

The Proportionality and Measurability of the Performance of Special-Needs Students on
Standardized Tests Compared to the General Population

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Abstract

This research seeks to find out what percentage of special-needs students nation-wide participate in high-stakes testing, and how well do they perform compared to other students in the general population. Some aspects of state education policies and federal mandates that are not available in previous studies are also a part of this research. Findings show an increase in the population of special needs students from 6.5 to 6.7 million which is about 13 percent of the school-age population in the United States. Furthermore, there is a huge performance gap between special-needs students and other students who take high-stakes tests. Awareness of the performance gap can foster a better approach to benefit all students, including those with special needs.

Keywords: Proportion; measure; performance; standardized tests; special-needs students; general population

The term proportionality in the text refers to the percentage or size of the population of special-needs students who take standardized tests. Measurability relates to the evaluation of the performance of special-needs students on standardized tests. The general population refers to the population of students who are not identified as having special needs. This research seeks to find out what percentage of the general school-age population in the United States comprises students with special needs, how many of them take high-stakes tests or standardized tests, also, how well special-needs students perform on standardized tests compared to their peers in the general population. State education leaders are in default of the U. S. Department of Education compliance mandate which requires them to submit a formula by which they determine which students need special services and which ones do not. The deadline was July of 2018 but was postponed to 2020 due to a lot of discrepancies in states' records (Individuals with Disabilities Education Act; Office of Special Education and Rehabilitation Services of the U. S. Department of Education).

The importance of the compliance mandate enables officials at the federal level to assess, monitor, and investigate states' policies due to the overrepresentation and underrepresentation of minority students identified for special services. Resolving the irregularities can significantly impact the size of the population of students with special needs who take high-stakes tests. This study builds on previous studies but differs because of new findings. There are scant reports on the proportionality of students with special needs who take standardized tests. The limited reports in circulation largely focus only on the 13 categories of students with special needs as defined by the U.S Department of Education. Other studies look into states' policies and approaches relating to special-needs students and contain examined and analyzed federal

data on federal mandates pertinent to students with special needs.

The Office of Special Education Program (OSEP) of the U. S. Department of Education offers formula grants approved by the Individual Disabilities Education Act (IDEA), a 2004 law that ensures services to children with disabilities throughout the United States, and oversees how states and public agencies provide early intervention, special education, and related services to more than 6.5 million eligible infants, toddlers, children, and youth with disabilities from birth to 21 years of age (Individual with Disabilities Education Act; U. S. Department of Education, 2004). Section 504 of the Rehabilitation Act of 1973, as amended, broadens the meaning of disability as it also appears in the American Disabilities Act of 1990 and 2008. Section 504 is a federal law put in place to protect the rights of individuals with disabilities in programs and activities that are funded by the U. S. Department of Education. (Office for Civil Rights; U. S. Department of Education).

Literature Review

Relative to the proportionality of special-needs students in the nation, the Individuals with Disabilities Education Act (IDEA) and National Center for Education Statistics (NCES) estimate that there are 6.7 million or about 13 percent of students who receive special education services due to some form of disability (National Center for Education Statistics, 2018). About all students with disabilities and English Language Learners (ELLs) with Individualized Education Program (IEP) take the Alternate Assessment based on modified achievement standards (AA-MAS) administered by all states (U. S. Department of Education, 2007). Data reveal that there is a huge

gap between the performance of students with disabilities and students of the general population (National Center on Educational Outcomes, 2017).

Determining which type of assessment will be appropriate for special-needs students is a concern among stakeholders. Experts argue that if school district leaders provided their special-needs students with the right academic support and tools about 90 percent of their students could graduate on time with diplomas instead of certificates. Furthermore, due to substandard academic services and education, only 65 percent of disabled students graduate but many do without receiving a traditional diploma. The percentage is lower for African Americans and Latino/a Americans (The Hechinger Report, 2017). According to the Hechinger Report, the 2014 and 2015 academic school year, nationally, showed that 76 percent of white special-needs students graduated on time compared to 65 percent Hispanic Americans and 62 percent African Americans (The Hechinger Report, 2017). Without the right support and education, life after high school can be very difficult for most of the students with special needs (The Hechinger Report, 2017).

