AGEC Meeting
July 29, 2020

Delaware
Department of Education

AGENDA

1. Welcome & Introductions
2. Disproportionality and the Alternate Assessment
    a. Why Focus on Disproportionality
    b. Definition
    c. State Level Data on Disproportionality
    d. Risk Ratio
    e. State Guidance Document

Why Focus on Disproportionality 1% Cap

Delaware Department of Education

Why Focus on Disproportionality?

ESSA Requirements

The Every Student Succeeds Act (ESSA) of 2015 **requires states to apply for a waiver** prior to the testing window if they think they will go over the **1% participation rate cap** for students with the most significant cognitive disabilities taking an AA-AAAS (34 CFR 200.6(c)(2)).

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

Delaware's Waiver Extension Results

1% Cap Decision: Received, February 18, 2020

- DE did not assess 95% of all Students with Disabilities in all three subject areas
- DE did not assess 95% of all students on the Science Assessment
- DE did not demonstrate that it reduced the rates of students taking the alternate assessment
- DE did not demonstrate substantial progress in achieving the plan and timeline

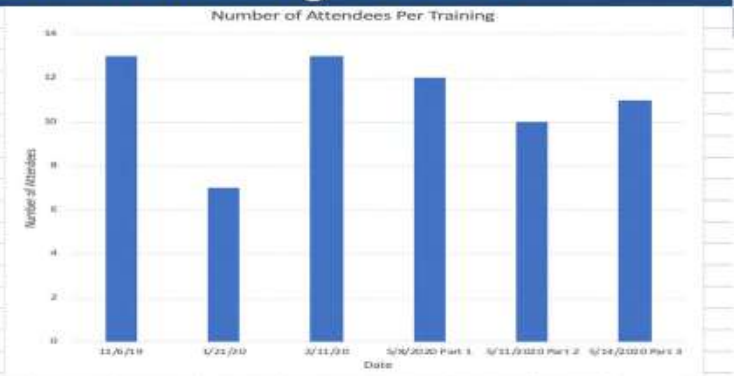
Delaware's Actions 2019-2020

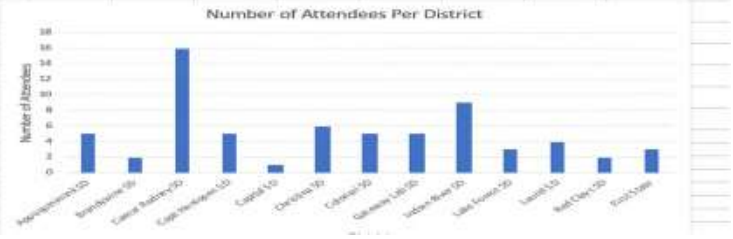
- LEAs were required to complete 95% Participation Plans
- Creation of the Alternate Assessment Participation Decision Making Workshop
- Adoption of Delaware's Definition of Students with Significant Cognitive Disabilities
- Revised the State Guidelines
- Created a Companion Guide to the State Guidelines

Alternate Assessment Training 2019-20

Training	Number of Attendees
11/6/19	13
1/21/20	7
2/11/20	13
5/8/2020 Part 1	12
5/11/2020 Part 2	10
5/14/2020 Part 3	11
Total	66

District/ School	Number of Attendees
Appoquinimink SD	5
Brandywine SD	2
Caesar Rodney SD	16
Cape Henlopen SD	5
Capital SD	1
Christina SD	6
Colonial SD	5
Gateway Lab SD	5
Indian River SD	9
Lake Forest SD	3
Laurel SD	4
Red Clays SD	2
First State	3
Total	66





Why Focus on Disproportionality?

ESSA Requirements

Part of a state's waiver application is **verifying and addressing disproportionality** in the identification of students with the most significant cognitive disabilities.

Specifically, the state must provide evidence that it has verified that each LEA
(1) **followed the state's guidelines** for participation in the AA-AAAS; and
(2) will **address any disproportionality** in the percentage of students in any subgroup under section 1111(c)(2)(A), (B), or (D) of the Act taking an AA-AAAS (34 CFR 200.6(d)), consistent with section 612(a)(16) (C) of the IDEA.

