

## Guidance and Procedures for Calculating Disproportionality for the DeSSA-Alternate Assessment

### Background Information:

Components addressed in the Every Student Succeeds Act (ESSA) of 2015 require states exceeding the 1% participation threshold for “students with the most significant cognitive disabilities taking an alternate assessment based on alternate achievement standards (34CFR 200.6 (c)(2)).”

States applying for a waiver from the 1% cap must examine “identification of students with the most significant cognitive disabilities,...verifying and addressing disproportionality (NCEO Brief 18, August 2019).

States are required to demonstrate that districts exceeding the 1% cap in alternate assessment testing:

- utilize the state’s guidelines for identification and
- “will address any disproportionality in the percentage of students in any subgroup under section 1111(c)(20(A), (B), or (D) of the Act taking AA-AAAS (34 CFR 200.5(d), consistent with section 612(a)(16)(C) of the IDEA.

### Delaware’s Definition of a Student with Significant Cognitive Disability:

A student with a significant cognitive disability is one whose disability *pervasively* impacts his/her intellectual functioning and adaptive behavior. Significant deficits in intellectual functioning result in the student requiring extensive direct instruction and substantial supports in order to make measurable educational gains. Significant deficits in adaptive behavior often result in the student being unable to develop the skills needed to live independently or to function safely in their daily life at home, in school and in the community. As a result, the student is learning academic content that is reduced in depth, breadth, and complexity.

### Definition of Disproportionality for the Alternate Assessment:

The National Center on Educational Outcomes (NCEO) provides a working definition of Disproportionality. “Disproportionality exists when there are atypical differences in the proportions of participants from a student group who take the alternate assessment in comparison to the general assessment” (NCEO Brief,2019).

When investigating disproportionality at the state and local levels, both analytical methods and contextual qualitative information must be considered. When examining data, small n-sizes can impact proportions and ratios. In-depth examination is warranted when investigating disproportionality.

As stipulated, the student subgroups include:

- Racial and Ethnic Groups
  - White
  - Black or African American
  - Hispanic
  - Native American or Alaska Native
  - Asian
  - Pacific Islander
  - Multiracial
- Socio-economic status (eligibility for Free and Reduced Meals)
- English Learners

**Calculations/Business Rules:**

- Calculations use data from Delaware's Waiver Submission Data; Local Education Agencies Justification Data. The information is based on actual student participation counts, not eligible counts.
- Focal Subgroups are based on multi-year analyses: longitudinal data
- Calculations will be performed for districts on Level 2 Support Plans for each of the targeted subgroups.
- A Risk Ratio for each content area is used to determine significant disproportionality by using state level data for the specific subgroups.
- The Difference in Proportion for each content area is used to determine significant disproportionality by using state level data for the specific subgroups.

**Example of how to calculate Participation Rates in Focal Subgroups**

<b>ELA and Math Male</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>Three Year Total</b>
Total AA-AAAS participants	1055	1054	1061	3170
Number of focal group participants	715	718	741	2174
Number of non-focal group participants	340	336	320	996
Percent of focal group participants	<b>67.77%</b>	<b>68.12%</b>	<b>69.84%</b>	<b>68.58%</b>

Calculated as the sum of focal group participants divided by the sum of all participants.

Example of how to calculate Risk Ratio also termed Relative Risk

Risk Ratio	1.35
Ln(RR)	0.299982528
Confidence Level	1.96
1-p1	31.42%
n1p1	2174.00
1-p2	49.19%
n2p2	111972
Error	0.023918229
Ln Upper	0.323900757
Ln Lower	0.276064298
EXP Upper	<b>1.382510096</b>
EXP Lower	<b>1.317932602</b>

Calculated by dividing the proportion of focal AA-AAS students by the proportion of focal group students who are non-participants.

A risk ratio of 1.35 means that a male student is 1.35 times likely to participate in the alternate assessment.

Example of how to calculate Difference in Proportion

ELA- Male	AA-AAAS Participants	Non-AA-AAAS Students
Focal Group	2174	111972
Non-Focal Group	996	108417
Total	3170	220389
Focal Group Proportions (%)	<b>68.58%</b>	<b>50.81%</b>

Calculated is produced by simply subtracting the focal group proportion for AA-AAAS participants from the proportion of focal group students who are not AA-AAAS participants.

There is a Difference in Proportion of **17.77%**  
This means that 17.77% **more** males participated in the alternate assessment than what we would expect based on the proportion of males in the general assessment.

Resources:

Guidance for Examining District Alternate Assessment Participation Rates  
<https://nceo.umn.edu/docs/OnlinePubs/NCEO1percentBrief.pdf>

Guidance for Examining Disproportionality of Student Group Participation in Alternate Assessments  
<https://nceo.umn.edu/docs/OnlinePubs/NCEOBrief18.pdf>

Guidance for Examining Participation Rates and Disproportionality VIDEO (step-by-step directions on computing the calculations)  
<https://vimeo.com/325082455>