In terms of measurability, The U. S. Department of Education mandates that assessment is the main method by which students' performance can be measured. Although state education leaders are to test 100 percent of their students, the Department of Education brought the percentage down to 95 percent instead. This mandate includes the general enrollment population and special-needs students (U. S. Department of Education). The National Center on Educational Outcomes (NCEO) and National Center on Systematic Improvement (NCSI) concertedly report that special-needs students are capable of handling rigorous standards. Recently some state

education leaders and a consortium of education stakeholders created a new assessment for all students, including special-needs. The new assessment aligns with a college- and career-ready standard or curriculum. The test is designed to measure students' achievement of rigorous college- and career-ready (CCR) standards (The National Center on Educational Outcomes & National Center on Systematic Improvement; University of Minnesota, 2016).

Opposing separating special-needs students from mainstream learning is the Council for Exceptional Children. Its members argue that separation is wrong and illegal (Council for Exceptional Children, 1997). Another group that opposes separation is the American Federation of Teachers (AFT). Its members argue that the law requires that special-needs students be provided with special education service through the individualized Education Program (IEP). Members of the federation also argue that school districts need to measure the performance of special-needs students through other means, such as portfolios, performance assessment, and observations, not standardized tests because it is not tailored to the special-needs students' Individualized Education Program (IEP) (American Federation of Teachers, 2014).

Methodology

Most of the data used for this research were collected or retrieved from on-line sources, such as electronic magazines, journals, articles, dissertations, and websites. An aggregated portion of the data was from the electronic outlets of the United States Department of Education where data relating to the current size and percentage of special-needs students in the enrolled

school population of the United States were garnered. Also, data pertaining to the types of disabilities along with their individual national percentages were analyzed. The National Center on Educational Outcomes (NCEO) through a cooperative agreement with the Office of Special Program of the U. S. Department of Education which also is affiliated with the University of Minnesota was also another source where data relating to the recent survey results pertinent to the new college- and career-ready standardized assessment that will include the participation of all students, including special-needs were collected.

Additional data collected were also the 20115 – 2016 state assessment participation and performance of students with IEPs, 2014 – 2015 publicly reported assessment results of students with disabilities and English Language Learners with Disabilities, and 2014 – 2015 Alternate Assessment based on Alternate Assessment Standards (AA-AAS). The aforementioned sources are not the only ones upon which the entire research is built. Additional data were gleaned from other media sources as well. However, the data for this segment of the research were selected because they address the research questions and provide relevance to the research.

Results

The table in the appendix shows the taxonomy of the different types of disabilities identified by the U. S. Department of Education which are prevalent among special-needs students. Special-needs students are about 13% or 6.7 million of the total school-age population in the country. The data below are representative of students with Individualized Education Programs (IEPs) as well as those with a 504 status in 13 categories for 2016 - 2017. The National Center on Educational Outcomes (NCEO) is the source of the data. (To view the content of the

table, please refer to Table 1.1 Categories of students with IEPS and a 504 status and their percentages in the Appendix). In July of 2018 the National Center on Educational Outcomes released the 2015 – 2016 Annual Performance Report (APR) of the assessments by states for students with Individualized Education Programs (IEPs). The data show the numbers and percentages of students with IEPS in each state. (refer to Figure 1 or the Appendix).