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https://nceo.umn.edu/docs/OnlinePubs/NCEOBrief18.pdf

Delaware's Waiver Extension Results

1% Cap Decision: Received, February 18, 2020

- DE did not verify that LEAs will address disproportionality.

Delaware's Next Steps

1% Cap Decision: Received, February 18, 2020

- Examine subgroup participation trends across the LEAs
- Examine state level data on disproportionality.

Why Focus on Disproportionality?

ESSA Requirements

These student groups include **seven racial and ethnic groups**

- White
- Black or African American
- Hispanic
- Native American
- Alaska Native, Asian
- Pacific Islander
- Multiracial
- socio-economic status
- English learners.

The state must also provide a **plan and timeline** with clear, actionable steps and milestones for how the state will address any disproportionality in the percentage of students taking an AA-AAAS.

Guidance for Examining Disproportionality of Student Group Participation in Alternate Assessments
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Disproportionality Defined

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.

It is an inquiry into whether certain groups are over- or under-identified as having a significant cognitive disability.

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

District Level Data

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Longitudinal Trends

Step 1: Determine an Approach for Detecting Atypical Values

Delaware's Approach

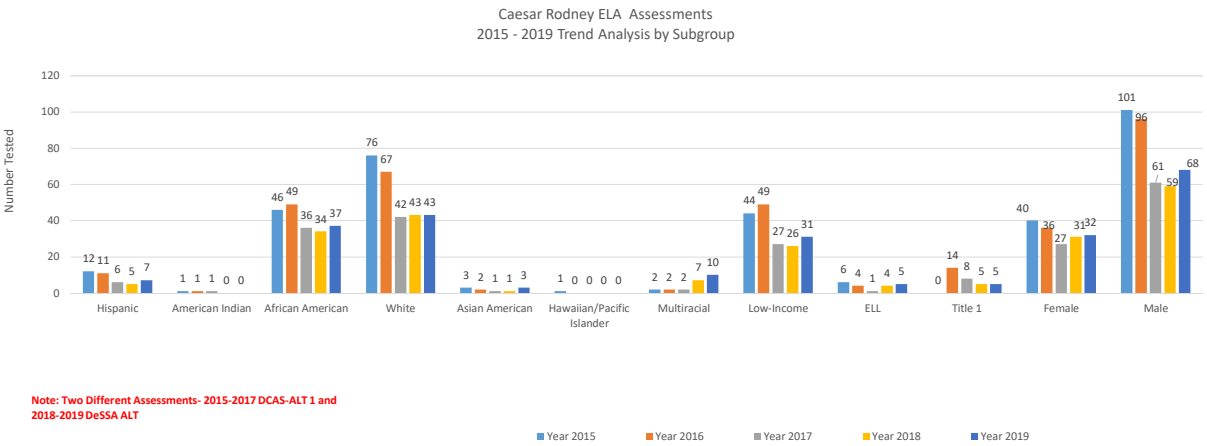
Multi-Year Analyses: Longitudinal Trends

- Use can Reduce issues related to small sample sizes
- Allows the examination of magnitude of change

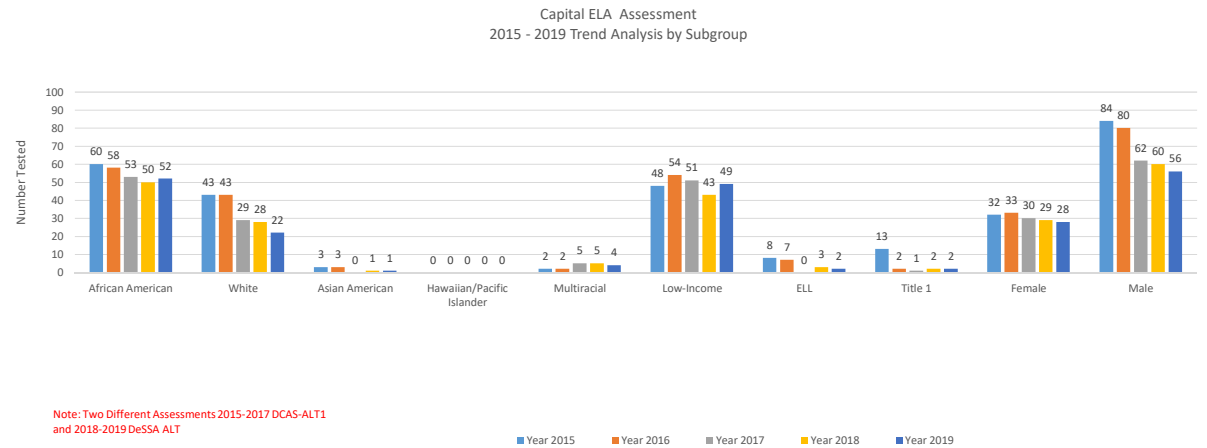
Our Actions:

