Shortages of qualified education personnel, including personnel in the fields of special education and related services remain an ongoing challenge nationally. Several sources of national data provide details regarding the nature and scope of these shortages. This brief from the Personnel Improvement Center (PIC) describes these data sources that are currently available at the national level. The brief includes federal data sources, as well as information about how these data sources relate to personnel in special education and the related services.

**FEDERAL DATA SOURCES**

**THE DATA ACCOUNTABILITY CENTER FOR IDEA DATA**

The only U.S. Department of Education website devoted solely to special education data, the Data Accountability Center (DAC) for Individuals with Disabilities Education Act (IDEA) Data website, provides public access to data on personnel serving infants, children and youth with disabilities under IDEA (www.ideadata.org). Part B personnel (serving students ages 3-21) data reported annually by states are available for the years 2003 through 2007. Tables include data on highly qualified education teachers and paraprofessionals and fully certified related service providers employed by each state. Types of information for each personnel category include:

- total personnel employed by state with separate tables for each category, such as teachers, paraprofessionals and various types of related service providers;
- the number of highly qualified teachers and paraprofessionals or fully certified related service providers by state and category; and
- the number of personnel who are not highly qualified (HQ) or fully certified by state and category.

Because total numbers of personnel are based on full-time equivalency (FTE) units rather than actual numbers of individuals employed, percentages of HQ personnel are not available. In addition to IDEA data, the DAC provides technical assistance materials to support the collection, analysis and reporting of personnel data, as well as the forms and spreadsheets used for data collection.

Examples of the most recent data available from 2007 on the DAC website relevant to Part B personnel shortages in the field of special education and the related services include:

- 355,539 teachers serving students ages six through 21 under Part B of IDEA were highly qualified and 34,882 were not.
- 33,707 paraprofessionals serving children ages three through five under Part B of IDEA were highly qualified and 4,820 were not.
- 59,136 speech language pathologists serving children ages 3 through 21 under Part B of IDEA were fully certified and 1,532 were not.
TITLE II HIGHER EDUCATION ACT WEBSITE

Title II Data Reporting by States. The Title II Higher Education Act’s website provides data reported annually under Title II of the Higher Education Act on the quality of teacher preparation in each state (https://title2.ed.gov/View.asp). State-level reports are available from 2001 through 2009. Information in each state’s report includes:

- standards for teachers;
- requirements for an initial teaching certificate or license through alternative and/or traditional routes; and
- pass rates on each assessment used by states in certifying or licensing teachers by preparation program (both alternative and traditional routes).

Data disaggregated for special education include information on teacher standards, certification requirements (including licensure reciprocity) and pass rates on teacher assessments for individual teacher preparation programs. Examples of the most recent data (2007-2008) relevant to teaching include the following:

- 653 special education candidates in traditional personnel preparation programs in Texas took the state assessment and 627 or 96% passed.
- 1,657 special education candidates in alternative route personnel preparation programs in Texas took the state assessment and 1,625 or 98% passed.

The site also provides technology tools to states and their preparation programs regarding Title II reporting requirements.

Annual Secretary’s Report. In accordance with Title II of the Higher Education Act, the Secretary of Education is required to prepare an annual report for Congress on the preparation of teachers. The most recent, The Sixth Annual Report on Teacher Quality: A Highly Qualified Teacher in Every Classroom (2009), summarizes much of the data available on the Title II Higher Education Act website. Tables also include state-level information on total number of teachers for each subject area (including special education) and numbers and percentages of teachers in each subject area serving on waivers (i.e., with emergency licenses) (https://title2.ed.gov/View.asp).

The following is an example of the 2004 personnel data reported in the most recent report relevant to personnel shortages in the field of special education:

- Out of 416,703 special education classroom teachers, 15,927 or 3.8% were teaching on waivers.
- The percentage of teachers on waivers varies greatly from state to state, with a low of 0% to a high of 68.5%.

NATIONAL CENTER FOR EDUCATION STATISTICS (NCES) DATA

The NCES website provides education survey data collected by the U.S. Department of Education, as well as analyses of education policy issues. The website enables users to create their own analysis tables and view thousands of existing tables. Several pages are relevant to the supply and demand of education personnel, including special education personnel. Among these are the following:

- Schools and Staffing Survey (SASS). The SASS, originally conducted in 1985, has been redesigned to emphasize teacher demand and shortages, teacher and administrator characteristics, school programs and general conditions in schools (http://nces.ed.gov/surveys/sass/).
- The Teacher Listing Form collects the full list of teachers from a school, along with information on subjects taught (including special education), full or part-time status and teaching experience.
- The District Questionnaire includes information on recruitment and hiring strategies and principal and teacher compensation.
- The School Questionnaire includes information on numbers of staff (teachers, related service providers, special education instructional aides and special education noninstructional aides), as well as the ease/difficulty with which teaching vacancies were filled within specific fields (including special education).
- The School Principal Questionnaire includes information on paraprofessional teacher professional development, school climate and safety, teacher and school performance, working conditions and principal perceptions.
- The Teacher Questionnaire includes information on teaching assignment (e.g. special education), classroom assignments (e.g. self-contained and team teaching), educational background (including special education), certification (e.g. special education) and working conditions, including adequacy of preparation and support during first year, professional development, school climate and teacher attitudes.
Teacher Follow-up Survey (TFS). The purpose of the TFS is to determine how many teachers remained at the same school, moved to another school or left the profession in the year following the SASS (http://nces.ed.gov/surveys/sass/ovry_whatsafs.asp). The 2008-09 TFS was administered to a sample of teachers who completed the SASS the previous year and the report, Teacher Attrition and Mobility: Results from the 2008-09 Teacher Follow-up Survey, includes information on numbers and percentages of stayers, movers and leavers by teacher characteristic, such as main assignment field (including special education) (http://nces.ed.gov/pubs2010/2010353.pdf).

