

Trends & Milestones

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Special Education Personnel Utilization and General Class Placement of Students with Disabilities: Ranges and Ratios

Michael F. Giangreco, Sean M. Hurley, and Jesse C. Suter

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As of 2006 (U.S. Department of Education, 2006a), approximately six million U.S. students with disabilities (Ages 6–21) were being served under the *Individuals with Disabilities Education Improvement Act of 2004* (IDEA). Approximately 54% had their primary placement (80% of the time or more) in general education classes (U.S. Department of Education, 2006b). Although this represented a 21% increase since 1990 (see Figure 1), variability across states remained wide, ranging from under 10% in Virginia to nearly 78% in North Dakota. Variability across disability categories was similarly wide. For example, over 84% of students identified with *speech or language impairments* had their primary placement in general education classes, whereas less than 16% with *intellectual disabilities* (labeled by the federal government as *mental retardation*) had primary placements in general education.

Personnel (e.g., special educators, related services providers, paraprofessionals) represents a key resource to support the education of students with disabilities across settings. To explore relationships among personnel utilization in full-time equivalents (FTEs) and general class placement rates, we compiled data from federally reported sources to present a series of ratios and correlations (Sable & Noel, 2008; U.S. Department of Education 2006a, 2006b, 2006c, 2006d). These data may begin to illuminate the availability of personnel supports for students with disabilities (see Table 1).

The ratio of special educator FTEs to the number of students with disabilities in the United States receiving special education in 2006 was approximately 1:15 (U.S. Department of Education, 2006a, 2006c). Individual states ranged from below 1:11 (HI, NH, NY) to over 1:21 (FL, ID, IN, MS, UT, WA, WY). Sometimes special educators have re-

sponsibilities in addition to working with students receiving special education. Therefore, another way to consider the availability of special educators is the ratio of special educator FTEs to total enrollment (students with and without disabilities). Nationally, in the 2006–2007 school year, there was one special educator FTE for every 121 students of total enrollment (Sable & Noel, 2008; U.S. Department of Education, 2006c). Ranges spanned from 1:80 or fewer students in six states (ME, NH, NJ, NY, OK, RI), to 1:190 or more students in seven others (CA, ID, MS, TX, UT, WA, WY). Special educators in some states served nearly twice as many students with disabilities compared with other states, and some states had only half as many special educators per total enrollment as others.

Nationally, there was a ratio of one special education paraprofessional FTE for nearly every 17 students with disabilities (U.S. Department of Education, 2006a, 2006d). In all but two states (OH, NJ), the ratios ranged from approximately 1:4 in Vermont to 1:37 in Texas. Although all of the federally reported data likely include some level of inaccuracy, paraprofessional data should be viewed with extra caution because interpretative and definitional differences may have resulted in underreporting. Questionable outliers (e.g., OH, 1:155; NJ, 1:140) suggest potential reporting differences.

The ratio of special education paraprofessional FTEs to special educator FTEs provides a perspective on the extent to which states' service delivery models are more or less dependent on special educator or paraprofessional supports. The U.S. ratio indicates that there was slightly less than one special education paraprofessional FTE (0.9) for every one special educator FTE, although ranges across the states were wide (U.S. Department of Education, 2006c, 2006d).

Table 1 State Data on Students With Disabilities (Ages 6–21), Total Enrollment for K–12, and Personnel FTE Ratios for 2006