- Focus on 7 districts in Level 2 Status
- Compared district subgroup participation rates over the past 5 years
  - 2015-2019
  - ELA, Math and Science

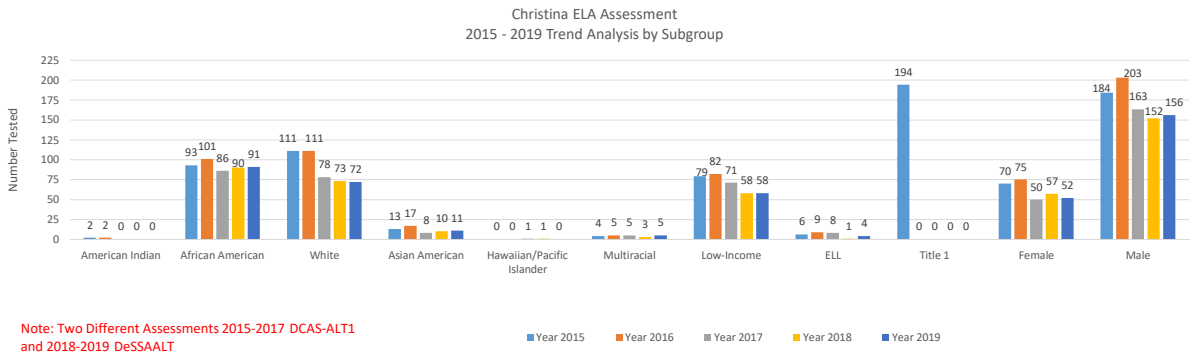
Longitudinal Trends



Longitudinal Trends

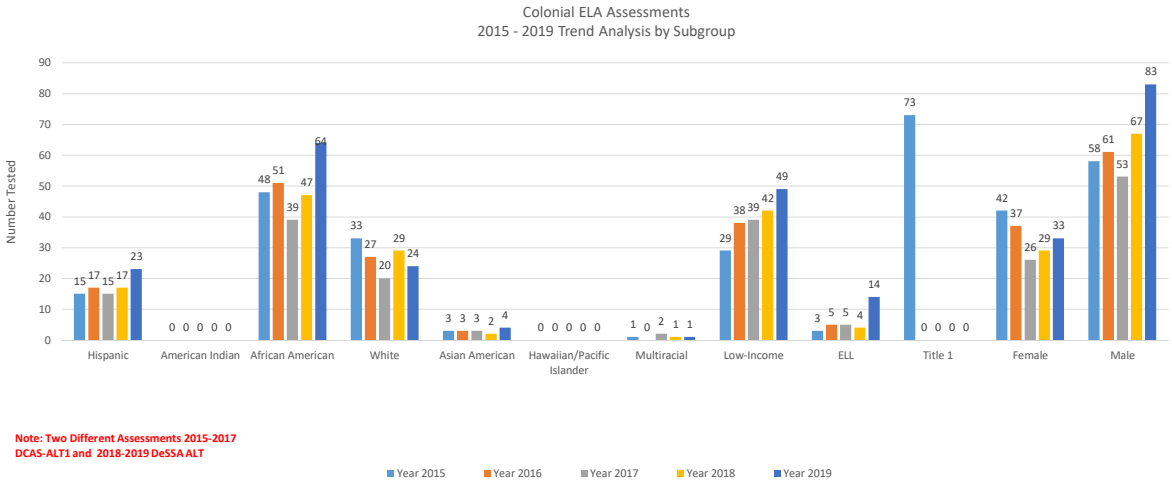


Longitudinal Trends



Note: Two Different Assessments 2015-2017 DCAS-ALT1 and 2018-2019 DeSSAALT

Longitudinal Trends



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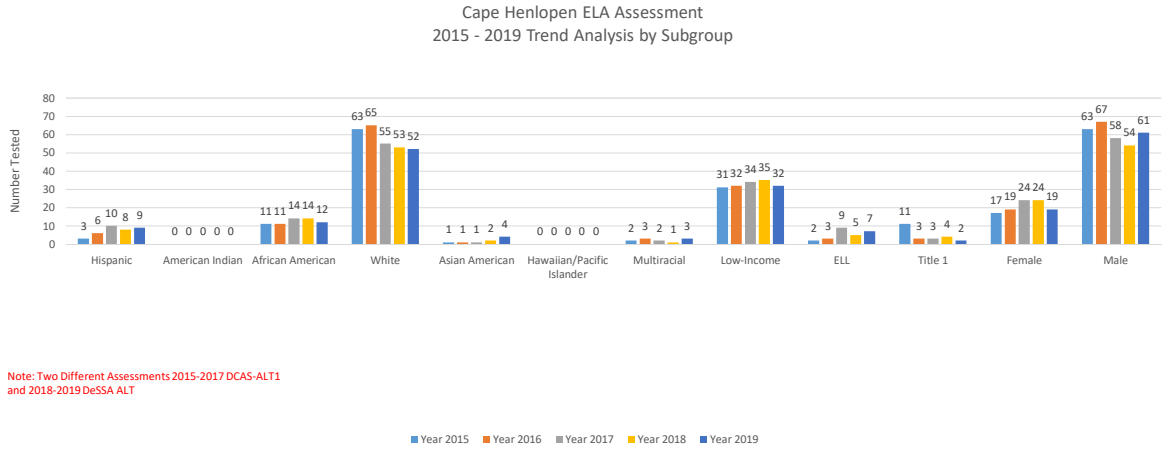
Longitudinal Trends



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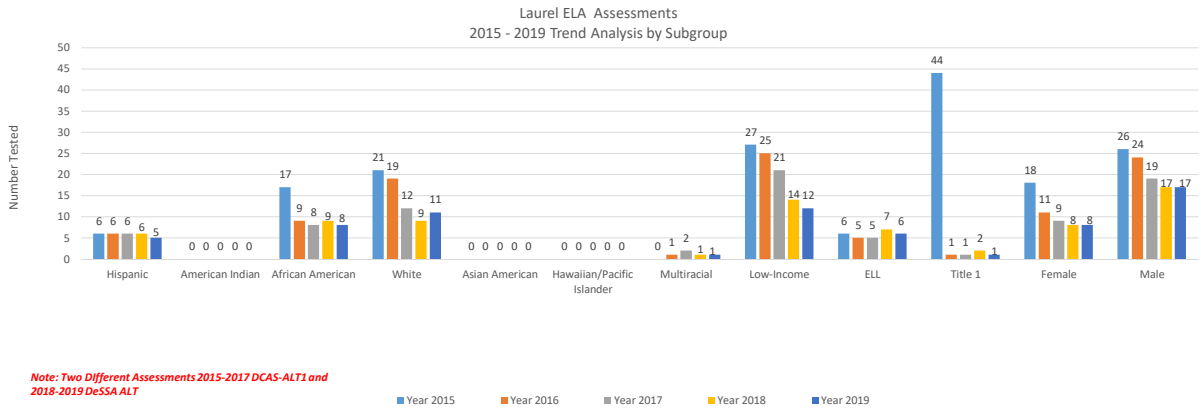
Longitudinal Trends



Note: Two Different Assessments 2015-2017 DCAS-ALT1 and 2018-2019 DeSSA ALT

Longitudinal Trends

Step 2: Determine Focus Areas:

Following Examination of Participation Patterns

- African-Americans
- Low-Income
- Males

State Level Data

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State Level Data

Assumption is that there should be **similar proportions** of students with significant cognitive disabilities from across race/ethnicity categories, FRL status and EL status **compared to the general population**.

