

Patterns in the Identification of and Outcomes for Children and Youth With Disabilities

Executive Summary

Patterns in the Identification of and Outcomes for Children and Youth With Disabilities

Executive Summary

January 2010

Jose Blackorby
Ellen Schiller
Sangeeta Mallik
Kathleen Hebbeler
Tracy Huang
Harold Javitz
Camille Marder
Katherine Nagle
Debra Shaver
Mary Wagner
Cyndi Williamson
SRI International

Yumiko Sekino
Project Officer
Institute of Education Sciences

U.S. Department of Education

Arne Duncan

*Secretary***Institute of Education Sciences**

John Q. Easton

*Director***National Center for Education Evaluation and Regional Assistance**

John Q. Easton

Acting Commissioner

January 2010

This report was prepared for the National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, under contract no. ED-04-CO-0040/0007 with SRI International.

This report is in the public domain. Authorization to reproduce it in whole or in part is granted. While permission to reprint this publication is not necessary, the citation should read: Blackorby, J., Schiller, E., Mallik, S., Hebbeler, K., Huang, T., Javitz, H., Marder, C., Nagle, K., Shaver, D., Wagner, M., and Williamson, C. (2010). *Patterns in the Identification of and Outcomes for Children and Youth With Disabilities. Executive Summary* (NCEE 2010-4006). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education.

IES evaluation reports present objective information on the conditions of implementation and impacts of the programs being evaluated. IES evaluation reports do not include conclusions or recommendations or views with regard to actions policymakers or practitioners should take in light of the findings in the report.

To order copies of this report,

- Write to ED Pubs, Education Publications Center, U.S. Department of Education, P.O. Box 1398, Jessup, MD 20794-1398.
- Call in your request toll free to 1-877-4ED-Pubs. If 877 service is not yet available in your area, call 800-872-5327 (800-USA-LEARN). Those who use a telecommunications device for the deaf (TDD) or a teletypewriter (TTY) should call 800-437-0833.
- Fax your request to 301-470-1244 or order online at www.edpubs.org.

This report is also available on the IES website at <http://ncee.ed.gov>.

Alternate Formats

Upon request, this report is available in alternate formats, such as Braille, large print, audiotape, or computer diskette. For more information, call the Alternate Format Center at 202-205-8113.

Acknowledgments

This study was a collaboration among technical and support staff at SRI, technical experts, and Institute of Education Sciences staff. The range and complexity of the many different data sources relating to the research questions as well as student age levels created a study that was both technically and logistically complex. This study was made possible only by the collective contributions of a large group of people. The listed authors were a small part of the project team. The authors acknowledge the important contributions of the following individuals:

- The technical working group—Elaine Carlson, Mark Innocenti, Mary McClean, Martha Thurlow, and Jim Ysseldyke provided valuable insights and guidance on analytic strategies and on early versions of the report.
- SRI—Mary McCracken, Cyndi Williamson, Ethan Miller, and James Van Campen contributed invaluable programming, data analysis, and data display expertise throughout the study. The production team of Roxanne Jones, Doris Perkins, Bonnee Groover, Ascencion Villanueva, and Wanda Washington worked tirelessly to produce and coordinate the production of tables, graphs, and text formatting. Careful and thoughtful editing support was provided by Meredith Ittner, Mimi Campbell, and Kathryn Morrison.

DISCLOSURE OF POTENTIAL CONFLICTS OF INTEREST

The research team for this study consists of key staff from SRI International. The organization and the key staff members do not have financial interests that could be affected by findings from the study. None of the members of the Technical Working Group, convened by the research team to provide advice and guidance, have financial interests that could be affected by findings from the study.

Executive Summary

Patterns in the Identification of and Outcomes for Children and Youth With Disabilities

Reported here are the results of analyses to describe the patterns of identification and academic and developmental outcomes for children with disabilities, conducted as part of the 2004 National Assessment of the implementation of the Individuals with Disabilities Education Act (IDEA). This report provides background context for National Assessment studies on program implementation and effectiveness. It provides a national description of the outcomes of children identified for services under IDEA and, as appropriate, in comparison with the outcomes of samples including their nondisabled peers. The results are presented by the age groups that correspond with a federal and local emphasis on children younger than school age and in elementary, middle and high schools, ages 0–3, 3–5, 6–9, 10–13, and 14–17. Further, the findings are reported across a 10-year time frame as well as for a single time point, describing a comprehensive picture of identification patterns and outcomes for each age group. Finally, extant data sources were used for analysis rather than costly new data collection. This report objectively presents descriptive findings from these analyses and provides relevant contextual information, such as the legislative background on IDEA. This study was not designed to assess how outcomes presented in this report are affected by identification or declassification practices, nor is it designed to measure impacts of IDEA services on child outcomes.

Legislative Background

Since the 1960s, federal legislation has focused on educating children with disabilities, providing grants to improve education and services for the children and their families. In 1975, the Education of All Handicapped Children Act (EHA), also called Public Law 94-142, ensured that children and youth ages 3 through 21 with disabilities have equal access to an education. Through this law, the federal government offers grants to states to help support the direct services provided for children determined to be eligible under the law to receive a “free appropriate public education” (FAPE) in the general education environment “to the maximum extent appropriate.”

In a series of reauthorizations of this landmark legislation over the subsequent three decades, other provisions were added, including provision of federal funding to support services to 3- to 5-year-olds and infants and toddlers (ages birth through 2 years) with disabilities (P.L. 99-457). In 1990, P.L. 101-476 renamed the EHA as the Individuals with Disabilities Education Act (IDEA) and extended the law to support youth with disabilities in the transition to young adulthood. The reauthorization of IDEA in 1997 (P.L. 105-17) placed greater emphasis on improving students’ inclusion in accountability systems, giving them access to the general education curriculum, and improving their academic performance, including improving the developmental outcomes for infants and toddlers.

The most recent reauthorization of IDEA in 2004 (P.L.108-446) brought further evolution in the law. Although IDEA 2004 continues to ensure all children with disabilities receive a “free appropriate public education” (FAPE), amendments affected state and local policies by stipulating that children with disabilities *make progress* in the general education curriculum and

improve their academic and developmental outcomes. The 2004 reauthorization was aligned more clearly with the guiding federal legislation, the No Child Left Behind Act of 2001. Specifically, states are expected to align their performance goals and indicators for children with disabilities with their definition of adequate yearly progress (AYP) and report on graduation rates and drop-out rates. Children with disabilities are expected to participate in state assessment systems and demonstrate continued improvement and progress in their academic outcomes, including those students who take an alternate assessment. States publicly report on children with disabilities' participation and progress toward meeting state goals on the assessments with the same frequency and detail as for children without disabilities. For children receiving early intervention and preschool services under IDEA, greater emphasis is on targeting developmental and academic outcomes, including preliteracy and language skills, as specified in the Individualized Family Service Plan (IFSP) or Individualized Education Program (IEP).

IDEA 2004 also made changes affecting who could be served with IDEA funds. First, local education agencies can use a portion of the IDEA funds to provide early intervening services in grades K through 12 for students struggling with and needing additional academic and behavioral supports to succeed in the general education environment. Second, states are required to establish policies to prevent inappropriate overidentification by race and ethnicity of children with disabilities and to collect and examine data to determine whether significant disproportionality on the basis of race and ethnicity exists in the state and districts.

To implement the law, federal funds supplement state and local funds. Part C of IDEA provides states with grants to support early intervention services for infants and toddlers from birth through age 2 and their families. Part B, Section 619, provides states with funding specifically to support special education and related services for preschool-age children, ages 3 through 5. Part B, Section 611, provides grants to support states' special education services for school-age students, ages 3 through 21.¹ The total formula grants to states have increased in current-year dollars from \$3.78 billion in fiscal year (FY) 1997 to \$11.76 billion in FY 2008. In addition to the FY2009 annual formula grants, \$12.20 billion in IDEA funding was provided to States through the American Recovery and Reinvestment Act of 2009 (P.L. 111-5, also known as ARRA or the Recovery Act). To obtain these resources, states submit to the U.S. Department of Education (ED) their applications, which include assurances regarding how the State identifies children who are eligible for IDEA services, and ensures the provision of appropriate services to children with disabilities. States vary in the ways that they implement both the identification of eligible children with disabilities and the provision of IDEA services.

National Assessment of IDEA

Since its inception in 1975, IDEA has included provisions for collecting information on the implementation and impact of the law and reporting findings annually to the U.S. Congress. In subsequent reauthorizations of IDEA, Congress added provisions to conduct national assessments to evaluate service implementation and outcomes for children. For example, in response to the call for a National Assessment in the 1997 reauthorization, the U.S. Department

¹ Of the two remaining subparts of the law, Part A states the purposes of IDEA, including definitions of key concepts. Part D authorizes a discretionary program, the *National Activities to Improve Education of Children With Disabilities*, designed to support the implementation of IDEA, including research, technical assistance and dissemination, state improvement grants, and training personnel to educate students with disabilities.

of Education funded a portfolio of special studies including four longitudinal child-based studies² on specific age groups and three topical studies addressing key issues in special education.³

The 2004 reauthorization of IDEA also called for a National Assessment to measure the implementation progress of IDEA and the relative effectiveness of the law in achieving its purpose (Section 664(b)). The 2004 National Assessment was intended to build on work conducted under the National Assessment required by IDEA 1997 and to conduct new studies as appropriate. In response, the National Center for Education Evaluation at the Institute of Education Sciences (IES) initiated a design study advised by practitioners, researchers, and evaluation experts to develop research questions and approaches to address the goals for the 2004 National Assessment (Fiore et al. 2007). The design study translated the topics identified in the law into specific research questions. Information generated from answering the research questions through this National Assessment was intended to help federal policymakers and state and local administrators implement the law more effectively and to help federal policymakers shape future legislation regarding infants, toddlers, preschoolers, children, and youth with disabilities.

By December 2009, IES initiated six studies as part of the 2004 National Assessment: (1) analyses of extant data to provide descriptive information on the patterns in the identification of and outcomes for children with disabilities as background for subsequent studies on program implementation and effectiveness of services, (2) a study on state and district implementation of policies and practices for children with disabilities, (3) an evaluation study of the Personnel Development Program, (4) an evaluation of Response to Intervention strategies in elementary reading, (5) a study of school improvement status as it relates to students with disabilities, and (6) an evaluation of the Technical Assistance and Dissemination Program. SRI International was charged with conducting the first study, and findings from it are the subject of this report.