The national Center on Educational Outcomes of the University of Minnesota 2014 – 2015 performance and participation data show the proficiency levels of students with significant cognitive disabilities. Although the U. S. Department of Education mandates that state should test 95% of all their students including students with disabilities, states have to disaggregate the results or scores. By separating the scores of special-needs students from the general population, this will enable the state and federal education leaders to monitor the performance of disabled students. The 2014 – 2015 data are those from the Alternative Assessment based on Alternate Achievement Standards (AA-AAS). Findings show that the participation rate was fairly consistent across states; between 0% - 23%, and the proficiency rate was higher in Reading than Math. Proficiency rate ranged from 14.1% - 99.2% (National Center on Educational Outcomes, 2017). The 2014 – 2015 Publicly Reported Assessment Results from the various states of special-needs students and students of the general population reveal a huge gap for both Reading and Math in elementary, middle school, and high school. The 2012 – 2013 gaps were: elementary Reading 35%, middle school Reading 41%, high school Reading 39%, elementary Math 32%, middle school Math 40%, and high school Math 37%. The gaps for 2014 – 2015

were: elementary Reading 32%, middle school Reading 38%, high school Reading 37%, elementary Math 29%, middle school Math 29%, and high school Math 28% (National Center on Educational Outcomes, 2017).

Discussion

Studies were done by the National Center on Educational Outcomes about designing a new large-scale assessment that will measure the achievement of students based of a rigorous college and career-ready standard, but still in its developmental stage. This assessment will be for all students including those with disabilities. Findings reveal that some students were unfamiliar with contents on the test and there were accessibility and technical challenges (National Center on Educational Outcomes, 2016). An advocate group, Fairtest, is against inclusion. Its members argue that it is a waste of time and that standardized test is cognitively inappropriate for special-needs students. They support multiple measures of student knowledge and skills (Fair Test/ National Center for Fair Testing, 2017).

The American Federation of teachers (AFT) is another group that is against inclusion. They argue that standardized tests do not measure the progress of students with special needs, it is harmful to special-needs students, and that most tests are not accommodative and not modified for students with Individualized Education Programs (IEPs). They want special-needs students to be tested according to their IEPs (American Federation of Teachers, 2014). District and state education leaders have to comply with the mandate of the Department of Education that requires them to test 95% of their students, including students with special needs. They also have the flexibility to design their own test or testing method but to disaggregate the scores of the general

population and the special-needs students. It is important for school officials to fortify their school system with a uniform standard or curriculum that is aligned with Standardized tests and the Alternate Assessment based on Modified Academic Achievement Standards (AA-MAAS) or Alternate Assessment based on Alternate Achievement Standards (AA-AAS). State officials have to make sure that these tests have accommodations and the necessary hardware and software to make testing convenient and compliant with federal laws. Teachers should be adequately trained and schools across districts and states should be equipped with the appropriate resources to make all their students succeed. When test results begin to improve as well as the achievement gap than state officials can initiate pilot programs that can transition some special-needs students into participating in rigorous college- and career-ready standardized assessment programs.

Due to the limitation of studies on the subject of special-needs students in education, more studies are needed. Future research should focus on finding out how district and state education leaders identify students who need special education services. The secretary of Education wants to make sure that states are in compliant with mandates that address the needs of students with disabilities. The U. S. Department of Education requires states to submit data showing the formula or method they use to determine which students require special services and which ones do not. It has become a sensitive issue because studies show that minority students are underrepresented in special needs areas with adequate assistive and rehabilitative resources and overrepresented in special needs areas with inadequate assistive and rehabilitative resources (American Educational Research Association, 2015).

The Office of Special Education and Rehabilitative Services of the U. S. Department of Education had to postpone the date for States to comply with the “significant disproportionality regulation” from July 1, 2018 to July 1, 2020 along with two additional years for States identification of children as children with disabilities and a particular impairment. The decision was made following receipt of complaints and comments by stakeholders and proponents of equity education regarding States’ failure to do something about the significant disproportionality that exists under IDEA which has been a Civil Rights problem for many years. Other comments were that if States continue to improperly identify, place, discipline, segregate, or deprive children of the services due them, it could harm, and that discrimination and/ or improper or ineffective State policies can make children susceptible to the school-to-prison pipeline (Federal Register: The Daily Journal of the United States Government, 2018).

