factors are likely to add to the variation. Differences in funding formulas may play a part. If local education departments are given set amounts of special education funding by the state each year, they may have an incentive to identify children who can use the resources that are earmarked for that purpose. In Illinois, for example, state special education dollars can be spent only on special education children. Another possibility is that there may be actual differences in the populations of children among states. Many disabilities are related to early health problems such as low birth weight, prenatal substance use, or unsafe or poor living conditions. Therefore, areas of the country that have higher rates of those health and safety problems may have higher concentrations of disabled children.

The variation in actual identification rates of children needing special education is probably a result of some combination of all of these influences, but the relative importance of the different factors is unknown.

**Geographic Variation in Disability Classification**

Children who are placed in special education are usually divided into groups by disability during their initial evaluation, a process called “classification.” As mentioned above, although the Individuals with Disabilities Education Act has 13 official subcategories for special education participants, states are required to use them only for determining eligibility for services and for reporting. Some states choose to use the federal categories in providing services, while others, such as Massachusetts, do not categorize children at all after the eligibility process is complete. This seemingly small allowance in classification criteria permits great diversity in the labels and definitions used across the country and makes comparisons difficult. It also may account for some of the state-by-state variation in the proportion of children served in special education shown in Figure 2 and in the proportions classified in specific categories.

In Figure 3, the states are divided into five groups (quintiles) according to the proportion of children in each state receiving special education services. Approximately 6.8% of children are in special education in the 10 states in quintile one and almost 10% in quintile five. It appears that the relatively small proportion of children with physical disabilities (included in the “other disability” category) and the proportion of children classified as mentally retarded remain fairly
Figure 3

**Percentage of Resident Population Age 6 to 21 in Special Education by Disability and by Quintile of the Percentage of Children in Special Education, 1993-94 School Year**

For this graph, the states were divided into five groups (quintiles) by the proportion of children receiving special education services in the state. The 10 states with the lowest proportion of children in special education are in quintile 1, and the 10 states with the highest proportion of children in special education are in quintile 5.

- As the proportion of children in special education goes up, the proportion of children with physical disabilities (included in the “other disability” category) remains fairly constant. However, the proportion of children in the learning disabilities category increases substantially, from 3.5% of children in the first quintile to 5.3% of children in the fifth quintile.

- These differences by quintile show that the variation in the proportion of children in each category is largely explained by the categories that are more difficult to define, such as learning disabilities and serious emotional disturbance.

constant as the proportion of children in special education varies. The proportion of children with specific learning disabilities, however, gradually increases from 3.5% in the first quintile to 5.3% in the fifth, and the proportion of children in the speech impairment category also increases. On the other hand, the proportions of children with multiple disabilities and serious emotional disturbances, while greater in quintile five than in quintile one, do not consistently increase across quintiles.

Even among states that have similar proportions of their child population in special education, the classification of children varies. For example, California and Georgia had similar proportions of children in special education in 1993–94 (6.3% to 6.4%), and yet more than 3.8% of California students are classified as having a specific learning disability, a rate twice that reported for Georgia (1.6%). And while 1.1% of Georgia’s students are classified as seriously emotionally disturbed, only 0.2% of students in California are classified in that category.9

Because the percentage of children classified in different categories varies so much across states and also across school districts,16 it appears that where a child lives affects what label he or she receives and whether he or she will receive any services at all. Concern about classification reflects the strong and lasting stigma that labels may produce,20 as well as the importance of identification and classification in obtaining access to appropriate special education services. Concern about variation in identification and classification of students across states and school districts leads to questions about how useful the OSEP data are in monitoring the national special education system. Population-based epidemiologic studies of the school-aged population that do not rely on school placement data would be helpful in providing benchmarks with which the OSEP data could be compared to assess the extent to which students were being appropriately identified and served.

**Comparison of OSEP Data with Data from National Surveys**

Various national surveys and studies including the Current Population Survey (CPS), the National Health Interview Survey Child Health Supplement (NHIS/CH), High School and Beyond, and the National Education Longitudinal Study of 1988 have all been used to supplement OSEP data in an attempt to better estimate the number of students with disabilities in the population.21 Because the criteria used to identify students with disabilities have varied across these data collection efforts, prevalence estimates from different sources may vary for largely technical reasons. With this important caveat in mind, Table 1 compares data based on parent reports of children with and receiving services for disabilities from the 1988 NHIS/CH and the 1992 CPS with OSEP data for corresponding years.

