

Who are the Children in Special Education?



Since the implementation of the Individuals with Disabilities Education Act (IDEA) nearly 30 years ago, legislators, educators, and parents have wanted to assess the impact of special education services for children with disabilities. Does special education work? Are growing numbers of students with disabilities graduating from school with high school diplomas? Do they continue their education beyond high school? Are they successful in finding employment? Many research studies have been conducted over the years in an attempt to answer these and other questions related to special education.

National evaluation of the IDEA is one of the ongoing responsibilities of the Office of Special Education Programs (OSEP) in the U.S. Department of Education. Currently, OSEP is funding seven national studies aimed at doing just that. One of these studies is SEELS—The Special Education Elementary Longitudinal Study.

**What is SEELS?**

SEELS is a six-year study (1999-2005) that will document the school experiences of a national sample of school-age students with disabilities. The study will follow the students as they move from elementary to middle

school and from middle to high school. SEELS will study academic perfor-

mance, school experiences, family life, social adjustment, and personal growth of each of these students. An important feature of SEELS is that it does not look at the students *at a single point in time*. Rather, it assesses change throughout the students' public education.

Information from the study will help to improve schools by informing the U.S. Department of Education, the U.S. Congress, state policymakers, parents, and educators about what works well and ways to improve educational services to better meet the needs of students with disabilities.

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## Who is in the Study?

To find students for the study, school districts across the country were first randomly selected and invited to participate in the study. These districts represented a variety of geographic locations, sizes, and community income levels. About 300 individual school districts and 40 state-operated schools for deaf and/or blind students agreed to participate. From these schools, approximately 14,000 students were randomly selected, and their parents were sent information about the study and invited to participate. Of these students, nearly 12,000, aged 6 to 12 as of December 1999, and their families agreed to participate in the study.

The students represent all the disability categories in the IDEA and comprise a variety of races, incomes, and genders. These students will be 12 to 18 years old when the study ends in 2005. All together, these students are representative of school-age children across the nation. This will allow SEELS to make valid statements about what educational and special services look like for children all over the country.

## How is Information Being Gathered?

There are three main data collection activities for SEELS, each done three times over the life of the study. These are described below.

**Parent interviews** Through telephone interviews, parents/guardians are asked to respond to questions about the school and family life experiences of their children. The first interviews were done during the summer and fall of 2000. Parents who did not have a telephone interview during the first round were mailed a written questionnaire to complete that included several of the telephone interview questions. The second round of parent telephone interviews was conducted in 2002. The final round of parent/guardian telephone interviews is scheduled for the 2003-2004 school year.

**Student assessments** SEELS learns about students' academic performance and their perception of school and learning through face-to-face assessments/interviews with each student. Professionals were hired and trained to arrange and conduct the interviews with students. If a face-to-face interview is not appropriate for a student, a person familiar with that student is asked to complete an alternative assessment of the student's ability to conduct daily activities in school and in the community. The first student assessments were done in spring 2001 and 2002. The final round of assessments will be completed in the spring of 2004.

**School questionnaires** Three types of questionnaires are sent to the schools to obtain important information about the schools, the educational experiences of each student in the study, and how they are doing in school. In spring 2002, SEELS asked schools to select one person to be a point of contact for the study. This school site study coordinator updates SEELS on student participants' enrollment, gives questionnaires to teachers, and sends transcripts (when students are in high school) to SEELS. The school questionnaires include:

**School Characteristics Survey**—(one per school) on the policies and characteristics of the school;

**Language Arts Teacher Survey**—(one per student) provides information about the students' instructional goals, classroom experiences, assessment, accommodations, social adjustment, and educational progress in their language arts classroom; and the

**School Program Survey**— (one per student), a questionnaire about the students' placements, programs, and overall progress.

## What Have We Learned So Far?

Students approach their educational experiences from complex backgrounds and histories that are shaped by personal characteristics, such as:

- age, gender, and ethnic background;
- family background and circumstances, such as parents' education, expectations, and household income; and
- the nature of the students' disabilities and how well they function.