Examples of data from this report relevant to personnel shortages in the field of special education include:

- Of the 3,380,300 teachers who taught in public schools during 2007-08, 84.5% remained at the same school the next year (“stayers”), 7.6% moved to a different school (“movers”) and 8% left the profession (“leavers”).
- Of the 396,500 special education teachers who taught in public schools during 2007-08, 78% were stayers, 9.8% were movers and 12.3% were leavers.

Integrated Post-Secondary Education Data System (IPEDS). IPEDS provides state-level information on numbers of graduate and post-graduate degrees and certificates conferred; numbers of college and university employees, faculty and graduate assistants; enrollment counts; and revenue and expenses by type of postsecondary institution (http://nces.ed.gov/das/library/ipeds_state.asp). IPEDS state-level tables are available for 2002 through 2006. IPEDS data can be disaggregated for special education degrees. However, accessing special education-specific data requires assistance from NCES staff.

TEACHER SHORTAGE AREAS BY STATE

The U.S. Department of Education’s Office of Postsecondary Education (OPE) provides a link to the Teacher Shortage Areas nationwide listing for the years 1990-91 through 2010-11. The list is by state, includes information on special education shortages and in some cases provides information on shortages of personnel within specific disability categories (e.g., emotional disturbance, specific learning disability, speech language impairment) (http://www2.ed.gov/about/offices/list/ope/pol/tsa.html).

Examples of data available on Teacher Shortage Areas relevant to the field of special education include:

- In the state of Florida, special education was the one consistent shortage area from 1990-2010. Each year, the state reported shortages in at least four disability categories, with as many as seven categories in 2010.
- In the state of Oregon, special education was again the one consistent shortage area during the years for which the state reported shortages (i.e., 1990-2000 and 2007-2010)

OTHER NATIONAL DATA SOURCES

AMERICAN ASSOCIATION FOR EMPLOYMENT IN EDUCATION (AAEE) SUPPLY AND DEMAND STUDIES

For the past 33 years, the AAEE has conducted an annual educator supply and demand study. Data reported from this study reflect supply and demand perceptions of career service representatives, deans and directors of teacher preparation programs at colleges and universities throughout the nation. The study identifies four levels of need for qualified personnel. Although the most current study is only available for a fee to non-members, reports from preceding years are available for free public download (http://www.aaee.org/cwf/external/wcpages/resource/).

Information from AAEE annual surveys related specifically to special education and related service provider shortages are available also on both the PIC website (http://personnelcenter.org/documents/supplydemand.pdf) and the National Coalition on Personnel Shortages in Special Education and Related Services website (http://specialedshortages.org/sd2008_index.cfm).

Examples of data from AAEE supply and demand studies relevant to personnel shortages in the field of special education include:

- In 2008, every special education field was ranked “considerable shortage,” except for early childhood special education which, was ranked “some shortage.”
- In 2008, occupational therapy, physical therapy and speech language pathology fields were all ranked “some shortage.”
- From 1996 through 2006, the only field that was consistently represented in the “considerable shortage” category among all fields in education was special education and/or related services.
RESEARCH BY ERLING BOE ON SPECIAL EDUCATION SHORTAGES

Dr. Boe, a professor at the University of Pennsylvania, has been conducting research on special education supply and demand issues for almost 20 years. Articles available for free download include:

- National Trends in the Sources of Supply of Teachers in Special and General Education (Cook and Boe, 2007) (http://www.dubois.gse.upenn.edu/cresp/pdfs/TESE%20Cook-Boe%20supply.pdf);
- Long-term Trends in the National Demand, Supply and Shortage of Special Education Teachers (Boe, 2006) (http://www.gse.upenn.edu/cresp/pdfs/JSE%20Article-Trends%20in%20SpEdTch.pdf); and
- The Shortage of Fully Certified Teachers in Special and General Education (Boe, 1998) (http://www.gse.upenn.edu/cresp/pdfs/TESE%20shortage%20paper%201998.pdf).

Examples of data from these articles relevant to special education supply and demand include:

- There is a chronic shortage of certified special education teachers (9.8%), a level at least twice that in general education (5.5%).
- The shortage of fully certified teachers for students with disabilities ages 6 through 21 has been chronic since 1987 and has increased annually from 7.4% in 1993 to 13.4% in 2002.

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