Patterns in the Identification of and Outcomes for Children and Youth With Disabilities

The topics of this study were (1) identification of children for early intervention and special education, (2) declassification of children who were no longer eligible for early intervention and special education services, and (3) outcomes for children identified for services under IDEA. Under an earlier contract, a design team had reviewed sources of national data already collected on special education and early intervention through other studies or as part of ongoing data collection systems, identified the sources that could be useful in addressing these three topics, and determined which topics were likely to be addressed with the available data and which would require collecting new data (Abt Associates and Westat 2007). Building on the work of the design team, this study addressed the following research questions using the extant data—

² These were the National Early Intervention Longitudinal Study (NEILS), examining children birth through age 2 and their families who received early intervention services; the Pre-Elementary Education Longitudinal Study (PEELS), addressing children receiving preschool special education services; and the Special Education Elementary Longitudinal Study (SEELS) and the National Longitudinal Transition Study-2 (NLTS2), which focused on 6- through 12-year-olds and 13- through 16-year-olds, respectively, who were receiving special education services when the studies began. (Details on these studies are in the Methodological Approach section of chapter 1 and appendix A.1).

³ These were the Study of State and Local Implementation of IDEA (SLIDEA), the Study of Personnel Needs in Special Education (SPeNSE), and the Special Education Expenditure Study (SEEP).

that is, data already collected through other studies or as part of ongoing data collection systems—as a cost-effective means of addressing the following descriptive research questions for the National Assessment:

Key questions related to *identification*:

- What is the percentage of children identified for early intervention and special education services under IDEA? What is the variation in the percentage identified over time and by age, gender, race/ethnicity, and disability categories?
- What is the variation across states and over time in the percentage of children identified for early intervention or special education services under IDEA?

Key questions related to *declassification*:

- What percentage of children identified for early intervention and special education services lose eligibility (are declassified)?
- How do the developmental and academic outcomes for children who are declassified compare with those for children with disabilities who continue receiving services under IDEA?

Key questions related to *outcomes*:

- How do developmental and academic outcomes for children with disabilities identified for services under IDEA compare with those for children not identified for services under IDEA?
- How do developmental and academic outcomes for children with disabilities vary by disability categories within age groups and over time?

The research questions were examined for the three age groups covered under IDEA: infants and toddlers (birth through age 2), preschool-age (ages 3 through 5), and school-age children and youth with disabilities (ages 6 through 21).

In addition, the research questions addressed both one point in time and trends over time. The time frame most relevant for addressing research questions at one point in time was the most recent year of data available. For analyses of changes over time, 1997 was chosen as the starting point because it was the year of the last IDEA reauthorization before the 2004 reauthorization.

Two sets of analytic activities were conducted to address the research questions. A review of relevant literature was conducted to identify published sources of data and analyses of pertinent data sources from which findings were drawn. On the basis of this initial review, extant databases were selected to conduct new analyses addressing the research questions for this study. As a result, the following 14 datasets were selected that targeted the age ranges of interest and the time frame most relevant for this study:

Population data on children identified for services under IDEA:

- Data Analysis System (DANS)
- State Annual Performance Reports (APR)

Population data used for identification and graduation ratios:

- Common Core of Data (CCD)

- U.S. Census (2000)
- National Vital Statistics System (NVSS)

Sample data from four longitudinal studies that followed nationally representative samples of children of different age groups identified for services under IDEA:⁴

- National Early Intervention Longitudinal Study (NEILS) of infants and toddlers
- Pre-Elementary Education Longitudinal Study (PEELS), of children ages 3 through 5
- Special Education Elementary Longitudinal Study (SEELS) of children ages 6 through 12
- National Longitudinal Transition Study-2 (NLTS2) of children ages 13 through 21.

Sample data on the outcomes of the general population for comparison with the outcomes of children identified for services under IDEA:

- Early Childhood Longitudinal Study, Kindergarten Cohort (ECLS-K)
- National Health Interview Survey (NHIS)
- National Household Education Surveys (NHES) (1999), used to compare outcomes for infants and toddlers
- National Assessment of Educational Progress (NAEP), used to compare outcomes of school-age children.

Analyses using population data were considered to be descriptive, and no statistical testing was conducted. When analyses included sample data, statistical testing was conducted. When sample data were used for comparison of outcomes, *t* tests for differences in mean values were applied to calculate the statistical significance of the comparison, and when appropriate the Benjamini-Hochberg (1995) procedure was used to control the false discovery rate. The alpha level was set to .05 for each family of comparisons.

For the research questions concerning identification, data include the number of children identified for services under IDEA; the percentage of children from the total population who were identified for services under IDEA are presented by age, race/ethnicity, and state; and the gender composition of children identified for services under IDEA Part B. Declassification data are presented on the percentage of children no longer eligible for early intervention or special education services and their outcomes as compared with children who continue to receive services. Data on outcomes for children identified for services under IDEA include academic and developmental outcomes and trends over time. Analysis results include comparisons over time between children identified for and not identified for services under IDEA, between state results and national averages, with the general population means, across IDEA eligibility categories, and across ages. A description of school completion by disability category and cluster is also presented.

All comparisons of outcomes between children identified for services under IDEA and other children and between children identified for services under IDEA across states and over time are

⁴ Although these data sources include outcome data that predate the 2004 reauthorization of IDEA, they are the only data sources available to address the study question on the variation by disability category in the outcomes for children with disabilities. Detailed descriptions of these data sources are included in appendix A.1.

presented for descriptive purposes only. These comparisons were not designed and are not suitable, to measure the impacts of IDEA on child outcomes.

The following sections highlight results for each of the three age groups—infants and toddlers, ages birth through 2, who were served under Part C of the law; preschool-age children, ages 3 through 5, served in Part B preschool programs; and school-age children and youth ages 6 through 21 served in Part B programs. For each age group, the patterns of identification and the academic and developmental outcomes for children with disabilities are addressed. Declassification information (the loss of eligibility for services) is presented for infants and toddlers and school-age children and youth.

Population of Children Identified for Services Under IDEA

In 2005, states reported that 7,013,238 children ages birth through 21 years had been identified for early intervention and special education services under IDEA, including both children newly identified in the year represented by the count and children identified in earlier years who continued to receive services. The total number of children identified for each age group is presented in exhibit ES.1 and summarized as follows:

- 294,714 infants and toddlers (ages 0 through 2) were reported by states as having been identified for early intervention services under Part C of IDEA.
- 698,928 preschool-age children (ages 3 through 5) were reported by states as having been identified for preschool-age services under Part B of IDEA.
- 6,019,596 school-age children and youth (ages 6 through 21) were reported by states as having been identified for school-age services under Part B of IDEA.

Data on the gender of children identified for services under IDEA were collected by DANS for the first time in 2006. In each age group, more males than females were identified for services under IDEA. For infants and toddlers, 59.46 percent were male. The composition of males and females identified for services under IDEA was comparable for preschool and school-age children—69.29 percent of children ages 3 through 5 were male, and 66.91 percent of children ages 6 through 21 were male.

Exhibit ES.1. National number of children identified for services under IDEA, by age (2005)

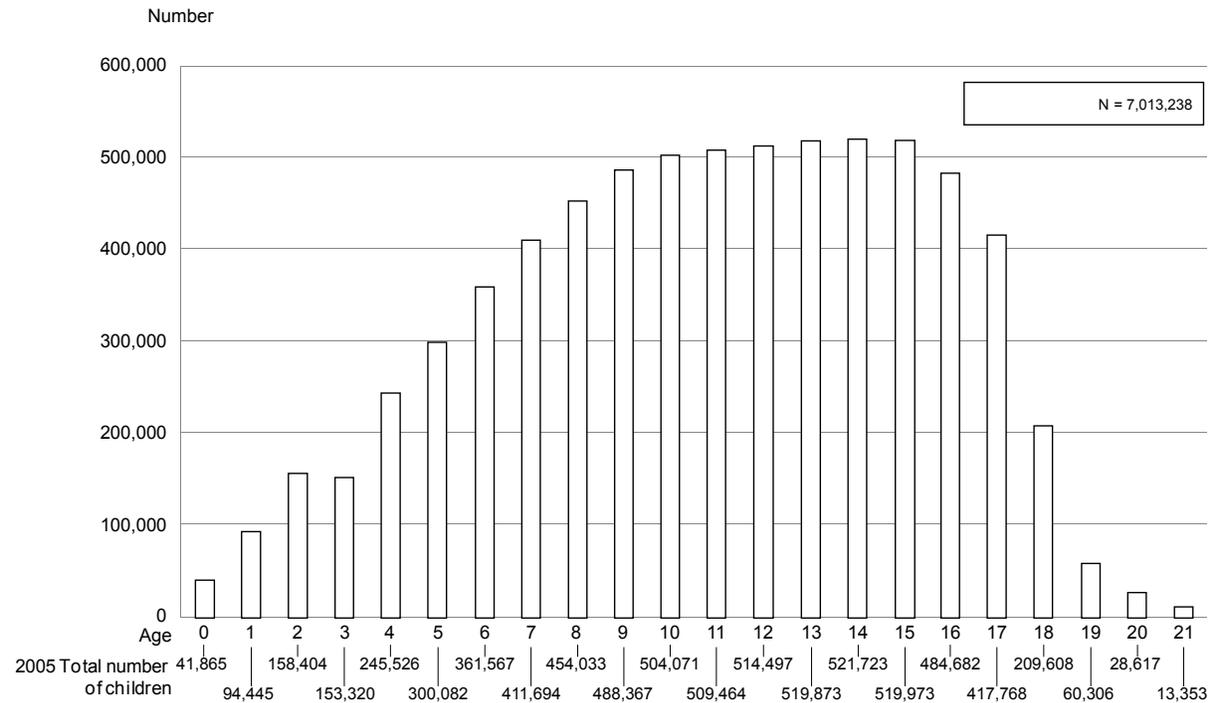


Exhibit reads: Nationwide, 41,865 children less than 1 year old were identified for services under Part C of IDEA in 2005.

NOTE: The numbers of children identified in the exhibit are aggregated counts of children identified for services under IDEA, based on enrollment numbers at a single time point between October 1, 2005, and December 1, 2005. These annual counts include both children newly identified in the year represented by the count and children identified in earlier years who continue to receive services under IDEA. Data represent the counts for the 50 states and the District of Columbia, including Bureau of Indian Affairs (BIA) children. This exhibit displays the number of children identified for services under IDEA from birth through age 21.

SOURCE: U.S. Department of Education, Office of Special Education Programs, Data Analysis System (DANS), Part C Child Count, 1997–2006, retrieved December 7, 2007, from <http://www.ideadata.org/PartCChildCount.asp>.

Key Findings for Infants and Toddlers Identified for Early Intervention Services Under IDEA

This section presents the main findings for infants and toddlers (ages birth through 2) who were identified for early intervention (EI) services under IDEA Part C.⁵ Results include the identification patterns, rates of loss of eligibility for EI services through declassification, and academic and developmental outcomes. Results on identification patterns are based on data from DANS and NVSS. Declassification information is based on data from NEILS and DANS. Outcomes analyses are based on data from NEILS, ECLS-K, NHIS, and NHES, and from NEILS reports.

⁵ Identification percentages in this section were computed for each year using the number of infants and toddlers identified under Part C (DANS) as a percentage of the total population of infants and toddlers (NVSS). NVSS birth data were used to create a proxy for the total number of infants and toddlers birth through age 2 in the population. Percentages were computed for each age year and race/ethnicity category using the same data sources.