References

Albus, D., Lazarus, S. S., & Thurlow, M. L. (2016, May). 2012 – 13 Publicly Reported

Assessment Results for Students with Disabilities and ELLs with Disabilities.

Retrieved from <https://nceo.umn.edu/docs/OnlinePubs/Tech70/TechnicalReport70.pdf>

Against Standardized Assessment for Students Receiving Special Education Services. (2014).

Retrieved from <https://www.aft.org/resolution/against-standardized-assessments-students-receiving-special-education-services>

Assistance to State for the Education of Children with Disabilities; Preschool Grants for Children with Disabilities. Federal Register: The Daily Journal of the United States Government. (2018). Retrieved from <https://www.federalregister.gov/documents/2018/07/03/2018-14374/assistance-to-states-for-the-education-of-children-with-disabilities-preschool-grants-for-children>

Butrymowicz, S. & Mader, J. (2017, November). U. S. Education System is Failing Students with Special Needs. The Hechinger Report. Retrieved from <https://sites.ed.gov/idea/about-idea/>

Butrymowicz, S. & Mader, J. (2017, November). Low Academic Expectations and Poor Support for Special Education Students are Hurting Their Future. The Hechinger Report.

Retrieved from <https://hechingerreport.org/low-academic-expectations-poor-support-special-education-students-hurting-future/>

Butrymowicz, S. & Mader, J. (2017, November). The Forgotten Part of Special Education that could Lead to Better Outcomes for Students. The Hechinger Report. Retrieved from <https://hechingerreport.org/forgotten-part-special-education-lead-better-outcomes-students/>

Felton, E. (2017, November) Special Education Hidden Racial Gap. The Hechinger Report. Retrieved from <https://hechingerreport.org/special-educations-hidden-racial-gap/>

Home Room: the Official Blog of the U. S. Department of Education. (2015). Elementary and Secondary Act of 1965. Retrieved from <https://blog.ed.gov/2015/04/what-is-esea/>

Individual with Disabilities Act, U. S. Department of Education (2004). Retrieved from <https://sites.ed.gov/idea/about-idea/>

Lessons Learned About Assessment from Inclusion of Students with Disabilities in College and Career Ready Assessments. (2016, March) National Center on Educational Outcomes. Retrieved from <https://nceo.umn.edu/docs/OnlinePubs/LessonsLearnedAboutAssessment.pdf>

Morgan, P. et al. (2015, June). Study Finds Minority Students are Underrepresented in Special Education. American Educational Research Association. Retrieved from <https://www.aera.net/Newsroom/News-Releases-and-Statements/Study-Finds-Minority-Students-Are-Underrepresented-in-Special-Education>

Pratt, T. (2017, November). The Separate Unequal Education of Students with Special Needs. Retrieved from <https://hechingerreport.org/georgia-program-children-disabilities-separate-unequal-education/>

Protecting Students with Disabilities; Frequently asked Questions about Section 504 and the Education of Children with Disabilities. (n.d.). Office for Civil Rights, U. S. Department of Education. Retrieved from <https://www2.ed.gov/about/offices/list/ocr/504faq.html>

Samuels, Christine (2015, June). Achievement Gaps on State Tests Remain Wide for Students with Disabilities. Retrieved from http://blogs.edweek.org/edweek/speced/2015/06/achievement_gaps_on_state_test.html

State Assessment Participation and Performance of Students with IEPs 2015 – 2016, Data

Analytics. (2018, July). National Center on Educational Outcomes. Retrieved from

<https://tableau.ahc.umn.edu/t/ICI/views/Dataanalytic7APR2015->

[16/Story1?iframeSizedToWindow=true&:embed=y&:showAppBanner=false&:display_c](https://tableau.ahc.umn.edu/t/ICI/views/Dataanalytic7APR2015-16/Story1?iframeSizedToWindow=true&:embed=y&:showAppBanner=false&:display_c)

[ount=no&:showVizHome=no](https://tableau.ahc.umn.edu/t/ICI/views/Dataanalytic7APR2015-16/Story1?iframeSizedToWindow=true&:embed=y&:showAppBanner=false&:display_c)

Status of Education Reform in Elementary and Secondary Schools: Teachers' Perspective.