These factors shape students' home life, experiences at school, and involvement in the community, as do the ways in which students, parents, school staff, and other service personnel work together toward positive results for students. Understanding the characteristics of students and their households is essential to understanding the many major life experiences of students and to being able to serve them well.

Below are some initial findings obtained from parents' interviews that tell us more about the personal characteristics of the students and their families.



## Disabilities

In 2000, SEELS found that youth receiving special education services made up 11% of *all* students between the ages of 6 and 13.

Of these special education students:

- 75% were classified as having either learning disabilities or speech/language impairments as their primary disabilities.
- 9% of students were classified with mental retardation.
- 6% were classified with emotional disturbances.
- 5% were classified with other health impairments.

Students in each of the other disability classifications represented fewer than 2% of all students with disabilities. When combined, these other categories comprised about 6% of students receiving special education.

When findings are presented for students with disabilities as a whole, the experiences of students with learning or speech/language disabilities are largely represented. Because the vast majority of students with disabilities are students with learning or speech/language disabilities, it is important to look closely at the results for each disability category.

## Gender

Among the general population of students in grades 1-8, boys and girls are represented in about equal numbers (U.S. Census Bureau, 1999).

Of special education students in the SEELS study, two-thirds are boys. Boys also comprise more than half of the students in each disability category.

There are more girls with mental retardation (12%) than boys (7%).

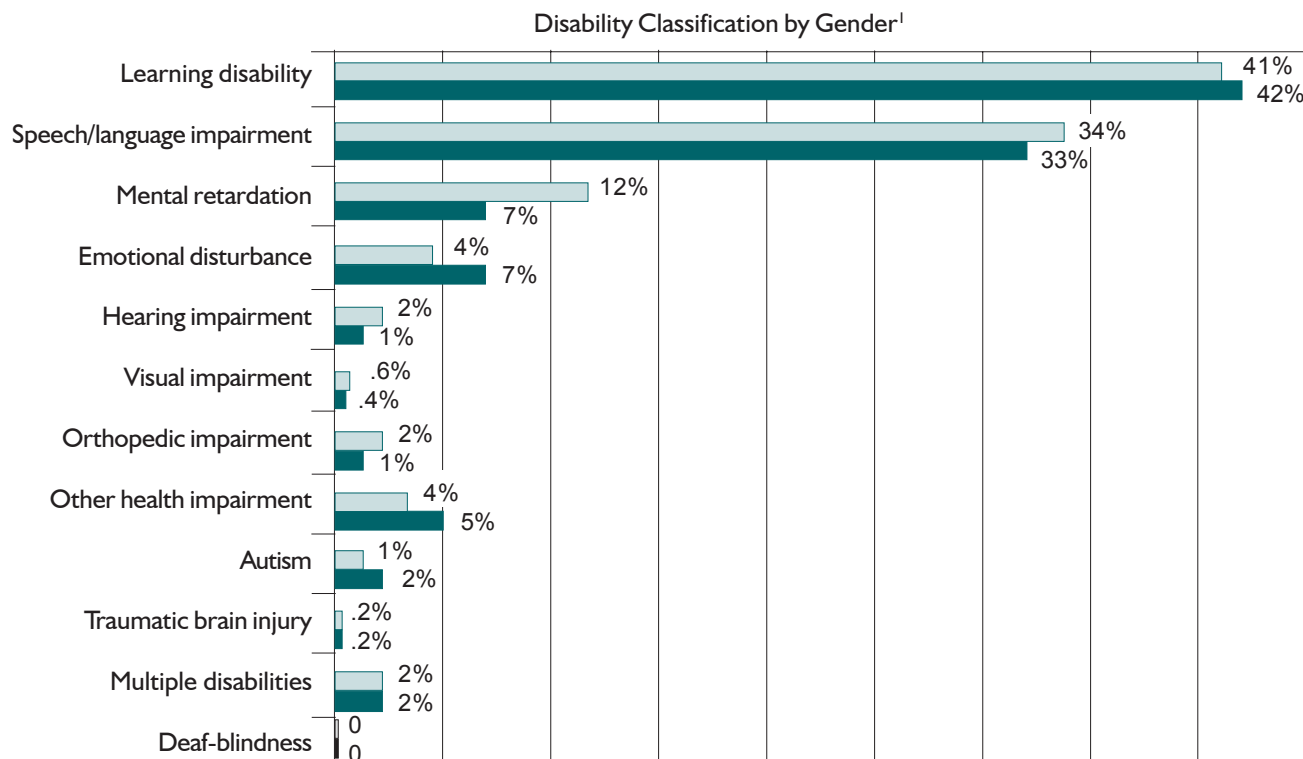
There are more boys with emotional disturbance (7%) than girls (4%).