Exploring Disproportionality

Step 1: **Establish participation rate for each Focal Group**

- Use of multi-year data
- Addresses the issue of small n-size challenges

Step 2: **Calculate the Test Statistic**

- Difference in proportions - quantify the difference between alternate participation minus the "expected proportion".
- Risk Ratio – relative risk.

Exploring Disproportionality

Step 3: **Determine if the difference is meaningful**

- Determine whether the difference in proportions or risk ratio is meaningful
- Compute a confidence interval – determine if the test statistic is outside the interval for a desired level of confidence
- Assume a 95% confidence interval

Exploring Disproportionality

Questions to consider

- Are there pronounced differences between the results in the current year compared to previous years?
- Are there distinct differences for one or more focal groups compared to results from other entities?
- **Are the results consistent with available literature/research base?**
- **Are there contextual factors that should be taken into account?**

Caution

Differences in student group participation rates based on small n-sizes may appear as large differences in proportions or relative risk ratios.

State Level ELA Data

ELA	2017			2018			2019		
	Total Number of Students Assessed	Total Number Assessed in Alternate Assessment	% Taking State Alternate Assessment	Total Number of Students Assessed	Total Number Assessed in Alternate Assessment	%Taking State Alternate Assessment	Total Number of Students Assessed	Total Number Assessed in Alternate Assessment	%Taking State Alternate Assessment
All Students	73611	1055	1.43	73491	1054	1.43	73287	1061	1.45
Male	37494	715	1.91	37300	718	1.92	37178	741	1.99
African American	22709	411	1.81	22689	422	1.86	22530	432	1.92
Low-Income	27440	435	1.59	25801	402	1.56	24531	416	1.7

Focal Group: Males in ELA and Math

Step 1: Determine the Participation Rate

ELA and Math Male	2017	2018	2019	Three Year Total
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	**67.77%**	**68.12%**	**69.84%**	**68.58%**

Step 2: Determine the Difference in Proportions and Risk Ratio

ELA and Math Male	AA-AAAS Participants	Non-AA-AAAS Students
Focal Group	2174	111972
Non-Focal Group	996	108417
Total	3170	220389
Focal Group Proportions (%)	**68.58%**	**50.81%**

Difference in Proportion is 17.77%

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	**1.382510096**
EXP Lower	**1.317932602**

Focal Group: Males in Science

Step 1: Determine the Participation Rate

SCIENCE-Male	2017	2018	2019	Three Year Total
Total AA-AAAS participants	489	489	469	1447
Number of focal group participants	331	331	314	976
Number of non-focal group participants	158	158	155	471
Percent of focal group participants	**67.69%**	**67.69%**	**66.95%**	**67.45%**

Step 2: Determine the Difference in Proportions and Risk Ratio

SCIENCE-Male	AA-AAAS Participants	Non-AA-AAAS Students
Focal Group	976	48173
Non-Focal Group	471	46404
Total	1447	94577
Focal Group Proportions (%)	**67.45%**	**50.94%**

Difference in Proportion is 16.51%

Risk Ratio	**1.32**
Ln(RR)	0.280830479
Confidence Level	1.96
1-p1	32.55%
n1p1	976.00
1-p2	49.06%
n2p2	48173
Error	0.036336216
Ln Upper	0.317166695
Ln Lower	0.244494263
EXP Upper	**1.373231464**
EXP Lower	**1.276975337**

Focal Group: Males in ELA and Math

Step 3: Determine if the Difference is Meaningful

Confidence Level	1.96
Participation Rate for ELA and Math	**68.58%**
1-P	31.42%
N	3170
Error	1.62%
Upper	**70.20%**
Lower	**66.96%**

← **Confidence Interval on Participation Rate**

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	**1.382510096**
EXP Lower	**1.317932602**