(1999, February). National Center for Education Statistics. Retrieved from

<https://nces.ed.gov/surveys/frss/publications/1999045/index.asp?sectionid=6>

Students with Disabilities. (2018, June). National Center on Educational Outcomes. Retrieved

from https://nceo.info/student_groups/students_with_disabilities

Thurlow, M. L., Albus, D. A., & Lazarus, S. S. (2017, May). 2014-15 Publicly Reported

Assessment Results for Students with Disabilities and ELLs with Disabilities. National

Center on Educational Outcome, NCEO Report 405. Retrieved from

<https://nceo.umn.edu/docs/OnlinePubs/NCEOReport405.pdf>

U. S. Congress. (2002). Public Law 107-110 107th Congress. No Child Left Behind Act of 2001

(20 USC 6301). Retrieved from <https://www2.ed.gov/policy/elsec/leg/esea02/107-110.pdf>

U. S. Department of Education. (2015). Every Student Succeed Act. Retrieved from

<https://www.ed.gov/essa?src=rn>

Appendix A

Table 1.1

Categories of students with IEPS and a 504 status and their percentages

Autism 10%	Deaf Blind < 1%	Developmental Delay 3%	Emotional Disturbance 6%	Hearing Impairment and Deafness 1%	Intellectual Disability 7%
Other Health Impairment 15%	Orthopedic Impairment < 1%	Specific Learning Disability 38%	Speech Language Impairment 17%	Traumatic Brain Injury < 1%	Visual Impairment and Blindness < 1%
Multiple Disabilities 2%					

Note. 2018 data of the categories and percentages of all students with Individualized Education Programs (IEPs) in the United States during the 2016 – 2017 academic year, grouped in 13 categories ranging from less than 1% to 38% (National Center on Educational Outcomes of the College of Education and Human Development of the University of Minnesota and the U.S. Department of Education).