The greater number of boys than girls receiving special education appears in all racial/ethnic groups.

Some research has suggested that the higher proportion of boys among elementary and secondary school students receiving special education may be because schools use identification and assessment practices that inaccurately identify boys, more often than girls, as having certain kinds of disabilities (Shaywitz & Shaywitz, 2001). However, the National Early Intervention Longitudinal Study (NEILS), a national study of children birth to 3 years of age with disabilities, developmental delays, or who are at risk of delay, found a similarly high percentage (61%) of boys among infants and toddlers with disabilities (Hebbeler et al., 2001).

The greater number of boys among children with disabilities appears at very early ages, before school practices come to bear. The pattern is the same for all the age groups within SEELS and is the same for high school-age students (Wagner et al., 2002).

Whatever the reason for the greater number of boys among students receiving special education, it is important to understand that the research findings about experiences of special education students, as a group, are dominated by the experiences of boys.



<sup>1</sup> Wave I Parent Interview/Family Survey, 2000. Sample size: Girls=3,226; Boys=6,434



## Age

As stated above, 75% of the students in the study are classified as having either a learning disability or a speech/language impairment as their primary disability. Children in the younger age group (6 to 9) are more likely to be identified as students with a speech/language impairment (47%). Older students (ages 10 to 13) are more often identified as having a learning disability (54% to 56%).

There are a number of factors involved in this finding. First, speech/language impairments are frequently apparent from very early ages.

A learning disability, sometimes referred to as the "hidden disability," is not so readily apparent, often surfacing only after children reach school age and encounter difficulties in the academic learning process (Smith, 1995). Further, research tells us that early identification of a speech/language impairment in preschool-aged children *can be* an early indicator for a later diagnosis of learning disability (Aram, Ekelman, & Nation, 1984; Catts, 1993).

Among the other disability categories, children with emotional disturbance tend to be older. In fact, research has shown that the emotional disturbance category has a sizable number of students identified for the first time during adolescence (Marder & Cox, 1991). Differences in experiences between older and younger students may well be explained by the considerable variation in prevalence of certain disability types within the different age groups.

## Health

The ability of students to participate in daily activities at school and at home is affected in many ways by their general health. Frequent or chronic illness can cause absenteeism from school. Missing important parts of the school curriculum and other learning opportunities can significantly frustrate student learning and performance. Poor health can also limit activities outside of school, which can hamper development of social relationships and opportunities to develop personal interests and skills.

To assess the general health of students with disabilities, parents were asked to rate their child's health as "excellent," "very good," "good," "fair," or "poor." Almost three quarters of the children were reported to have "very good" to "excellent" health. However, 15% were reported to have "good" health and 10% were reported to have only "fair" or "poor" health."

As a group, students with disabilities are somewhat less healthy than their nondisabled peers. Eighty-two percent of children in the general population who were under 18 years of age were reported to have very good or excellent health (Federal Interagency Forum on Child and Family Statistics, 2001), compared to 72% of students with disabilities in the SEELS study.