← **Confidence Interval of Risk Ratio**

Focal Group: Males in Science

Step 3: Determine if the Difference is Meaningful

Confidence Level	1.96
Participation rate for Science	**67.45%**
1-P	32.55%
N	1447
Error	2.41%
Upper	**69.86%**
Lower	**65.04%**

← **Confidence Interval on Participation Rate**

Risk Ratio	**1.32**
Ln(RR)	0.280830479
Confidence Level	1.96
1-p1	32.55%
n1p1	976.00
1-p2	49.06%
n2p2	48173
Error	0.036336216
Ln Upper	0.317166695
Ln Lower	0.244494263
EXP Upper	**1.373231464**
EXP Lower	**1.276975337**

← **Confidence Interval of Risk Ratio**

Focal Group: African-Americans

ELA-African American	**2017**	**2018**	**2019**	**Three Year Total**
Total AA-AAAS participants	1055	1054	1061	3170
Number of focal group participants	411	422	432	1265
Number of non-focal group participants	644	632	629	1905
Percent of focal group participants	**38.96%**	**40.04%**	**40.72%**	**39.91%**

MATH-African American	**2017**	**2018**	**2019**	**Three Year Total**
Total AA-AAAS participants	1055	1054	1061	3170
Number of focal group participants	411	423	433	1267
Number of non-focal group participants	644	631	628	1903
Percent of focal group participants	**38.96%**	**40.13%**	**40.81%**	**39.97%**

Step 1: Determine the Participation Rate

SCIENCE-African American	**2017**	**2018**	**2019**	**Three Year Total**
Total AA-AAAS participants	489	489	469	1447
Number of focal group participants	183	183	180	546
Number of non-focal group participants	306	306	289	901
Percent of focal group participants	**37.42%**	**37.42%**	**38.38%**	**37.73%**

Focal Group: African-Americans

Steps 2-3: Determine the Difference in Proportions and Meaning

ELA- African American	AA-AAAS Participants	Non-AA-AAAS Students
Focal Group	1265	67928
Non-Focal Group	1903	152451
Total	3168	220379
Focal Group Proportions (%)	**39.93%**	**30.82%**

Difference in Proportion is 9.11%

Confidence Level	1.96
P	**39.93%**
1-P	60.07%
N	3168
Error	1.71%
Upper	**41.64%**
Lower	**38.23%**

← Confidence Interval on Participation Rate →

MATH- African American	AA-AAAS Participants	Non-AA-AAAS Students
Focal Group	1267	67980
Non-Focal Group	1903	153193
Total	3170	221173
Focal Group Proportions (%)	**39.97%**	**30.74%**

Difference in Proportion is 9.23%

Confidence Level	1.96
P	39.97%
1-P	60.03%
N	3170
Error	1.71%
Upper	**41.67%**
Lower	**38.26%**

← Confidence Interval on Participation Rate →

SCIENCE- African American	AA-AAAS Participants	Non-AA-AAAS Students
Focal Group	546	29127
Non-Focal Group	901	65450
Total	1447	94577
Focal Group Proportions (%)	**37.73%**	**30.80%**

Difference in Proportion is 6.93%

Confidence Level	1.96
P	**37.73%**
1-P	62.27%
N	1447
Error	2.50%
Upper	**40.23%**
Lower	**35.24%**

Focal Group: African-Americans

Step 2-3: Determine the Risk Ratio and Meaning

Risk Ratio for ELA	1.30
Ln(RR)	0.2588721
Confidence Level	1.96
1-p1	99.60%
n1p1	1265.00
1-p2	69.18%
n2p2	67928
Error	0.0553519
Ln Upper	0.314224
Ln Lower	0.2035202
EXP Upper	**1.3691964**
EXP Lower	**1.2257099**

← Confidence Interval of Risk Ratio →

Risk Ratio for Math	1.30
Ln(RR)	0.262652
Confidence Level	1.96
1-p1	60.03%
n1p1	1267.00
1-p2	99.69%
n2p2	67980
Error	0.0433188
Ln Upper	0.3059708
Ln Lower	0.2193332
EXP Upper	**1.3579426**
EXP Lower	**1.2452461**