Identification of Infants and Toddlers for Early Intervention Services Under IDEA

- **In 2006, the percentage of infants and toddlers identified for services under IDEA was 2.40 percent (n = 299,848), an increase from 1.65 percent (n = 192,469) in 1997.**
- **Between 1997 and 2006, changes in the percentage of infants and toddlers served under IDEA varied by year of age.** The percentage of children from birth through age 2 who were receiving early intervention nationally declined from 1997 to 1998 (1.65 percent to 1.57 percent) but then increased every year thereafter, reaching 2.40 percent in 2006. The greatest increase, from 2.42 percent in 1998 to 3.91 percent in 2006, was for 2-year-olds (see exhibit ES.2).
- **In 2005, the percentage of infants and toddlers identified for EI services under IDEA varied by race/ethnicity.** Percentages ranged from 1.95 percent (Asian infants and toddlers) to 2.55 percent (White infants and toddlers). The percentages for American Indian, Black, and Hispanic infants and toddlers were 2.45 percent, 2.32 percent, and 2.09 percent, respectively.
- **From 1998 to 2005, the percentage of infants and toddlers identified for EI services under IDEA for all five race/ethnicity categories increased.** The percentage of Black (1.66 percent to 2.32 percent), Hispanic (1.11 percent to 2.09 percent), Asian (1.18 percent to 1.95 percent), White (1.41 percent to 2.55 percent), and American Indian (1.81 percent to 2.45 percent) infants and toddlers identified for EI services nationally increased from 1998 to 2005 (percentage changes of 0.66, 0.98, 0.77, 1.14, and .64, respectively), with the percentages for White infants and toddlers showing the greatest change.
- **In 2006, states varied in the percentage of infants and toddlers identified for services under IDEA.** The percentage of children identified for services ranged from 7.19 percent in Hawaii to 1.18 percent in Mississippi. In 2006, the percentage of children identified was higher than in 1997 for 47 states (the exceptions were Delaware, Florida, Mississippi, and Ohio). Fourteen of the 22 states with broad eligibility criteria had higher identification percentages than the national percentage, and 12 of the 16 states with narrow criteria had lower percentages than the national percentage.⁶

⁶ Eligibility varies throughout the country for Part C services, with states identified by the Office of Special Education Programs (OSEP) as having “broad,” “moderate,” and “narrow” eligibility criteria. The criteria is based upon averaging descriptors (percent delay, age/month delay, standard deviation, and undefined variable related to if a state serves at-risk) in states’ eligibility definitions (Mackey Andrews and Taylor 2007).

Exhibit ES.2. Trends in national percentage of infants and toddlers identified for early intervention services under IDEA, by age (1997–2006)

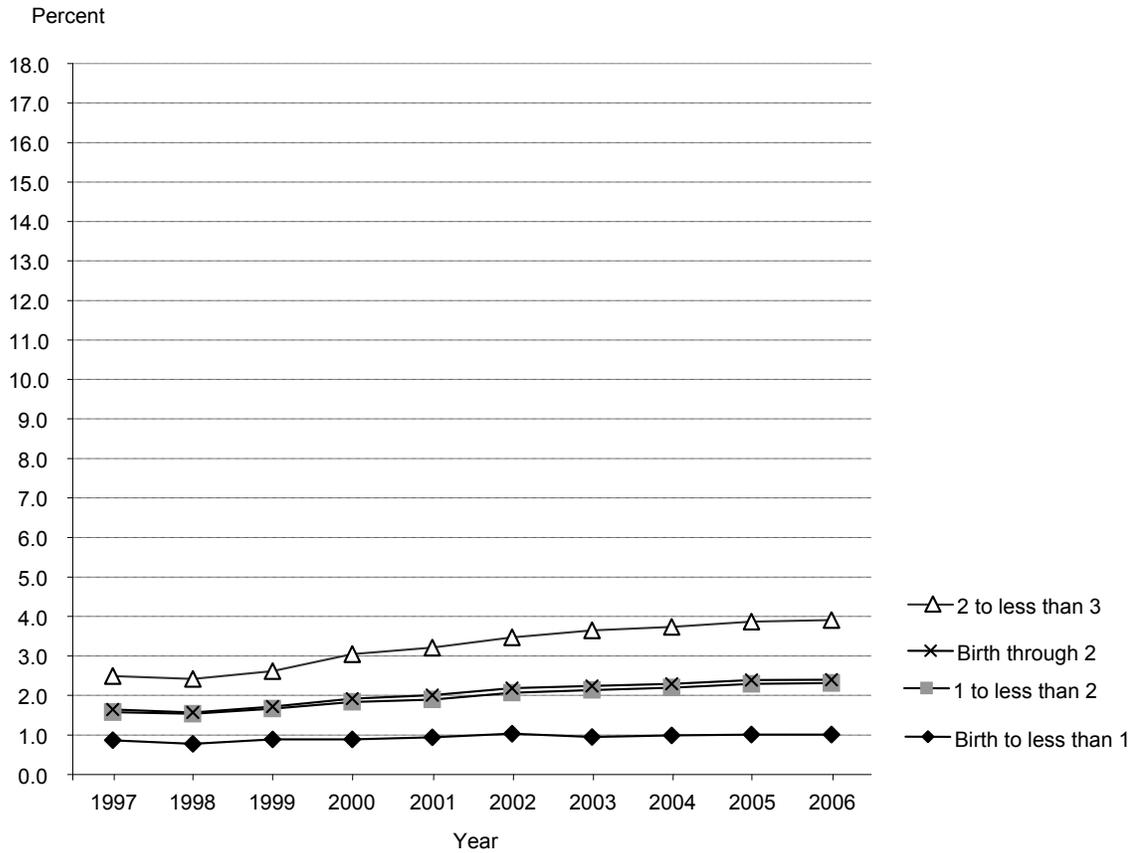


Exhibit reads: Nationwide, the percentage of 2-year-olds identified for services under IDEA increased from 2.49 percent in 1997 to 3.91 percent in 2006.

NOTE: The percentage of children who were identified was calculated by dividing the number of children identified for services under IDEA (DANS) in a given age group by the total number of children in the same age group as indicated by the NVSS-constructed population proxy. The numbers of children identified are aggregated counts of children identified for services under IDEA at a single time point between October 1 and December 1 of each year. These annual counts include both children newly identified in the year represented by the count and children identified in earlier years who continue to receive services under IDEA. Data represent the counts for the 50 states and the District of Columbia, including Bureau of Indian Affairs (BIA) children. The total number of children is a population proxy constructed with National Vital Statistics System (NVSS) birth data, including births on the Indian reservations. Birth data for 2006 are preliminary.

SOURCE: U.S. Department of Education, Office of Special Education Programs, Data Analysis System (DANS), Part C, Child Count, 1997–2006, retrieved December 7, 2007, from <http://www.ideadata.org/PartCChildCount.asp>; U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System, 1990–2005, retrieved January 11, 2008, from <http://205.207.175.93/vitalstats/ReportFolders/ReportFolders.aspx>; birth data for 2006 are from table 6, p. 12, of Hamilton, Martin, and Ventura (2007).

Declassification of Infants and Toddlers Who Had Been Identified for Early Intervention Services Under IDEA

- A longitudinal study of infants and toddlers who were identified for the first time for EI services in 1997–1998 found that 18 percent exited, i.e. left the EI system, before reaching the age limit of 36 months for EI services. These children exited early intervention for various reasons, such as meeting all their developmental goals and losing eligibility because of developmental progress or parents’ choosing to withdraw from services.
- Nationally, of all infants and toddlers identified for services under IDEA who exited early intervention at 36 months from 2005 to 2006, 66 percent were reported by states to have been eligible for Part B, Section 619, preschool services (see exhibit ES.3). The percentage of children receiving EI services at 36 months who were then eligible for Part B services ranged from 100 percent in Minnesota to 10 percent in the District of Columbia.

Exhibit ES.3. National percentage of children no longer receiving early intervention services under IDEA at 36 months of age, by exit category (2005–2006)

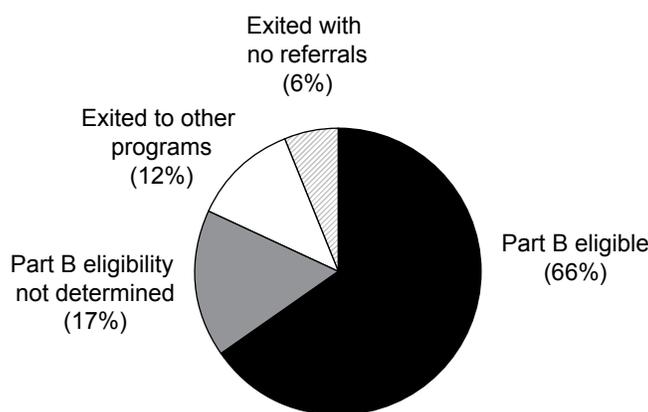


Exhibit reads: Nationwide, of all children served under IDEA who left EI at 36 months from 2005 to 2006, 66 percent were eligible for Part B services.

NOTE: The DANS data represented in this exhibit reflect data on all children who exited EI programs at 36 months of age in fall 2005.

SOURCE: U.S. Department of Education, Office of Special Education Programs, Data Analysis System (DANS), retrieved December 7, 2007, from https://www.ideadata.org/tables30th%5Car_7-8.xls.

Outcomes for Infants and Toddlers Identified for Services under IDEA

The NEILS dataset can be used to describe outcomes for children who received EI services nationally. NEILS outcome data collection included parent-reported information at 36 months of age and parent- and teacher-reported information in kindergarten. Information was collected from both parents and teachers as to whether or not children had been identified for services under Part B IDEA in kindergarten. Overall, 55 percent of former EI participants were identified for special education services in kindergarten (i.e., had Individualized Education Programs). This

section highlights children’s outcomes at 36 months of age (based on parent report) and in kindergarten (based on teacher and parent reports) across five developmental domains (communication, cognition, social emotional, physical and adaptive development). Most of the findings are based on items in the NEILS parent interviews and teacher survey that were developed for the study, including items that asked parents and teachers to report on the child’s level of accomplishment across developmental milestones and the child’s skill level compared to other children the same age. Some items were taken from protocols developed for other studies so the information could be compared to the general population (defined as including both children receiving and not receiving EI or special education services).

Key findings highlight overall outcomes for children identified for EI services under IDEA. Where applicable, outcome data were compared with general population data on 3- and 5-year-olds from the public use datasets of the following sources: National Household Education Survey (NHES), Early Childhood Longitudinal Study, Kindergarten Cohort (ECLS-K), and the National Health Interview Survey (NHIS) datasets. Additional findings highlight outcomes by Part C eligibility category⁷ and comparisons of kindergarten outcomes for former EI participants with Individualized Education Plans (IEPs) and without IEPs.