Given the generally poorer health of children with disabilities relative to other children and the significant health care needs of children with particular kinds of disabilities, health insurance is an important support for children with disabilities. Almost 92% of children with disabilities in the SEELS study have medical insurance. This rate is slightly higher than the rate for children ages 6 to 11 in the general population (87%). However, the type of insurance differs between the two groups. While 74% of children in the general population have private health insurance, the rate is 65% for children with disabilities in this study. Conversely, a greater percentage of children with disabilities (26%) participate in government health insurance (e.g., Medicaid and Medicare), than do children in the general population (19%). These differences are consistent with the higher rate of low-income children among those with disabilities.

Of those who are insured, 55% have managed health care provided by a health maintenance organization (HMO). Managed care is a much more common form of insurance among children with private health insurance (60%) than those with government insurance (41%).

There are no differences in health insurance coverage related to the child's disability. Very few parents (3%) reported having to change insurance plans or buy extra insurance because of their children's disabilities. More parents (13%) have encountered refusals by insurance companies to cover services or items related to children's disabilities, such as diagnostic services and speech or physical therapies. SEELS found that refusals to pay were more common for families with private health insurance, than for those with government-insured children. This was also true for those who had managed care versus those with non-managed care coverage.

## Household Income

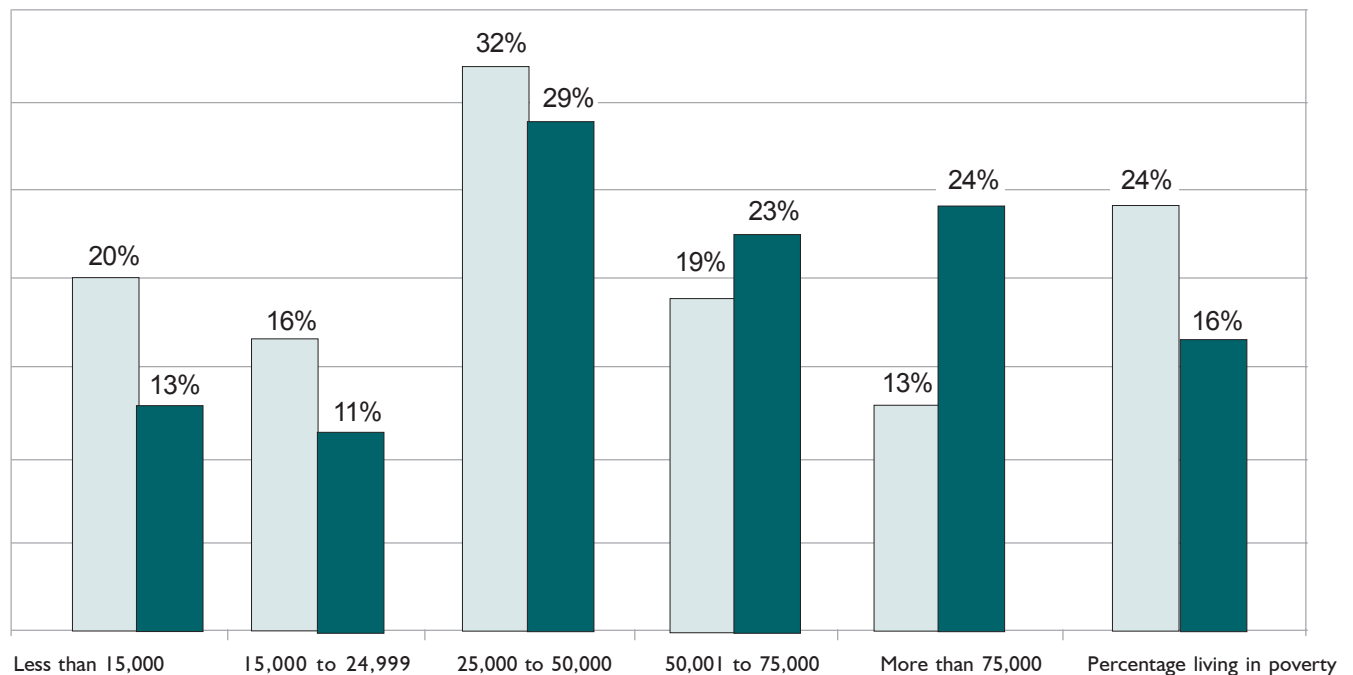
The influences of a family's economic status on the well-being of its children and on the children's prospects for the future can hardly be understated. SEELS findings, summarized in the graphic below, confirm the results of earlier research that children and youth with disabilities are more often affected by poverty.

