



Methodology Overview

The CRDC presented a unique opportunity to analyze special education data at both the national and state levels. The comprehensive nature of the data set meant that several variables of interest, (e.g., enrollment figures and school type), were accessible for secondary analyses.

The CRDC does have certain methodological limitations. In some cases, enrollment numbers were concealed by the USDOE to protect the privacy of students. Consequently, some schools had incomplete information. In other cases, there were apparent errors in the numbers, such as percentages of enrollment that totaled over 100% or incorrect school type classifications (e.g., a school categorized as a charter school in a state that does not have a charter school law). Due to the magnitude of the dataset, we were not able to verify the accuracy of all the data. However, we did investigate outliers and data points that appeared to lack face validity (e.g., a school in Virginia that reportedly enrolled 373 students, of which 98.7% were students with disabilities; we called the school to verify the data and determined that the school was a magnet school that had been incorrectly coded as a charter school and that the special education enrollment data were incorrect).

In spite of these limitations, we determined that the CRDC was valuable in that it is nationally representative and therefore provides a unique foundation for future analyses and comparisons. The data collection uses standardized metrics across all schools in all states, a feature which was invaluable for the analyses we wanted to perform. Furthermore, we exercised caution in “cleaning” the data and obtaining a viable sample of schools. In general, we removed records that had incomplete information. The number of schools removed and the reasons for their removal (e.g., privacy protection or incompleteness) depended upon what variables we were looking at; not

all of the analyses used data from the same files. Further details on the data processing are included in the in-depth analysis and Appendix A.⁹ Our goal in establishing rules for including and excluding data was to ensure total transparency so that our methods could be readily examined and replicated by others.

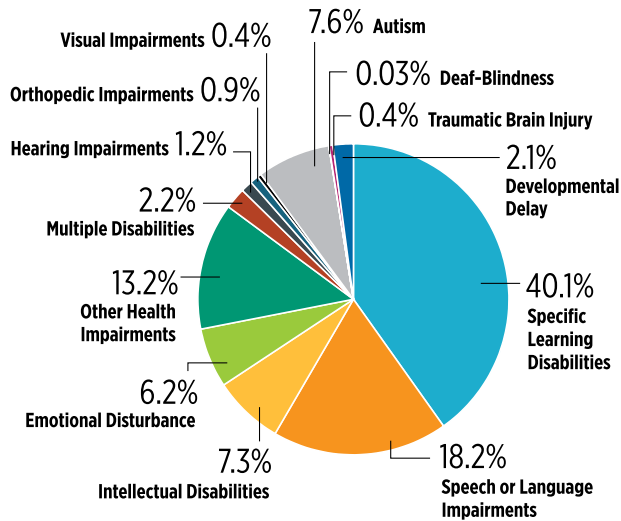
After separating a sample with concrete data for students with disabilities in the main enrollment analysis (i.e., the first analysis presented in this report), we performed some hypothesis testing to see if the sample we had obtained was significantly different from the schools that were filtered out. According to the tests, which evaluated any differences between the school groups based on total enrollment figures — these numbers were used because they were not privacy-protected — our sample was found to be significantly different. It appeared that the sample of traditional and charter public schools represented schools that had larger enrollment totals on average. Since privacy-protected data occur when the number of students with disabilities is two or below for either gender, it follows that smaller schools with lower enrollment totals might be more likely to have privacy-protection.

Given the difference in average enrollment size between our sample and the schools we excluded from our analysis, it is important to acknowledge the potential presence of bias in the results of this report. That is, the results might be more relevant to larger traditional public schools and larger charter schools. In each analysis, however, 80% or more of traditional public schools and 60% or more of charter schools were represented. Thus, the analyses in this report do reference a majority in both school groups.

Even though the sample of verifiable, non-privacy-protected data is used, it is important to acknowledge that the missing schools might merit separate research. Why

⁹As a reference, there were 90,322 traditional public schools and 5,300 charter schools in the CRDC. The number of students was 47,714,795 at traditional public schools and 2,036,556 at charter schools.

Percent of students ages 6 to 21 receiving special education services in 2013



SOURCE: U.S. Department of Education, ED Facts Data Warehouse (EDW), OMB # 1875-240: "IDEA Part B Child Count and Educational Environments Collection," 2012. These data are for the 50 states, DC, BIE schools, PR, the four outlying areas, and the three freely associated states. Data were accessed fall 2013. For actual data used, go to <http://www.ed.gov/about/reports/annual/osep>.

is it, for instance, that a greater portion of charter schools appears to have very low enrollment percentages of students with disabilities?

Without knowing the exact numbers behind the privacy-protected values (e.g., does a value of "less than or equal to two" on average represent a value of zero, one or two?), we decided that for the other analyses, similar to the initial enrollment analysis, we would only include records with complete data. While this sample may introduce some bias toward larger schools in both sectors (as suggested by the results shown in Tables 3 and 4), the number of schools represented in the samples of the analyses does make up a majority for both school groups.

Children with disabilities are identified as having 1 of 13 categories of disabilities:

- **specific learning disabilities**
- **speech or language impairments**
- **other health impairments**
- **autism**
- **cognitive impairment**
- **emotional disturbance**
- **multiple disabilities**
- **developmental delay**
- **hearing impairments**
- **orthopedic impairments**
- **traumatic brain injury**
- **visual impairments**
- **deaf-blindness**

SOURCE: U.S. Department of Education. 36th Annual report to congress on the implementation of the Individuals with Disabilities Education Act. (2014). Washington, DC: Author. Retrieved October 1 from: <http://www2.ed.gov/about/reports/annual/osep/2014/parts-b-c/36th-idea-arc.pdf>