- **On outcomes for all five domains (communication, cognitive, social-emotional, physical development, and adaptive skills), children identified for EI services demonstrated skills at lower levels than expected for their age at both 36 months and kindergarten.** For example, at age 36 months, 42 percent (standard error (SE) = 1.39) of EI participants were reported by parents to communicate their needs as well as other children their age. At kindergarten, 37 percent of former EI participants (SE = 2.02) were reported by their parents to have mastered all communication milestones expected of a 5-year-old (see exhibit ES.4).

⁷ IDEA Part C eligibility categories include developmental delay, diagnosed condition, at risk for delay. According to the federal regulations for IDEA, 34 C.F.R. §303.16(a), “...infants and toddlers with disabilities means individuals from birth through age two who need early intervention services because they--1) Are experiencing developmental delays, as measured by appropriate diagnostic instruments and procedures, in one or more of the following areas: (i) Cognitive development. (ii) Physical development, including vision and hearing. (iii) Communication development. (iv) Social or emotional development. (v) Adaptive development; or 2) Have a diagnosed physical or mental condition that has a high probability of resulting in developmental delay. (b) The term may also include, at a State's discretion, children from birth through age two who are at risk of having substantial developmental delays if early intervention services are not provided.”

Exhibit ES.4. Parent and teacher reported communication outcomes at 36 months of age and kindergarten for former EI participants

Outcome	Percent	SE	N
Parent report: 36 months of age			
Communicates needs as well as other children	41.7	1.39	2,670
When child talks to other people she/he doesn't know well, she/he is very easy to understand	18.8	1.29	2,644
All age-expected communication milestones mastered	29.0	0.99	2,651
Parent report: kindergarten			
Communicates needs as well as other children	59.9	1.49	2,280
When child talks to other people she/he doesn't know well, she/he is very easy to understand	39.7	1.10	2,165
All age-expected communication milestones mastered	36.9	2.02	2,095
Understands verbal and nonverbal communication as well as other children	63.0	1.37	2,275
Teacher report: kindergarten			
Understands others as expected for age	59.7	0.86	1,539
Communicates with others as expected for age	50.0	1.28	1,549

Exhibit reads: When former early intervention participants were 36 months of age, parents of 41.7 percent reported that the children communicated their needs as well as other children their age.

NOTE: Data are weighted to be nationally representative. Cohort began to receive early intervention services between September 1997 and November 1998.

SOURCE: U.S. Department of Education, Office of Special Education Programs, National Early Intervention Longitudinal Study (NEILS), parent interviews and kindergarten teacher survey (public use dataset), 2007.

- For the parent-reported measures of early literacy and mathematics skills, former EI participants demonstrated significantly lower skills than the general population of 3-year-olds.** When children were 36 months of age, parents reported that 17 percent (SE = 1.13) of former EI participants could recognize most or all letters of the alphabet, whereas parents of 37 percent (SE = 1.41) of children in the general population⁸ reported that their children could do so ($p < .001$) (see exhibit ES.5). Thirteen percent (SE = 1.38) of former EI participants were reported to be able to count to 20 or higher, whereas 41 percent (SE = 1.43) of children in the general population were reported to be able to ($p < .001$).
- At both 36 months and kindergarten, children eligible because of a risk condition were reported by parents and teachers to have higher skills in all five domains—communication, cognitive, social-emotional, physical development, and adaptive skills—compared with children with a diagnosed condition.** For example, 33 percent (SE = 3.78) of children with a risk condition at entry to early intervention and 31 percent (SE = 7.01) of those with a developmental delay were reported by parents to have mastered all age-expected physical milestones at 36 months, compared with 15 percent (SE = 1.57) of those with a diagnosed condition ($p < .001$ for both comparisons). At kindergarten, the pattern was similar: 28 percent (SE = 4.55) of children with an at-risk classification at entry into early intervention and 24 percent (SE = 2.89) of those with developmental delays were reported to have mastered all their

⁸ General population statistics are based on data from the National Household Education Survey (NHES).

kindergarten milestones, compared with 10 percent (SE = 1.95) of children with a diagnosed condition ($p < .001$ for both comparisons).

Exhibit ES.5. National percentage of former EI participants and of the general population for whom parents reported cognitive outcomes at 36 months and in kindergarten

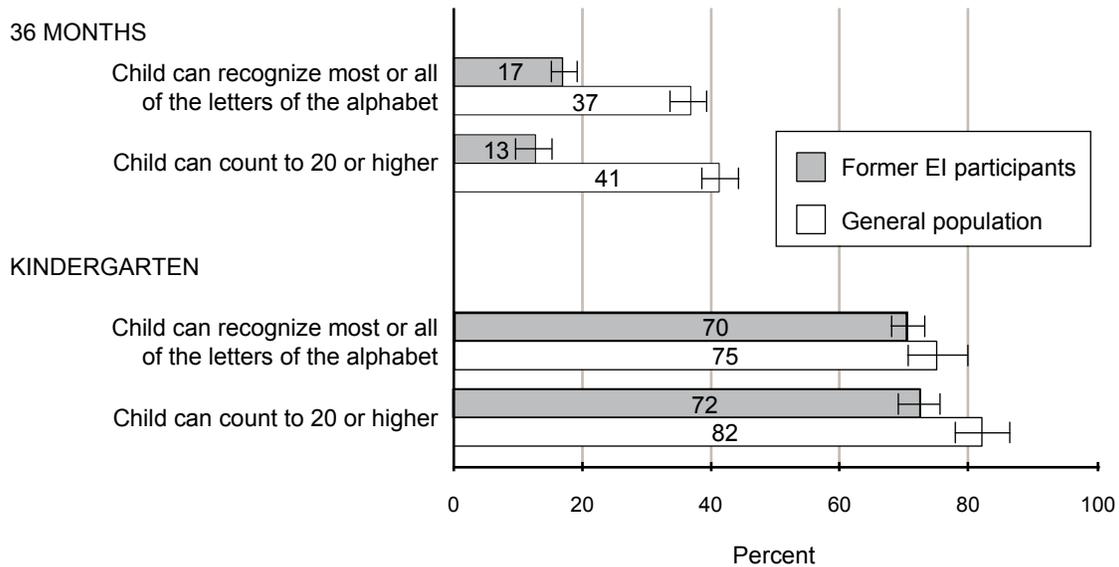


Exhibit reads: Nationwide, 17 percent of 3-year-olds who were former EI participants were reported by their parents to be able to recognize most or all letters of the alphabet.

NOTE: Data are weighted to be nationally representative. Cohort began to receive early intervention services between September 1997 and November 1998. The presented confidence intervals represent plus or minus 1.96 multiplied by the standard error.

SOURCE U.S. Department of Education, Office of Special Education Programs, National Early Intervention Longitudinal Study (NEILS), parent interviews (public use dataset), 2007; general population data from the National Household Education Survey (NHES) public use dataset, 1999 parent interview, available at <http://nces.ed.gov/nhes/dataproducts.asp>.

- Teachers' reports of seven mathematics and nine early literacy skills at kindergarten indicated that larger percentages of former EI participants without IEPs than those with IEPs performed at age-expected levels and at levels comparable to the general population.** For example, in mathematics, 16 percent (SE = 1.47) of former EI participants with IEPs were reported to use a variety of strategies to solve mathematics problems, compared with 49 percent (SE = 2.25) of children without IEPs ($p < .001$) and 46 percent (SE = 0.89) of children in the general population ($p < .001$). In early literacy, 11 percent (SE = 1.28) of former EI participants with IEPs were reported to be able to compose simple stories, according to their kindergarten teachers, compared with 31 percent (SE = 1.58) of children without IEPs ($p < .001$) and 32 percent (SE = 0.81) of children in the general population ($p < .001$).

Key Findings for Preschool-Age Children Identified for Services Under IDEA

This section highlights findings for children ages 3 through 5 identified for services under IDEA Part B preschool programs. Results reported include the identification of preschool children for services under IDEA and their academic and social outcomes. Information on identification is based on data from DANS and NVSS.⁹ Analyses on children's outcomes are based on data from PEELS.

Identification of Preschool-Age Children for Services Under IDEA

- **In 2006, the percentage of preschool-age children identified for services under IDEA was 5.82 percent (n = 706,242), an increase from 4.70 percent (n = 564,270) in 1997** (see exhibit ES.6). This overall increase from 1997 to 2006 was 1.12 percentage points, and the percentage of 3- through 5-year-olds increased every year from 1997 to 2006 for the overall preschool-age group.
- **In 2006, the percentage of preschool-age children identified for services under IDEA differed for children of each single year of age** (see exhibit ES.6). As shown in exhibit ES.6, the highest percentage was among 5-year-olds (7.41 percent), followed by 4-year-olds (6.07 percent) and 3-year-olds (4.01 percent).
- **The percentage of preschool-age children identified for services increased from 1997 to 2006 for each single year of age.** For 5-year-old children, the percentage increased from 6.27 percent to 7.41 percent (1.14 percentage increase); for 4-year-olds, it increased from 4.89 percent to 6.07 percent (1.18 percentage increase); and for 3-year-olds, it increased from 2.88 percent to 4.01 percent (1.13 percentage increase).
- **In 2006, the percentage of 3- through 5-year-olds identified for services under IDEA differed by children's race/ethnicity category.** Percentages ranged from 3.59 percent (Asian preschool-age children) to 8.14 percent (American Indian preschool-age children). The percentages for White, Black, and Hispanic preschool-age children were 6.45 percent, 5.93 percent, and 4.52 percent, respectively.
- **Between 1998 and 2006, the relative position of preschool-age children by race/ethnicity category remained the same for those identified for services under IDEA.** For each year from 1998 to 2006, American Indian preschool-age children had the highest identification percentages (ranging from 6.31 percent in 1998 to 8.14 percent in 2006) followed by White (4.86 percent to 6.45 percent), Black (4.43 percent to 5.93 percent), Hispanic (3.10 percent to 4.52 percent), and Asian preschool-age children (2.28 percent to 3.59 percent).

⁹ Identification percentages in this section were computed for each year using the number of preschool-age children identified under Part B (DANS) as a percentage of the total population of children ages 3 through 5 (NVSS). NVSS birth data, including births on Indian reservations, were used to create a proxy for the total number of children ages 3 through 5 in the population. Percentages were computed for each age year and race/ethnicity category using the same data sources.