Appendix B

Figure 1. Categories and sizes of students with IEPs and a 504 status

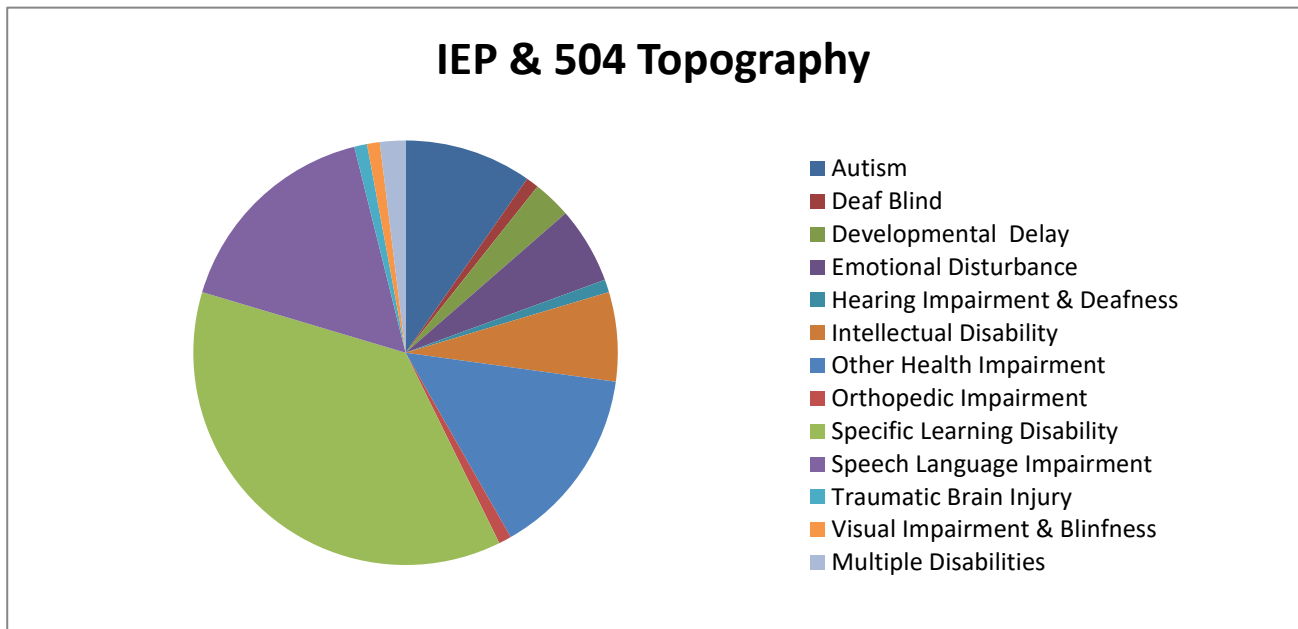


Figure 1. 2018 data of the categories and percentages of all students with Individualized Education Programs (IEPs) in the United States during the 2016 – 2017 academic year, grouped in 13 categories ranging from less than 1% to 38% (National Center on Educational Outcomes of the College of Education and Human Development of the University of Minnesota and the U.S. Department of Education).

Appendix C

Figure 2. 2015 – 2016 State Assessment of the Performance and Participation of Students with Individualized Education Programs (IEPs) with their percentages per state:

Alabama/ 7.6%, Alaska/ 10.1%, Arizona/ 7.9%, Arkansas/ 8.7%, California/ 7.9%, Florida/ 8.9%, Georgia/ 8.1%, Hawii/ 6.2%, Indiana/ 10.6%, Illinois/ 9.6%, Iowa/ 8.5%, Kansas/ 9.1%, Kentucky/ 9.0%, Louisiana/ 7.5%, Maine/ 11.9%, Missouri/ 8.6%, Massachusetts/ 11.1%, Maryland/ 7.6%, Michigan/ 8.5%, Minnesota/ 9.8%, Mississippi/ 8.8%, Montana/ 7.7%, Nevada/ 7.9%, Nebraska/ 10.0%, North Carolina/ 8.5%, New Hampshire/ 9.7%, New Jersey/ 11.8%, New Mexico/ 10.2%, New York/ 11.2%, North Dakota/ 7.4%, Ohio/ 9.6%, Oklahoma/ 11.7%, Oregon/ 9.5%, Pennsylvania/ 10.7%, South Dakota/ 9.1%, South Carolina/ 9.2%, Utah/ 8.9%, Virginia/ 8.6%, Washington/ 8.5%, West Virginia/ 11.6%, Wisconsin 8.7%, Wyoming 10.0%

Figure 2. Annual Performance Report of State Assessment for the 2015 – 2016 school year of Students with Disabilities per state, ranging from as low as 6.2% to 11.9%

(National Center on Educational Outcomes of the College of Education and Human Development of the University of Minnesota and the U.S. Department of Education).

Appendix D

Figure 3. Gaps between IEP students and comparison peer group on the Reading assessment for 2012 - 2013