The 1988 NHIS/CH was a national survey of 17,110 children. Data collection was by in-person interviews with informed adults (usually mothers), and all data are based on the report of the adult respondent.22 Parents were asked a number of questions about whether the child ever had various kinds of disabilities and whether the child received services for the condition in the past 12 months.

The CPS is a large on-going population survey conducted by the Bureau of the Census. Data from this survey reported in Table 1 are from the 1992 October supplement to the CPS on school enrollment.23 The data reflect parental responses to a single question about whether children have ever had any of a list of 10 disabling conditions. The 10 conditions correspond to the 10 largest OSEP disability categories.

The selective comparisons of some of the larger categories in the national surveys and the OSEP data reveal several inconsistencies and do not yield generalizable conclusions. For 1988, parents in the NHIS/CH report a higher proportion of children in special education for learning disabilities and emotional problems than schools report in the 1988–89 OSEP data. Parents also reported

Where a child lives affects what label he or she receives and whether he or she will receive any services at all.
### Table 1

<table>
<thead>
<tr>
<th>Source of Data/Report</th>
<th>Delays in Growth or Development (Mental Retardation)</th>
<th>Learning Disability</th>
<th>Emotional or Behavioral Problems</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Parent: NHIS/CH 1988</strong></td>
<td>3.9%</td>
<td>7.8%</td>
<td>6.9%</td>
</tr>
<tr>
<td>Percentage of children ages 6 to 17 years who have ever had specified disability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Parent: NHIS/CH 1988</strong></td>
<td>0.9</td>
<td>5.5</td>
<td>1.7</td>
</tr>
<tr>
<td>Percentage of children ages 6 to 17 who attended special classes or a special school in past 12 months because of indicated conditions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>School: OSEP 1988-89</strong></td>
<td>1.2</td>
<td>4.5</td>
<td>0.8</td>
</tr>
<tr>
<td>Percentage of children ages 6 to 17 served under federally funded special education programs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Parent: CPS 1992</strong></td>
<td>0.7</td>
<td>4.3</td>
<td>0.9</td>
</tr>
<tr>
<td>Percentage of children ages 5 to 17 with specified disability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>School: OSEP 1992-93</strong></td>
<td>0.9</td>
<td>4.1</td>
<td>0.7</td>
</tr>
<tr>
<td>Percentage of children ages 6 to 17 served under federally funded special education programs</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This table compares data from the 1988 National Health Interview Survey Child Health Supplement (NHIS/CH) and data from the 1992 Current Population Survey (CPS) with data collected from schools by the Office of Special Education Programs (OSEP). The estimates represent the proportion of children who were reported to be in special education by parents (NHIS/CH) and by schools (OSEP), and parental reports of their children’s experience of educationally disabling conditions (CPS and NHIS/CH).

- Compared with OSEP data, parents in the NHIS/CH report a higher proportion of children in special education for learning disabilities and emotional problems. Parents also report substantially higher rates of children experiencing these problems than were being served at the time of the survey.
- In the CPS, parents report rates of disabilities similar to those of the school reports of services from OSEP for 1992–93.
- There are substantial differences in the proportion of children reported by parents to have disabilities in the 1988 and 1992 surveys. Since the prevalence of disabilities could not have changed so dramatically between 1988 and 1992, other factors, perhaps specific to the surveys themselves, must account for the differences.

substantially higher rates of children experiencing these problems than were being served at the time of the survey. In comparison, estimates of the proportion of children with selected disabilities based on parental reports in the 1992 CPS match the OSEP data fairly closely. There are, however, substantial differences in the proportion of children reported by parents to have disabilities in the 1988 and 1992 surveys. It seems improbable that the prevalence of disabilities could have changed so dramatically over the four years between 1988 and 1992. It is more likely that there are other factors, perhaps specific to the surveys themselves, that account for the substantial differences between 1988 and 1992.

Exploration of the many reasons the national survey data agree with the OSEP data in one year but not in another is beyond the scope of this short article. However, based on the comparisons presented in the table, it is reasonable to conclude that national surveys of parents probably cannot be relied upon as a means of obtaining accurate information about the prevalence of disabilities requiring special education.