Exhibit ES.6. Trends in national percentage of preschool-age children identified for services under IDEA, by age (1997–2006)

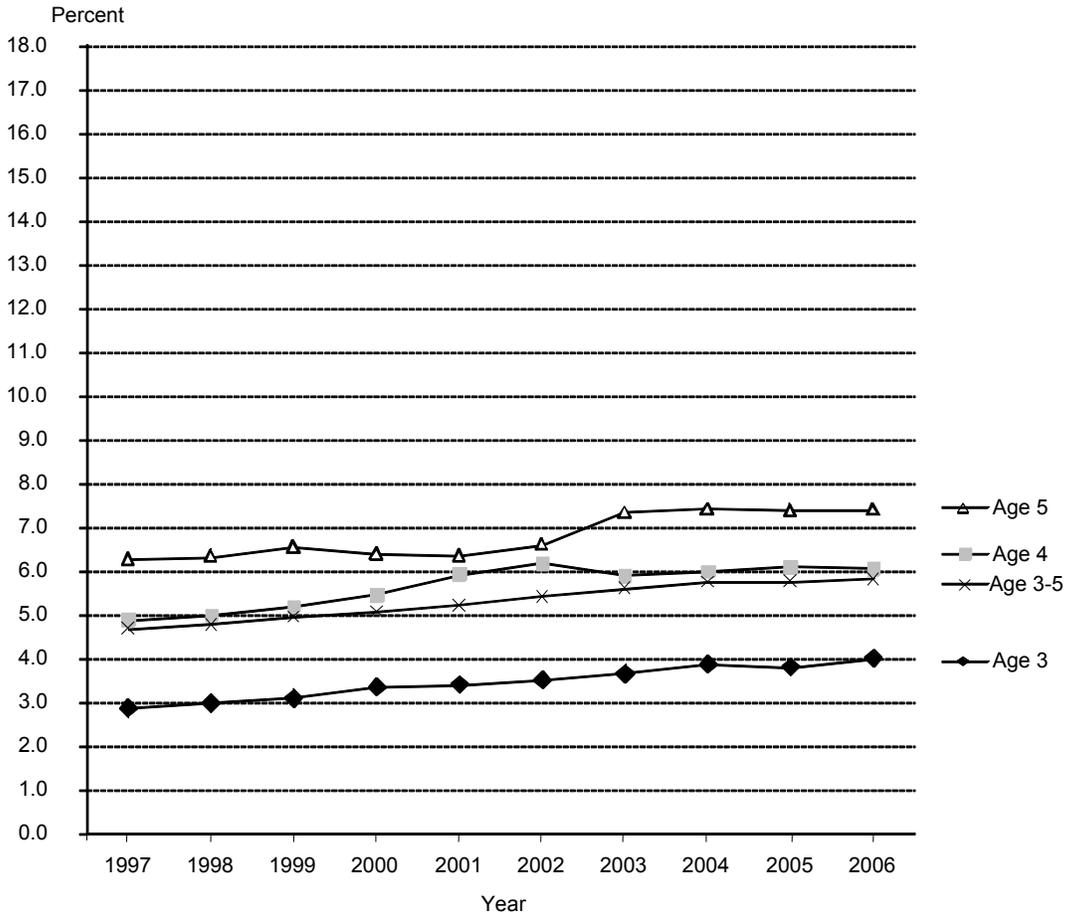


Exhibit reads: Nationwide, the percentage of 3-year-olds identified for services under IDEA increased from 2.88 percent in 1997 to 4.01 percent in 2006.

NOTE: The percentage of children who were identified was calculated by dividing the number of children identified for services under IDEA (DANS) in a given age group by the total number of children in the same age group as indicated by the NVSS-constructed population proxy. The numbers of children identified in the exhibit are aggregated counts of children identified for services under IDEA at a single time point between October 1 and December 1 of each year. These annual counts include both children newly identified in the year represented by the count and children identified in earlier years who continue to receive services under IDEA. Data represent the counts for the 50 states and the District of Columbia, including Bureau of Indian Education (BIE) schools. The total number of children is a population proxy constructed with National Vital Statistics System (NVSS) birth data, including births on Indian reservations.

SOURCE: U.S. Department of Education, Office of Special Education Programs, Data Analysis System (DANS), Part B, Child Count, 1997–2006, retrieved December 7, 2007, from <http://www.ideadata.org/PartBChildCount.asp>; U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System, 1990–2005, retrieved January 11, 2008, from <http://209.217.72.34/VitalStats/ReportFolders/ReportFolders.aspx>.

- **In 2006, the percentage of 3- through 5-year-olds identified for services under IDEA varied by disability category.**¹⁰ The largest percentages were for preschool-age children identified under the speech or language impairments and developmental delay categories of IDEA (2.73 percent and 2.06 percent, respectively).
- **Between 2004 and 2006, the percentage of 3- through 5-year-olds identified for services under IDEA increased for all but four of the disability categories.** Changes in the identification percentages for each disability category were examined relative to the identification percentage in 2004. The largest increase, relative to the percentage of children identified under each disability category in 2004, was for children with autism (34.87 percent), followed by children classified with other health impairments (24.64 percent). The largest relative decrease was for children with deaf-blindness (-19.05 percent).
- **States varied in the percentage of preschool-age children identified for services under IDEA in 2006.** The states, ordered by their identification percentage in 2006, ranged from 3.32 percent in the District of Columbia to 13.66 percent in Wyoming. Of the 50 states and the District of Columbia, 49 had higher identification percentages in 2006 than in 1997 (exceptions were Idaho and Texas).

Outcomes for Children Identified for Preschool Services Under IDEA

Data from PEELS were used to describe outcomes for preschool-age children. Outcomes are reported in the form of standard scores for children ages 3 through 5 and for each age year; the general population (based on norm samples including both children with and without disabilities) has a mean standard score of 100.0 and a standard deviation of 15.0.

- **In the Woodcock Johnson (WJ III) Letter-Word Identification test, the mean score for 5-year-olds identified for services (96.8; SE = 0.98) differed from that of their same-age peers in the general population, but the scores of the 3- and 4-year-olds did not (100.8 and 98.5, SE = 1.37 and SE = 0.98 respectively; see exhibit ES.7).** As a group, all children ages 3 through 5 identified for preschool services under IDEA had a mean standard score on the Letter-Word Identification subtest of 98.2 (SE = 0.78), which was not significantly different from the general population mean of 100.0 ($p < .001$, see exhibit ES.7).
- **Peabody Picture Vocabulary Test-Third Edition (PPVT-III) scores for preschool children identified for services under IDEA, both overall and for each age cohort, were significantly lower than those for the general population.** Children identified for preschool services under IDEA had significantly lower mean scores on the vocabulary test than preschool-age children in the general population for the group as a whole (90.1, SE = 0.59 vs. 100.0), as well as for children in each age-year cohort (88.6,

¹⁰ The 13 disability categories under which 3- through 21-year-old children may be identified for services under IDEA, Part B, are specific learning disabilities (SLD), speech or language impairments (SP), mental retardation (MR), emotional disturbance (ED), hearing impairments (HI), visual impairments (VI), orthopedic impairments (OI), other health impairments (OHI), autism (AUT), traumatic brain injury (TBI), multiple disabilities (MD), and deaf-blindness (DB), and developmental delay (DD). States or local education agencies may elect to identify children ages 3 through 9 under the developmental delay category.

89.7, and 91.1, and SE = 0.78, SE = 0.78 and SE = 0.88 for 3-, 4-, and 5-year-olds, respectively; $p < .001$ for all comparisons, see exhibit ES.7).

- **WJ III numeracy outcomes for preschool children identified for services under IDEA, both overall and for each age cohort, were significantly lower than those for the general population.** Preschool children with disabilities had a mean standard score on the WJ III Applied Problems subtest of 90.3 (SE = 0.98), which was significantly lower than the mean score of 100.0 for the general population. The significant difference from the general population was apparent for all three age cohorts, with mean scores of 88.2, 91.2, and 90.6, and SE = 1.27, SE = 1.57 and SE = 0.98 for 3-, 4-, and 5-year-olds, respectively ($p < .001$ for all comparisons, see exhibit ES.7).
- **Preacademic skills from the Adaptive Behavior Assessment System-Second Edition (ABAS-II) of preschool children identified for services under IDEA as a group and for all age groups individually were statistically lower than those of the general population.** For children identified for preschool services under IDEA who were not yet in kindergarten, the overall mean teacher/day care provider rating on the Functional Preacademics subtest was 89.5 (SE = 0.98), which was significantly different from the general population mean of 100.0. The difference from the general population was also statistically significant for all three age cohorts, with mean scores of 88.5, 90.0, and 93.5, and SE = 0.98, SE = 0.98 and SE = 1.47 for 3-, 4-, and 5-year-olds, respectively ($p < .001$ for all comparisons, see exhibit ES.7).
- **Social skills outcomes measured by the Preschool and Kindergarten Behavior Scales-Second Edition (PKBS-2) for preschool children identified for services under IDEA were significantly lower than those of the general population. Three- and 4-year-old preschoolers also had significantly lower social skills ratings than the general population and than 5-year-olds, but 5-year-olds did not differ from the general population.** Children identified for preschool services under IDEA, as a group, had a mean Social Skills standard score of 92.8 (SE = 0.88), which was significantly lower than the general population mean score of 100.0 ($p < .001$). The mean score for 3-year-old children identified for preschool services was 85.2 (SE = 1.08), for 4-year-olds it was 93.0 (SE = 1.08), and for 5-year-olds it was 96.5 (SE = 1.37).

Exhibit ES.7. Mean literacy, numeracy, and preacademic skills scores of 3- through 5-year-olds identified for services under IDEA (2005)