← Confidence Interval of Risk Ratio →

Risk Ratio for Science	1.23
Ln(RR)	0.203119988
Confidence Level	1.96
1-p1	62.27%
n1p1	546.00
1-p2	69.20%
n2p2	29127
Error	0.224091922
Ln Upper	0.427211909
Ln Lower	-0.020971934
EXP Upper	**1.458389015**
EXP Lower	**0.979246447**

Focal Group: Low-Income

ELA-Economically Disadvantaged	2017	2018	2019	Three Year Total
Total AA-AAAS participants	1055	1054	1061	3170
Number of focal group participants	435	402	416	1253
Number of non-focal group participants	620	652	645	1917
Percent of focal group participants	**41.23 %**	**38.14%**	**39.21%**	**39.53%**

MATH-Economically Disadvantaged	2017	2018	2019	Three Year Total
Total AA-AAAS participants	1055	1054	1061	3170
Number of focal group participants	435	402	417	1254
Number of non-focal group participants	620	652	644	1916
Percent of focal group participants	**41.23 %**	**38.14%**	**39.30%**	**39.56%**

Step 1: Determine the Participation Rate

SCIENCE-Economically Disadvantaged	2017	2018	2019	Three Year Total
Total AA-AAAS participants	489	489	469	1447
Number of focal group participants	215	215	183	613
Number of non-focal group participants	274	274	286	834
Percent of focal group participants	**43.97%**	**43.97%**	**39.02%**	**42.36%**

Focal Group: Low-Income

Steps 2-3: Determine the Difference in Proportions and Meaning

ELA-Economically Disadvantaged	AA-AAAS Participants	Non-AA-AAAS Students
Focal Group	1253	77772
Non-Focal Group	1917	142617
Total	3170	220389
Focal Group Proportions (%)	**39.53%**	**35.29%**

Difference in Proportion is 4.24%

Confidence Level	1.96
P	**39.53%**
1-P	60.47%
N	3170
Error	1.70%
Upper	**41.23%**
Lower	**37.82%**

← **Confidence Interval on Participation Rate** →

MATH-Economically Disadvantaged	AA-AAAS Participants	Non-AA-AAAS Students
Focal Group	1254	77847
Non-Focal Group	1916	143336
Total	3170	221183
Focal Group Proportions (%)	**39.56%**	**35.20%**

Difference in Proportion is 4.36%

Confidence Level	1.96
P	**39.56%**
1-P	60.44%
N	3170
Error	1.70%
Upper	**41.26%**
Lower	**37.86%**

← **Confidence Interval on Participation Rate** →

SCIENCE-Economically Disadvantaged	AA-AAAS Participants	Non-AA-AAAS Students
Focal Group	613	31605
Non-Focal Group	834	62972
Total	1447	94577
Focal Group Proportions (%)	**42.36%**	**33.42%**

Difference in Proportion is 8.94%

Confidence Level	1.96
P	**42.36%**
1-P	57.64%
N	1447
Error	2.55%
Upper	**44.91%**
Lower	**39.82%**

Focal Group: African-Americans

Step 2-3: Determine the Risk Ratio and Meaning

Risk Ratio for ELA	1.12
Ln(RR)	0.113421786
Confidence Level	1.96
1-p1	99.60%
n1p1	1253.00
1-p2	64.71%
n2p2	77772
Error	0.055549688
Ln Upper	0.168971474
Ln Lower	0.057872097
EXP Upper	**1.184086361**
EXP Lower	**1.059579464**

Confidence Interval of Risk Ratio →

Risk Ratio for Math	1.12
Ln(RR)	0.116851906
Confidence Level	1.96
1-p1	60.44%
n1p1	1254.00
1-p2	0.996480426
n2p2	77847
Error	0.043598051
Ln Upper	0.160449957
Ln Lower	0.073253854
EXP Upper	**1.174039019**
EXP Lower	**1.07600365**