Almost 20%, or 1 in 5 children with disabilities are living in households with annual incomes of less than \$15,000. Compare this with 12.5%, or 1 in 8 children in general-population households.

When the two lowest income categories are combined, the difference is even larger; 36% of students with disabilities live in households with incomes of \$25,000 or less, compared with 24% of children in the general population.

Almost twice as many children in the general population live in more affluent households with incomes of more than \$75,000 compared to children with disabilities. Added to the challenges

Household Income of Students with Disabilities and Students in the General Population



(a) Income in 1999 of households of children with disabilities ages 6 to 13.

(b) Income in 1997 of households with children ages 6 to 17.

Source: U.S. Bureau of the Census

■ Students with disabilities (a)

■ Students in the general population (b)

associated with disability, the negative effects of poverty can limit the chances of success for children with disabilities.

## What Does All This Mean?

These initial findings from SEELS give a demographic overview of school-age children with disabilities. In essence, it tells us basic information about the children in special education and their families.

We do not, as yet, know the implications, if any, of personal characteristics on the effectiveness of special education for these students. As the study progresses and children move through the school system, more information on their growth and performance will become known. We expect to see connections that demonstrate the interplay of all factors, personal and school, that affect a child's success.

SEELS is collaborating with other U.S. Department of Education studies, such as the NEILS and the National Longitudinal Transition Study-2 (NLTS2). Information from all three studies is available at these Web sites:

SEELS: [www.seels.net](http://www.seels.net)

NEILS: [www.sri.com/neils/](http://www.sri.com/neils/)

NLTS2: [www.nlts2.org/](http://www.nlts2.org/)

More findings from the SEELS study will be made available on the SEELS Web site in the near future. Please visit the SEELS site for complete reports from the study. Findings will be continuously updated and expanded through 2005.

## REFERENCES

- Aram, D., Ekelman, B., & Nation, J. (1984). Preschoolers with language disorders: 10 years later. *Journal of Speech and Hearing Research*, 27, 232-244.
- Catts, H.W. (1993). The relationship between speech-language impairments and reading disabilities. *Journal of Speech and Hearing Research*, 36, 948-958.
- Federal Interagency Forum on Child and Family Statistics (FIFCFS). (2001). *America's children: Key indicators of well-being, 2001*. Washington, DC: Author.
- Hebbeler, K., Wagner, M., Spiker, D., Scarborough, A., Simeonsson, R., & Collier, M. (2001). *A first look at the characteristics of children and families entering early intervention services*. Menlo Park, CA: SRI International.
- Marder, C., & Cox, R. (1991). More than a label: Characteristics of youth with disabilities. In M. Wagner, L. Newman, R. D'Amico, E.D. Jay, P. Butler-Nalin, C. Marder, & R. Cox, *Youth with disabilities: How are they doing?* Menlo Park, CA: SRI International.
- Shaywitz, S.E., & Shaywitz, B.A. (2001). The neurobiology of reading and dyslexia. *Focus on Basics*, 5, 11-15.
- Smith, S. (1995). *No easy answers* (Rev. ed.). New York: Bantam.
- U. S. Census Bureau. (1999, October). *Current population survey*. Washington, DC: U.S. Department of Commerce.
- Wagner, M., Levine, P., Cameto, R., Cadwallader, T.W., Marder, C., & Blackorby, J., with Cardoso, D. (2002, June). *The individual and household characteristics of youth with disabilities: A report from the National Longitudinal Transition Study-2 (NLTS2)*. Menlo Park, CA: SRI International.

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