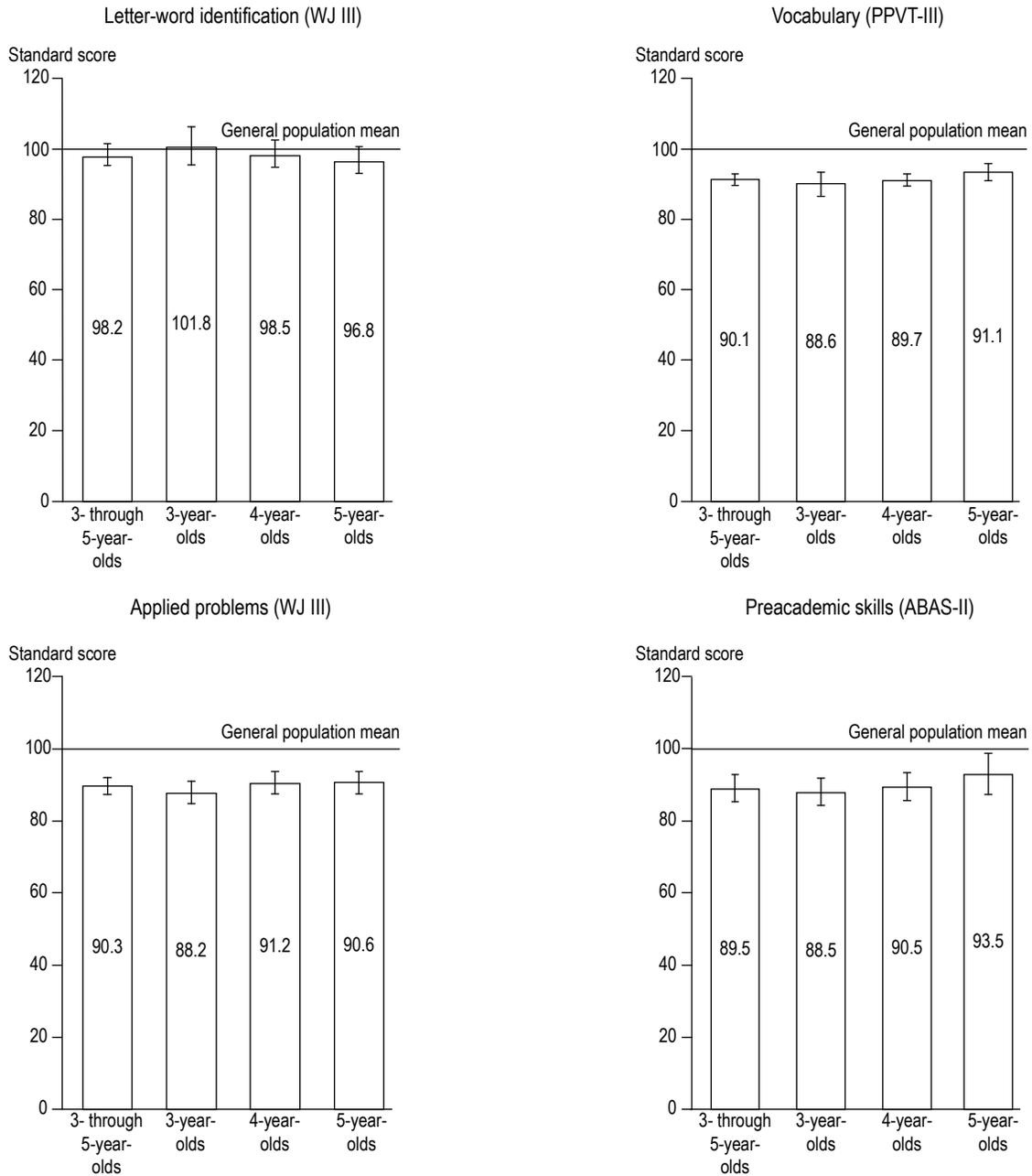


Exhibit reads: Preschool-age children identified for services under IDEA had a mean standard score of 98 on the letter-word identification subtest.

NOTE: Data were preliminary at the time of publication (2005). Findings reported in the exhibit are based on a direct assessment of individual students using Woodcock-Johnson III (WJ III) (Woodcock, McGrew, and Mather 2001), Peabody Picture Vocabulary Test-Third Edition (PPVT-III) (Dunn and Dunn 1997), and Adaptive Behavior Assessment System-Second Edition (ABAS-II) (Harrison and Oakland 2003). All measures are based on a general population mean of 100 and a standard deviation of 15. The presented confidence intervals represent plus or minus 1.96 multiplied by the standard error.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, Pre-Elementary Education Longitudinal Study (PEELS), direct assessment, 2005.

Key Findings for School-Age Students Identified for Services Under IDEA

This section presents main findings for children ages 6 through 21 who were identified for services under IDEA Part B. Results reported include the patterns of identification of school-age children for services under IDEA, rates of loss of eligibility for services under IDEA through declassification, and outcomes. Information on identification patterns is based on data from DANS and CCD.¹¹ Declassification information is based on reports from SEELS and NLTS2 and other literature review. Outcomes analyses are based on data and reports from NAEP, APRs, SEELS, NLTS2, DANS, and CCD.

Identification of School-Age Children for Services Under IDEA

- **In 2005, the percentage of 6- through 17-year-old children identified for services under IDEA was 12.92 percent (n = 5,707,712), an increase from 12.31 percent (n = 5,081,196) in 1997.**
- **Between 1997 and 2005, the patterns in the identification of school-age children identified for services under IDEA varied by age group.** As shown in exhibit ES.8, the highest percentage of students identified for each year from 1997 to 2005 were 10- through 13-year-olds. During the same period, the 14- through 17-year-olds had the largest percentage point change in receipt of services under IDEA (1.64 points).
- **In 2005, the percentages of 6- through 21-year-olds identified for services under IDEA differed by race/ethnicity category.** In 2005, percentages of students identified ranged from 6.34 percent (Asian school-age children) to 16.67 percent (Black school-age children). For American Indian, White, and Hispanic school-age children, 15.76 percent, 14.05 percent, and 11.83 percent, respectively, were identified for services.¹²
- **From 1998 to 2005, the relative position of all race/ethnicity categories remained the same for the percentage of school-age children identified for services under IDEA.** For each year from 1998 to 2005, Black school-age children had the highest identification percentages (ranging from 16.57 in 1998 to 16.67 in 2005), followed by American Indian (14.69 to 15.76), White (13.88 to 14.05), Hispanic (12.80 to 11.83), and Asian school-age children (6.01 to 6.34).

¹¹ Identification percentages in this section were computed for each year using the number of children ages 6 through 17 identified for services under Part B (DANS) as a percentage of the school enrollment in grades 1 through 12 (CCD). CCD school enrollment counts in grades 1 through 12 were used as a proxy for the total number of children ages 6 through 17 in elementary and secondary schools. For the identification percentages by race/ethnicity categories, CCD school enrollment counts in grades 1 through 12 were used as a proxy for the number of children ages 6 through 21 in elementary and secondary schools as DANS child count data by race/ethnicity category are only available in the aggregate 6–21 age group.

¹² This analytic approach was established by Donovan and Cross (2002) in the National Academy of Sciences report, *Minority Students in Special and Gifted Education*.

Exhibit ES.8. Trends in national percentage of school-age children identified for services under IDEA, by age group (1997–2005)

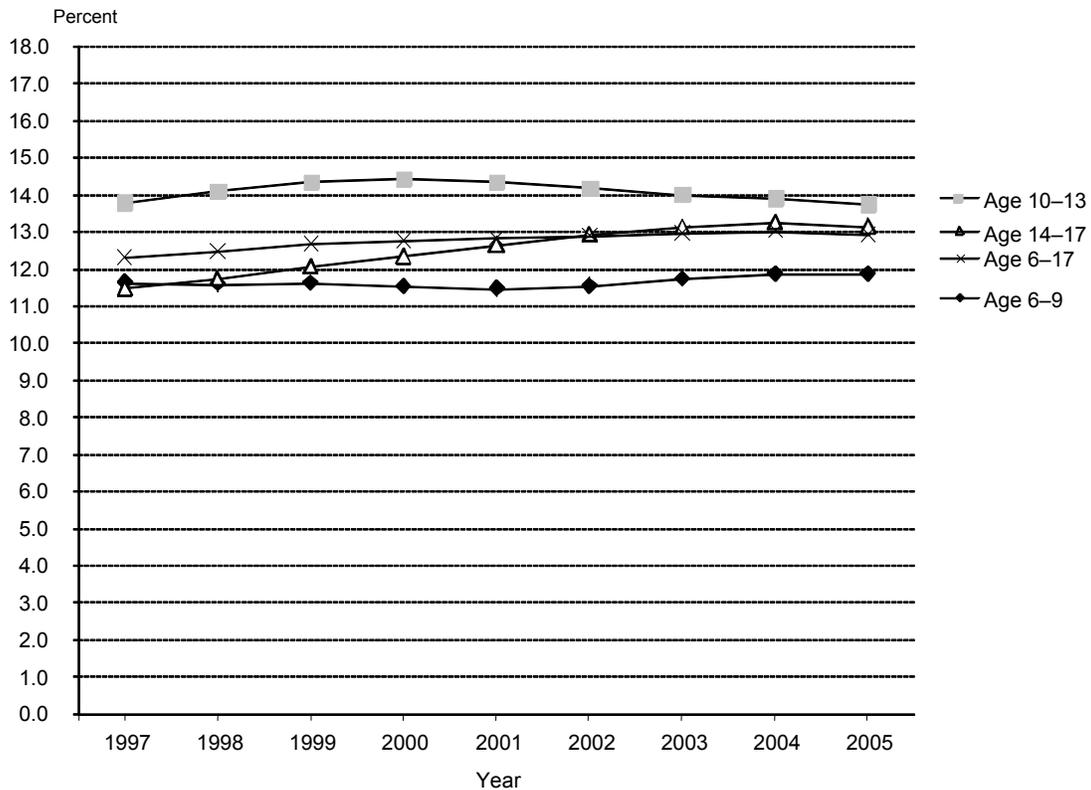


Exhibit reads: Nationwide, the percentage of 6- through 9-year-olds identified for services under IDEA increased from 11.63 percent in 1997 to 11.85 percent in 2005.

NOTE: The numbers of children identified in the exhibit are aggregated counts of children identified for services under IDEA at a single time point between October 1 and December 1 of each year. These annual counts include both children newly identified in the year represented by the count and children identified in earlier years who continue to receive services under IDEA. Data represent the counts for the 50 states and the District of Columbia, including Bureau of Indian Education (BIE) schools. The school enrollment numbers are aggregated counts of student enrollment in all public schools in the 50 states and the District of Columbia, including BIE schools. To compute the percentages, the number of students with disabilities, including children in BIE schools, for each age year was divided by the enrollment count for the corresponding grade level. The following age groups and grade levels are as follows: 6- through 9-year-olds (grades 1–4); 10- through 13-year-olds (grades 5–8); 14- through 17-year-olds (grades 9–12); and 6- through 17-year-olds (grades 1–12).

SOURCE: U.S. Department of Education, Office of Special Education Programs, Data Analysis System (DANS), Part B, Child Count, 1997–2005, retrieved December 7, 2007, from <http://www.ideadata.org/PartBChildCount.asp>; U.S. Department of Education, National Center for Education Statistics, Common Core of Data, 1997–98 to 2005–06, retrieved December 10, 2007, from <http://www.nces.ed.gov/ccd/bat/>.

- In 2005, the disability category with the largest percentage of school-age children identified for IDEA services varied by age group.** For children ages 6 through 9, the largest percentage was children with speech and language impairments (5.46 percent). For children ages 10 through 13 and 14 through 17, the largest percentage was for children with specific learning disabilities (7.07 percent and 7.58 percent, respectively).

- **Between 1997 and 2005, the percentage of 6- through 17-year-olds identified for services under IDEA varied by disability category.**¹³ Between 1997 and 2005, the largest percentage change for 10- through 13- and 14- through 17-year-olds relative to identification percentages for the age group in 1997 was for children identified with autism under IDEA (410.67 percent and 409.72 percent, respectively). Developmental delay is a category included for the 3 through 5 and 6 through 9 age groups and showed the largest relative percentage change from 1997 to 2005 (1,988.85 percent).
- **States varied in the percentage of children identified for services under IDEA in 2005.** Across states in 2005, the percentage identified ranged from 9.87 percent in Colorado to 18.59 percent in Rhode Island. Forty-one states had higher identification percentages in 2005 than in 1997 (exceptions were Colorado, California, Texas, Connecticut, Alabama, Tennessee, Maryland, Alaska, New Mexico, and Massachusetts).