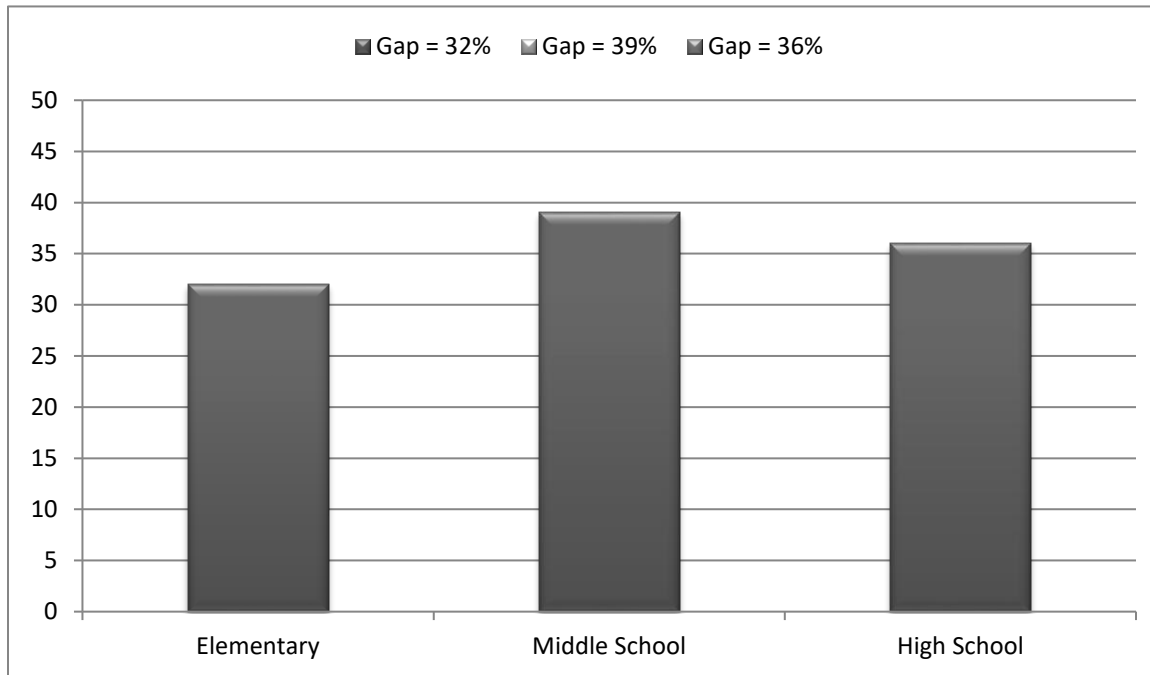


Figure 3. The performance gaps between special needs students and their counterparts in 48 states on the Reading Assessment were 34% on the Elementary level and 41% on the Middle School level respectively. On the High School level, the gap was 38% for 49 states (National Center on Educational Outcomes in collaboration with the Council of Chief State School Officers and the National Association of State Directors of Special Education, supported by the U. S. Office of Special Education Program).

Appendix E

Figure 4. Gaps between IEP students and comparison peer group on the Math assessment for 2012 - 2013