State	No. students with disabilities	% with disabilities in general education ^a	No. special educator FTEs	No. with disabilities per special educator FTE	Total student enrollment per special educator FTE	No. special education paraprofessional FTEs	No. students with disabilities per paraprofessional FTE	No. special education paraprofessional FTEs per special educator FTE
AL	80,987	74.1	5,600	14.5	132.1	4,380	18.5	0.8
AK	15,773	55.4	990	15.9	132.1	—	—	—
AZ	112,614	52.3	5,976	18.8	175.8	7,680	14.7	1.3
AR	56,444	49.8	3,803	14.8	122.4	2,324	24.3	0.6
CA	605,685	49.5	32,169	18.8	195.4	43,730	13.9	1.4
CO	72,620	60.2	4,765	15.2	161.5	5,469	13.3	1.2
CT	62,294	66.9	4,892	12.7	114.8	8,538	7.3	1.8
DE	17,153	51.3	1,465	11.7	83.0	1,003	17.1	0.7
DC	10,359	—	—	—	—	—	—	—
FL	364,645	57.6	17,155	21.3	153.0	12,800	28.5	0.8
GA	176,400	55.4	15,376	11.5	103.4	11,626	15.2	0.8
HI	18,640	—	1,813	10.3	98.9	1,799	10.4	1.0
ID	24,550	61.4	1,105	22.2	239.5	2,261	10.9	2.1
IL	289,611	48.6	19,902	14.6	102.7	31,296	9.3	1.6
IN	159,679	61.9	7,032	22.7	147.3	8,181	19.5	1.2
IA	65,195	55.1	5,761	11.3	82.4	5,251	12.4	0.9
KS	56,307	60.5	3,890	14.5	117.1	9,588	5.9	2.5
KY	88,347	66.8	6,569	13.5	98.4	5,008	17.6	0.8
LA	78,919	58.0	6,350	12.4	102.7	5,669	13.9	0.9
ME	31,419	56.6	2,818	11.2	68.0	3,861	8.1	1.4
MD	95,149	61.0	8,171	11.6	101.1	7,185	13.2	0.9
MA	150,146	52.6	8,630	17.4	109.4	12,671	11.9	1.5
MI	217,673	49.8	12,991	16.8	130.6	8,992	24.2	0.7
MN	103,935	60.3	8,476	12.3	97.7	9,994	10.4	1.2
MS	59,160	60.6	1,124	52.6	438.0	1,670	35.4	1.5
MO	125,991	55.8	9,155	13.8	98.2	7,604	16.6	0.8
MT	16,616	49.0	826	20.1	173.9	1,064	15.6	1.3

Table 1 continued

Errata: Three states' numbers under the column *Total student enrollment per special educator FTE* are incorrect. The correct numbers are OH 92.9, PA 91.6, and VT 86.1.

Table 1 Continued

State	No. students with disabilities	% with disabilities in general education ^a	No. special educator FTEs	No. with disabilities per special educator FTE	Total student enrollment per special educator FTE	No. special education paraprofessional FTEs	No. students with disabilities per paraprofessional FTE	No. special education paraprofessional FTEs per special educator FTE
NE	39,947	69.9	2,320	17.2	121.0	3,174	12.6	1.4
NV	42,561	58.9	2,586	16.5	162.5	1,796	23.7	0.7
NH	28,494	65.0	2,656	10.7	75.7	5,484	5.2	2.1
NJ	230,327	40.6	19,062	12.1	68.3	1,644	140.1	0.1
NM	41,617	50.8	2,433	17.1	132.5	2,908	14.3	1.2
NY	391,773	53.1	39,888	9.8	69.3	30,422	12.9	0.8
NC	172,018	63.1	10,264	16.8	139.1	7,404	23.2	0.7
ND	12,258	77.8	825	14.9	116.0	1,407	8.7	1.7
OH	245,678	50.0	19,431	12.6	692.9	1,586	154.9	0.1
OK	88,235	54.9	7,948	11.1	76.1	2,751	32.1	0.4
OR	69,521	68.9	3,422	20.3	164.1	5,668	12.3	1.7
PA	265,199	49.6	20,304	13.1	691.6	16,069	16.5	0.8
RI	27,261	62.9	1,876	14.5	79.9	—	—	—
SC	93,489	—	6,112	15.3	111.5	4,213	22.2	0.7
SD	15,140	65.5	915	16.6	131.1	1,495	10.1	1.6
TN	108,296	63.4	6,070	17.8	156.7	5,760	18.8	1.0
TX	454,951	58.7	22,628	20.1	193.9	12,427	36.6	0.6
UT	53,569	50.6	2,509	21.4	207.2	3,283	16.3	1.3
VT	12,408	70.8	1,058	11.7	686.1	3,104	4.0	2.9
VA	153,826	9.8	13,322	11.6	90.1	11,808	13.0	0.9
WA	109,805	50.1	5,195	21.1	195.9	5,967	18.4	1.2
WV	43,041	63.6	2,818	15.3	97.4	1,513	28.5	0.5
WI	112,935	51.1	7,836	14.4	107.6	5,684	19.9	0.7
WY	11,300	56.0	440	25.7	192.7	1,049	10.8	2.4
BIE	6,684	—	505	13.2	—	625	10.7	1.24
U.S.	5,986,644	53.7	399,222	15.0	120.6	356,883	16.8	0.9

Note. Dashes indicate missing data. FTE = full-time equivalent.