**Conclusion**

As this journal issue goes to press, the system of special education that has developed over the past several decades is under attack. Among the system’s critics are those who advocate for the inclusion of disabled children, principally children with mental retardation, in mainstream education. These critics focus on the stigmatization associated with some separate, special education programs and on the benefits of having children with mental retardation associate with nondisabled classmates. Fiscal considerations also play a role in the debate about special education. States and most local school districts operate with limited budgets. On average, the per-pupil cost of special education is more than twice the cost of regular education. Thus, the continual increase in the number of children in special education programs strains school budgets and decreases the amount of money available for regular education.

The processes of identifying, counting, and classifying children in special education have also come under increased scrutiny. It is argued that some disability categories are bogus and that instances of overidentification of children as disabled are frequent, particularly because the most common special education category, specific learning disability, could fit nearly anyone having some problems in school. It is not possible to determine from the annual OSEP count data reviewed in this article if children are overidentified. However, the variation in the numbers and rates of children served over time and across different jurisdictions is substantial and not well understood.

Even the concept of categorizing disabilities has been called into question. The Department of Education has recommended that, in the next reauthorization of the IDEA, a definition of disability similar to the definition in the Americans with Disabilities Act be adopted. Under this definition, a student would be eligible for special education if he or she “has a physical or mental impairment which substantially limits the major life activity of learning and who by reason thereof requires special education.” Although this definition may limit labeling of children by category, it will be subject to the vagueness and subjectivity that are cause for concern with the SLD and other categories today. Some advocates, such as the Learning Disabilities Association of America, argue that using a general category could result in “generic special education in regular education classrooms” and funding changes, which could “deny students with specific learning disabilities an appropriate education.”

**Perhaps most problematic from a monitoring standpoint is the lack of national data on the epidemiology of specific disorders and their prevalence in the population.**
enrolled in appropriate educational programs. Moreover, national population surveys that rely on parents’ reports of specific educational problems and placements have weaknesses. In a field where educators find it difficult to consistently and uniformly identify and classify children with learning problems, it is difficult to put much credence in parents’ differentiation among special education categories on a checklist. At best, the CPS, NHIS/CH, and other national survey data reflect what parents think their children’s problems may be and whether they are receiving services for the problems identified.

Because the purpose of the primary OSEP data collection system is to count the number of children in special education programs being served with federal funds, the system, unless fundamentally altered, will continue to be unable to provide national information for policymakers and educators on the appropriateness of services delivered and other complex questions. OSEP does collect other data, such as the National Education Longitudinal Survey and the National Longitudinal Transition Study of Special Education Students, which attempt to answer those types of questions, and such efforts are useful for limited purposes. However, increasing expenditures to collect additional data on the prevalence of disabilities or to perform more or better state program evaluations might assure that disabled children are getting the services they need and that children in regular education are not being shortchanged by attention to and funding for special education.

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3. Children with disabilities who are not in special education may receive other services that are available to any individual with a disability under Section 504 of the Rehabilitation Act. Marcia L. Brauen, Westat, Inc. Telephone conversation, November 16, 1995.

4. See note no. 2, Office of Special Education Programs, p. 2.

5. In 1986, Congress permitted states to provide counts of preschool-age children served by a generic category of their choosing rather than by the disability categories to which school-age children were assigned and by which they were reported. In 1991, the law was amended to allow states to incorporate an additional disability category (developmental delay) for children three to five years of age if they desired. Danaher, J. Preschool special education eligibility classification and criteria. NEC*TAS Notes (November 1992) 6:1–2.


10. See note no. 9, National Center for Education Statistics, p. 44, and Office of Special Education Programs, p. 12.

11. See note no. 2, Office of Special Education Programs, p. 7.


13. With regard to the last factor, many observers have noted that a substantial decline in the number of children classified as having mental retardation occurred simultaneously with the large increase in the count of SLD children. Part of that shift may reflect a conscious effort to avoid the stigmatizing label of being mentally retarded in favor of the more acceptable characterization of having a learning disability. While the tendency to classify as learning disabled children who would have previously been stigmatized with a diagnosis of mental retardation can explain a portion of the increase over time in children classified as learning disabled, the substitution of diagnostic categories cannot be a factor in the growth in the aggregate number of children in special education.


15. However, if all of these children were served, the states would not receive any federal reimbursement for a large proportion because the federal government will pay for special education for only up to 12% of the state's total school enrollment. See note no. 8, Verstegen, and Parrish and Verstegen.


22. See note no. 21, Zill and Schoenborn.

23. See note no. 21, Feliciano.


25. See note no. 21, Rossi, Herting, and Wolman.