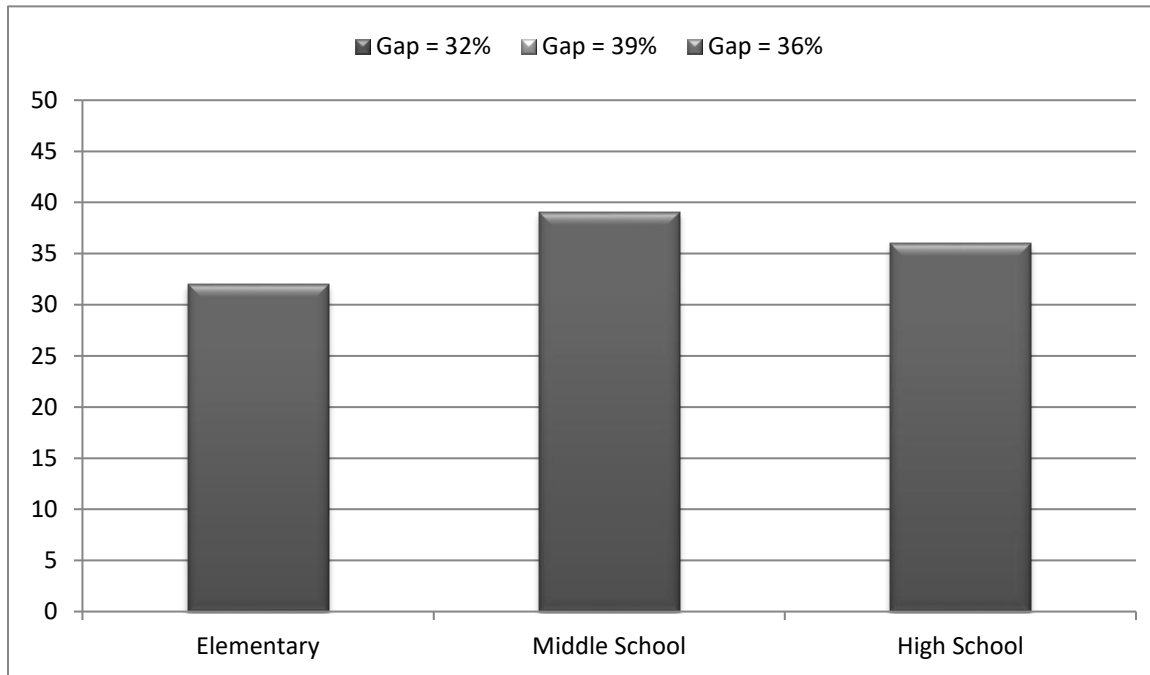


Figure 4. Figure 3. The performance gaps between special needs students and their counterparts in 48 states on the Math Assessment were 32% on the Elementary level and 39% on the Middle School level respectively. On the High School level, the gap was 36% for 49 states (National Center on Educational Outcomes in collaboration with the Council of Chief State School Officers and the National Association of State Directors of Special Education, supported by the U. S. Office of Special Education Program).

Appendix F

Figure 5. Gaps between IEP students and comparison peer group on the Reading and Math assessments for 2012 - 2013

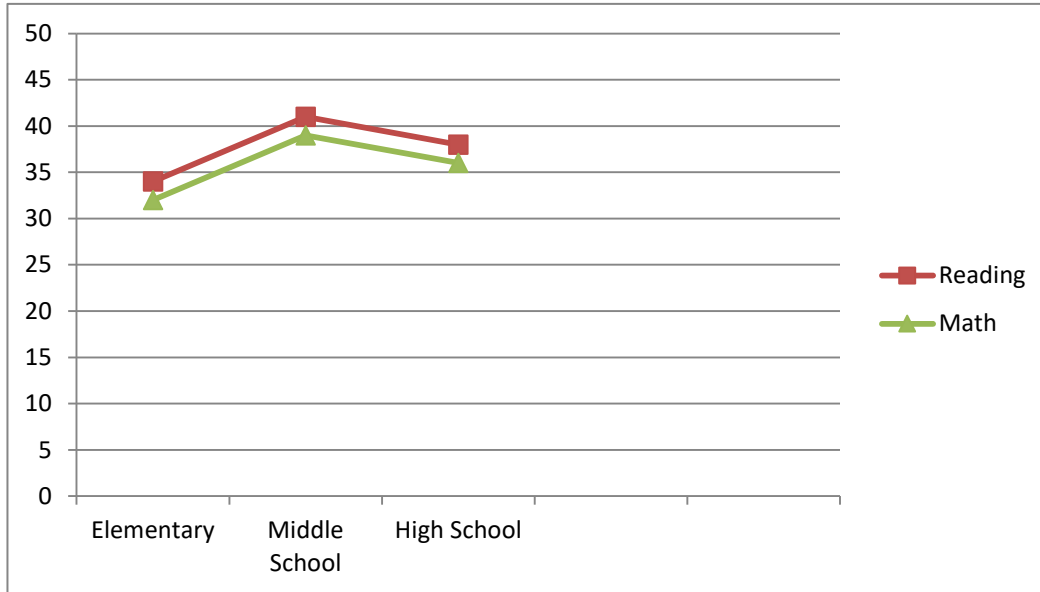


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