^aStudents with disabilities included in general education classrooms 80% of the time or more.

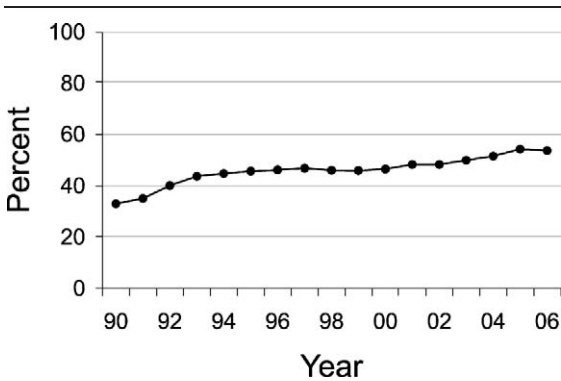


Figure 1 National percentage of students with disabilities whose primary placements are in general education classes (80% of the time or more), 1990–2006.

Twenty-three states and the Bureau of Indian Education (BIE) reported employing more special education paraprofessional FTEs than special educator FTEs, a trend that has steadily increased over the past decade. Vermont reported the largest disparity, employing nearly three times as many special education paraprofessionals as special educators in FTE. States that had higher rates of general class placement of students with disabilities tended to employ more paraprofessionals than special educators in FTE ($r = .34$). For example, 9 states (AL, CT, KY, NE, NH, ND, OR, SD, VT) reported that 65% or more of their students with disabilities had their primary placement in general education classes. These states employed an average of 1.6 ($SD = 0.7$) special education paraprofessionals (FTEs) for every one special education teacher (FTE), and 7 of the 9 states employed more paraprofessional FTEs than special educator FTEs. In contrast, 9 states (AR, CA, IL, MI, MT, NJ, OH, PA, VA) reported that 50% or fewer of their students with disabilities had their primary placement in general education classes. They employed an average of 0.8 ($SD = 0.5$) special education paraprofessionals (FTE) for every one special education teacher (FTE), with 6 of the 9 states employing more special educator FTEs than paraprofessional FTEs.

In combination, these data raise many questions. Does personnel availability across the states vary as much as reported, or are some of the differences attributable to reporting errors? Does the extent to which students with disabilities have access to general education classes depend on where they live? If the data are reasonably accurate, is it con-

ceivable that students across the country are receiving equitable access to the promises of the IDEA when personnel resource availability varies by more than 100% between some states? What is a desirable proportion of special educators to special education paraprofessionals? Is a shift toward increased reliance on paraprofessionals desirable as the trend to include more students with disabilities in general education classes advances?

Because state averages provide only gross indexes for consideration, the child counts, percentages, and ratios presented in Table 1 may be even more helpful to explore at the individual school level. Doing so may assist schools in being proactive, rather than reactive, in designing their special education service delivery in ways that are consistent with the IDEA pledge to ensure a free, appropriate, public education in the least restrictive environment. Regardless of the unit of analysis, the need for accurate data remains paramount for making informed decisions regarding special education service delivery. (Sources: Sable, J., & Noel, A. (2008). *Public elementary and secondary school student enrollment and staff from the common core of data: School year 2006–07* (NCES 2009-305). Washington, DC: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Retrieved Nov. 24, 2008, from <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2009305>; U.S. Department of Education. (2006a). *Table 1-3. Students ages 6 through 21 served under IDEA, Part B, by disability category and state: Fall 2006* [Data file]. Washington, DC: Author. Available from <https://www.ideadata.org/PartBdata.asp>; U.S. Department of Education. (2006b). *Table 2-2. Students ages 6 through 21 served under IDEA, Part B, by disability category, educational environment and state: Fall 2006* [Data file]. Washington, DC: Author. Available from <https://www.ideadata.org/PartBdata.asp>; U.S. Department of Education. (2006c). *Table 3-2. Teachers employed (FTE) to provide special education and related services to students ages 6 through 21 under IDEA, Part B, by certification status and state: Fall 2006* [Data file]. Washington, DC: Author. Available from <https://www.ideadata.org/PartBdata.asp>; U.S. Department of Education. (2006d). *Table 3-4. Paraprofessionals employed (FTE) to provide special education and related services to children ages 6 through 21 under IDEA, Part B, by qualification status and state: Fall 2006* [Data file]. Washington, DC: Author. Available from <https://www.ideadata.org/PartBdata.asp>)