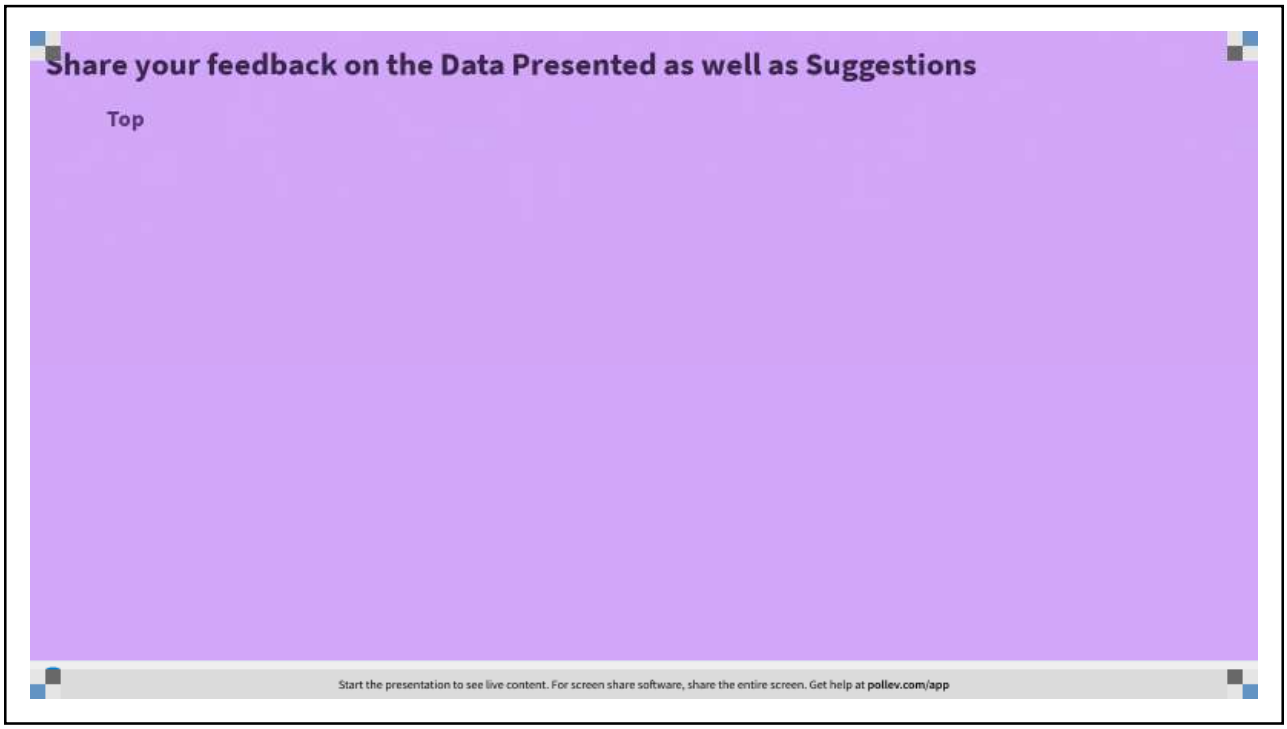
Confidence Interval of Risk Ratio →

Risk Ratio for Science	1.27
Ln(RR)	0.237216191
Confidence Level	1.96
1-p1	57.64%
n1p1	613.00
1-p2	0.665827844
n2p2	31605
Error	0.060769595
Ln Upper	0.297985786
Ln Lower	0.176446596
EXP Upper	**1.347142639**
EXP Lower	**1.192970716**

AGEC Open Discussion

- Suggestions/Feedback on the Data
  - Additional Data suggestions
  - Disseminating information

Poll Title: Share your feedback on the Data Presented as well as Suggestions etc.
https://www.polleverywhere.com/discourses/avMbvVs7O4GZI7ZIpDnNB



AGEC Open Discussion

- Do we use Difference in Proportion? Risk Ratio? Or, Both?
- Adoption of State Level Risk Ratio

How should we calculate Disproportionality?

A Risk Ratio using State Values

B Difference in Proportion using State Values

C Both

None of the above

AGEC Open Discussion

- Feedback on the Draft Guidance Document

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
https://vimeo.com/325082455

Questions

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