Declassification of School-Age Children With Disabilities

- **Across grade levels, declassification rates among children and youth identified for IDEA services varied: 49 percent of students who had received services in kindergarten (spring 1999) were no longer eligible by third grade (spring 2002) (Holt, McGrath, and Herring 2007), 17 percent of children ages 6 through 12 in 1999 were ineligible after 2 years, and 5 percent of youth ages 13 through 16 in 2000 were ineligible after 2 years (Wagner 2003).**
- **The proportions of 6- through 12-year-olds who had been declassified from special education services within approximately 2 years varied across disability categories.** As shown in exhibit ES.9, the declassification rates of students ages 6 through 12 ranged from 2 percent among children with traumatic brain injury to 34 percent for children identified under the speech or language impairments category, the highest percentage among all disability categories (SEELS 2005).
- **Children and youth ages 6- through 12- years-old declassified from IDEA services had significantly higher scores on literacy and mathematics outcomes than children and youth of the same age who continued to receive services.** The mean standard score on the research versions of WJ III Letter-Word Identification subtest was 96 (SE = 1.57) for declassified students and 82 (SE = 0.77) for students who continued to receive services. Similarly, Passage Comprehension mean standard scores for the two groups were 92 (SE = 1.46) and 83 (SE = 0.75), respectively; for Math Calculation, they were 104 (SE = 1.40) and 91 (SE = 0.71); and for Applied Problems, they were 101 (SE = 1.56) and 88 (SE = 0.74).

¹³ The 13 disability categories under which 3- through 21-year-old children may be identified for services under IDEA, Part B, are specific learning disabilities (SLD), speech or language impairments (SP), mental retardation (MR), emotional disturbance (ED), hearing impairments (HI), visual impairments (VI), orthopedic impairments (OI), other health impairments (OHI), autism (AUT), traumatic brain injury (TBI), multiple disabilities (MD), deaf-blindness (DB) and developmental delay (DD). States or local education agencies may elect to identify children ages 3 through 9 under the developmental delay category.

Exhibit ES.9. Percentage of 6- through 12-year-olds identified for IDEA services in December 1999 who were declassified by spring 2002, by disability category

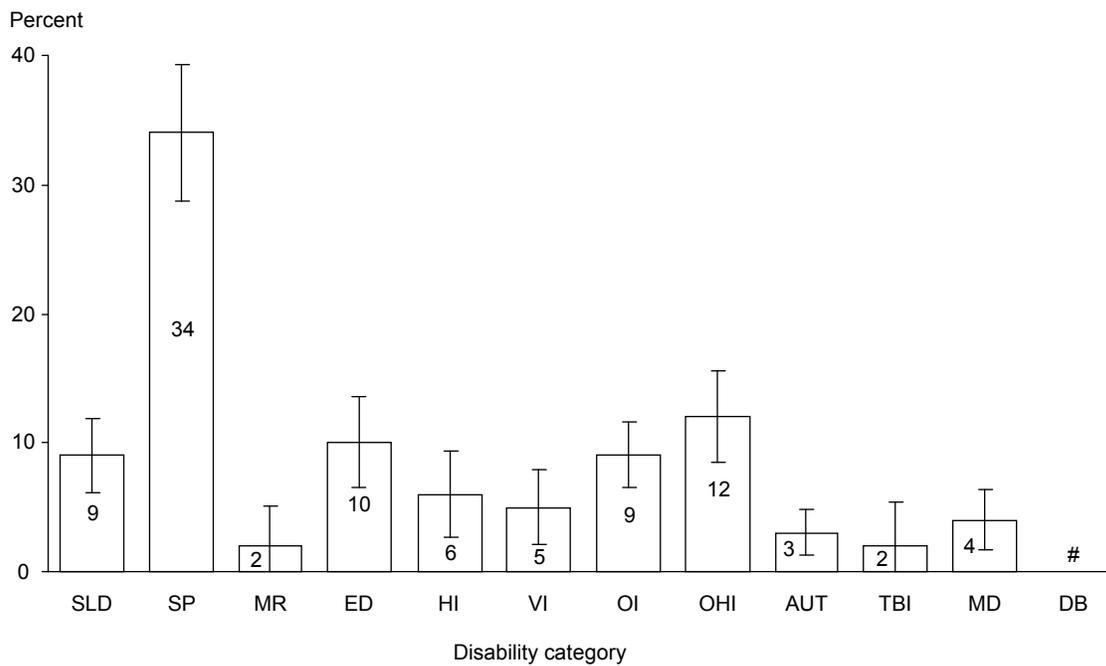


Exhibit reads: Nine percent of 6- through 12-year-olds who had been identified for IDEA services under the category of specific learning disabilities in December 1999 were reported by schools or parents not to be receiving special education services as of spring 2002.

Rounds to zero.

NOTE: Disability categories are: specific learning disabilities (SLD), speech or language impairments (SP), mental retardation (MR), emotional disturbance (ED), hearing impairments (HI), visual impairments (VI), orthopedic impairments (OI), other health impairments (OHI), autism (AUT), traumatic brain injury (TBI), multiple disabilities (MD), deaf-blindness (DB). The presented confidence intervals represent plus or minus 1.96 multiplied by the standard error.

SOURCE: U.S. Department of Education, Office of Special Education Programs, Special Education Elementary Longitudinal Study (SEELS), parent interviews and students' school program survey, 2002. Reported in SEELS (2005).

Outcomes for School-Age Children Identified for Services Under IDEA

- Academic achievement trends from 2003 through 2007 measured by NAEP showed significant increases in average scale scores for both children identified and children not identified for services under IDEA in grade 4 reading and mathematics and in grade 8 mathematics (see exhibit ES.10).** In grade 4 reading, average scale scores for children identified for services under IDEA and children not identified for IDEA services increased by 5.8 (SE = 0.82, $p < .001$) and 3.0 (SE = 0.38, $p < .001$) scale points, respectively. Similar increases were observed in grade 4 mathematics of 6.1 (SE = 0.56, $p < .001$) and 5.0 (SE = 0.29, $p < .001$) scale points, respectively. In grade 8 mathematics, average scale scores for children identified for services under IDEA increased by 4.1 (SE = 0.91, $p < .001$) scale score points from 2003 to 2007. Average scale scores for children not identified for IDEA services increased by 3.2 (SE = 0.35, $p < .001$) scale score points.

- **Children identified for services under IDEA had significantly lower scores on NAEP in reading and mathematics than children not identified at each time point (see exhibit ES.10).** For example, in grade 4 reading, the differences between children identified and not identified for services under IDEA were 35.4 (SE = 0.66, $p < .001$), 30.6 (SE = 0.58, $p < .001$), and 32.7 (SE = 0.62, $p < .001$) scale score points in 2003, 2005, and 2007, respectively. In grade 8 mathematics, the differences by IDEA service status were 38.6 (SE = 0.82, $p < .001$), 37.5 (SE = 0.51, $p < .001$), and 37.8 (SE = 0.73, $p < .001$) scale score points in 2003, 2005, and 2007, respectively.
- **Across states, NAEP reading and mathematics scores varied for children identified for and not identified for services under IDEA.** For children identified for services under IDEA, the average scale scores in 2007 ranged from 162 (SE = 4.73) to 213 (SE = 2.86) on the NAEP fourth-grade reading test and from 203 (SE = 2.80) to 248 (SE = 2.44) on the eighth-grade test, resulting in differences across states of 51 points and 45 points, respectively. Average scale scores for children not identified for IDEA services were more homogeneous, ranging from 199 (SE = 0.84) to 239 (SE = 1.14) and 243 (SE = 0.79) to 278 (SE = 0.83) for the fourth- and eighth-grade reading tests, respectively, differences of 40 and 35 points.

Exhibit ES.10. Mean reading and mathematics scale scores of fourth- and eighth-grade students identified and not identified for services under IDEA (2003, 2005, and 2007)

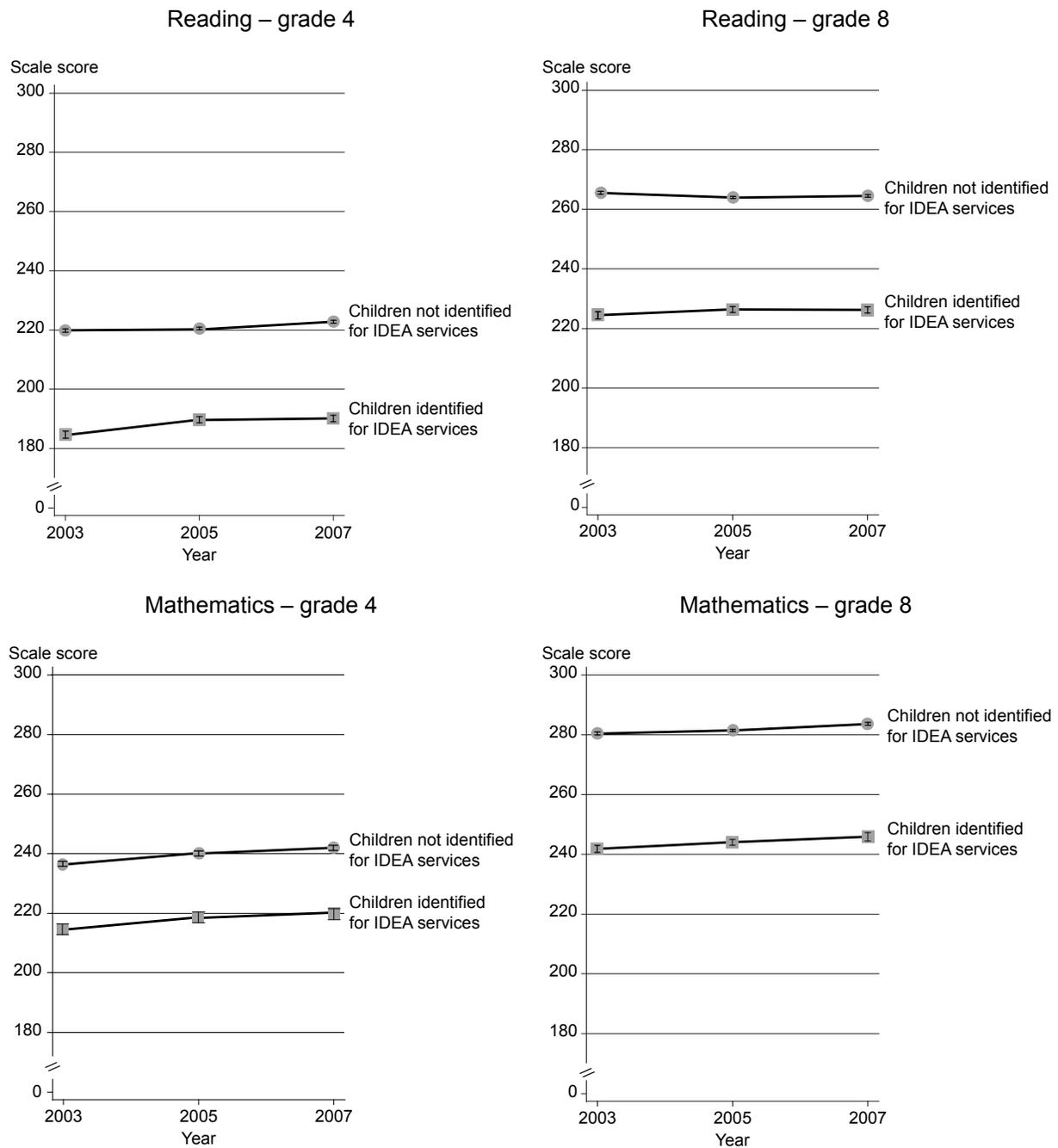


Exhibit reads: In 2007, the mean reading scale score of fourth-grade students not identified for IDEA was 223 compared with 190 for students identified.

NOTE: The presented confidence intervals represent plus or minus 1.96 multiplied by the standard error.
 SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003, 2005, and 2007, retrieved January 18, 2008, from NAEP Data Explorer, <http://nces.ed.gov/nationsreportcard/naepdata/>.

- The percentage of students identified for services under IDEA meeting achievement levels in reading in fourth grade on NAEP and state regular assessments varied across states.** The range of percentages of children identified for IDEA services at the NAEP *proficient or above* achievement level was from 2 percent (SE = 1.4) in the District of Columbia to 19 percent (SE = 2.8) in Virginia. The range of children identified for services under IDEA at the NAEP *basic or above* achievement level was from 9 percent (SE = 2.2) in the District of Columbia to 48 percent (SE = 4.5) in Delaware. The percentage of children identified for services under IDEA reported as *proficient or above* on regular state accountability tests ranged from 9 percent in South Carolina to 83 percent in Mississippi.
- The percentage of students identified for services under IDEA meeting achievement levels in mathematics in fourth grade on NAEP and state regular assessments varied across states.** The range of children identified for IDEA services at the NAEP *proficient or above* achievement level was from 2 percent (SE = 0.9) in the District of Columbia to 26 percent (SE = 2.8) in North Carolina. The range of children identified for IDEA services at the NAEP *basic or above* achievement level was from 9 percent (SE = 2.1) in the District of Columbia to 70 percent (SE = 2.7) in North Carolina. The percentage of children identified for IDEA services reported as *proficient or above* on regular state accountability tests ranged from 8 percent in Maine to 81 percent in North Carolina.
- Nationwide, 46 percent of children identified for services under IDEA and estimated to be enrolled as of 4 years prior completed secondary school with a regular diploma in 2005. This graduation rate is 29 percentage points below the rate for children in the total population nationwide who received a regular diploma that year (75 percent).**¹⁴ The Averaged Freshman Graduation Rate (AFGR) in 2005 for children identified for services under IDEA ranged from 17 percent in Louisiana to 78 percent in Pennsylvania (see exhibit ES.11). For the total population of children, the AFGR ranged from 56 percent in Nevada to 91 percent in New Jersey.

¹⁴ Comparisons between children identified for services under IDEA and the total population, as well as comparisons among states, should be treated with caution because of limitations of the data sources.

Exhibit ES.11. Averaged freshman graduation rate of school-age youth identified for services under IDEA and total population, by state (2005 and 1998–2004 average)

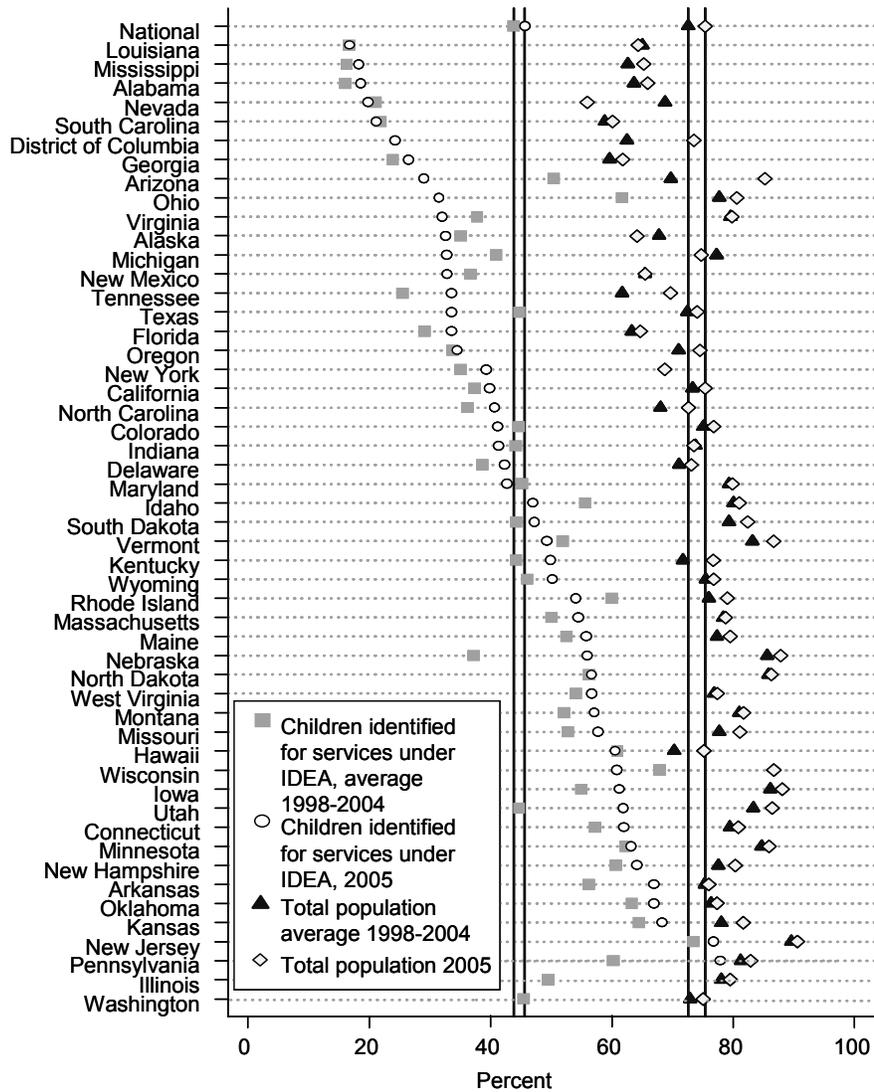


Exhibit reads: In Louisiana, 17 percent of the estimated enrollment of students identified for IDEA services 4 years prior to 2005 graduated with a regular diploma in 2005.

NOTE: States are ordered by the graduation rate of youth identified for services under IDEA in 2005. Vertical lines represent national rates. The Averaged Freshman Graduation Rate (AFGR) uses aggregate student enrollment data to estimate the size of an incoming freshman class and aggregate counts of the number of graduates 4 years later. For a given year, the freshman class size four years prior is estimated by summing the enrollment in 8th grade 4 years prior, 9th grade for the next year, and 10th grade for the year after and then dividing by 3. The averaging is intended to account for higher grade retentions in the 9th grade. To calculate the AFGR, the number of diplomas awarded in a year serves as the numerator, and the averaged freshmen class enrollment serves as the denominator (for more information about the use of the AFGR for the general population, go to: <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2008053>). Using data from the Common Core of Data (CCD), the formula for calculating the AFGR for youth in the total population is shown below.

AFGR formula for youth in the total population for 2005-06 school year:

Regular High School Diplomas Awarded at End of 2005-06 School Year

Enrollment in (Grade 8 in fall 2001 + Grade 9 in fall 2002 + Grade 10 in fall 2003)/3

SOURCE: U.S. Department of Education, Office of Special Education Programs, Data Analysis System (DANS), Part B, 1997–2005, retrieved April 19, 2008, from <http://www.ideadata.org>; U.S. Department of Education, National Center for Education Statistics, Common Core of Data, 1997–98 to 2005–06, retrieved December 10, 2007, from <http://www.nces.ed.gov/ccd/bat/>.

References

- Abt Associates and Westat. (2007). *Design of the National Assessment of Progress Under the Individuals With Disabilities Education Improvement Act. Extant Data Report*. Cambridge, MA: Author.
- Benjamini, Y., and Hochberg, Y. (1995). Controlling the False Discovery Rate - A Practical and Powerful Approach to Multiple Testing. *Journal of the Royal Statistical Society*, 57(1): 289–300. Dunn, L.M., and Dunn, L.M. (1997) *Peabody Picture Vocabulary Test-Third Edition*. Circle Pines, MN: American Guidance Services.
- Fiore, T., Daley, T.C., Lee, H., Carlson, E., Munk, T.E., O'Reilly, F., Price, C., and McLaughlin, M. (2007). *Design of the National Assessment of Progress Under the Individuals With Disabilities Education Improvement Act. Final Report of Design Options*. Cambridge, MA: Abt Associates.
- Hamilton, B.E., Martin J.A., and Ventura S.J. (2007). Births: Preliminary Data for 2006. *National Vital Statistics Reports*, 56(7). Hyattsville, MD: National Center for Health Statistics. 2007. Retrieved January 9, 2008, from www.cdc.gov/nchs/data/nvsr/nvsr56/nvsr56_07.pdf.
- Harrison, P.L., and Oakland, T. (2003). *Adaptive Behavior Assessment System – Second Edition*. San Antonio, TX: The Psychological Corporation.
- Holt, E.W., McGrath, D.J., and Herring, W.L. (2007). *Timing and Duration of Student Participation in Special Education in the Primary Grades*. (NCES 2007-043). Washington, DC: National Center for Education Statistics.
- Mackey Andrews, S.D. and Taylor, A.(2007). *To Fee or Not to Fee: That is the Question!* (NECTAC Notes No.22). Chapel Hill, NC: The University of North Carolina, FPG Child Development Institute, National Early Childhood Technical Assistance Center.
- National Research Council. (2002). *Minority Students in Special and Gifted Education*. M.S. Donovan and C.T. Cross, (Eds.). Washington, DC: National Academy Press.
- SEELS. (2005). *Declassification—Students Who Leave Special Education. A Special Topic Report From the Special Education Elementary Longitudinal Study*. Menlo Park, CA: SRI International. Available at http://www.seels.net/designdocs/SEELS_Declass_FINAL.pdf.
- Wagner, M. (2003). An Overview of the School Programs of Secondary School Students With Disabilities. In M. Wagner, L. Newman, R. Cameto, P. Levine, and C. Marder, *Going to School: Instructional Contexts, Programs, and Participation of Secondary School Students With Disabilities*. Menlo Park, CA: SRI International. Available at http://www.nlts2.org/reports/2003_12/nlts2_report_2003_12_ch4.pdf.
- Woodcock, R.W., McGrew, K.S., and Mather, N. (2001). *Woodcock-Johnson Tests of Academic Achievement*. Itasca, IL: Riverside Publishing.