
NAEP 2022 Reading and Mathematics Results

Paul Kleinert, PhD

Idaho State Department of Education



What is NAEP?

- The only assessment that measures what U.S. students know and can do in various subjects across the nation, states, and in some cases, urban districts.
 - NAEP results are released as “The Nation’s Report Card”
 - www.nationsreportcard.gov
-



The
Nation’s
Report Card

National Assessment of
Educational Progress

NAEP Subjects



Civics



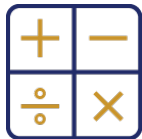
Economics



Geography



U.S. History



Mathematics



Music



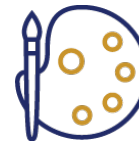
Reading



Science



Technology &
Engineering Literacy



Visual Arts



Writing

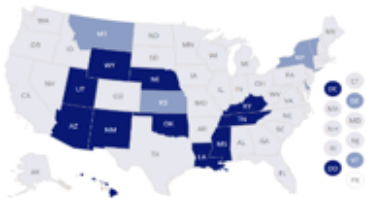
What does NAEP measure?



Overall student performance for key demographic groups



Change over time



Differences between the nation, states, and urban districts

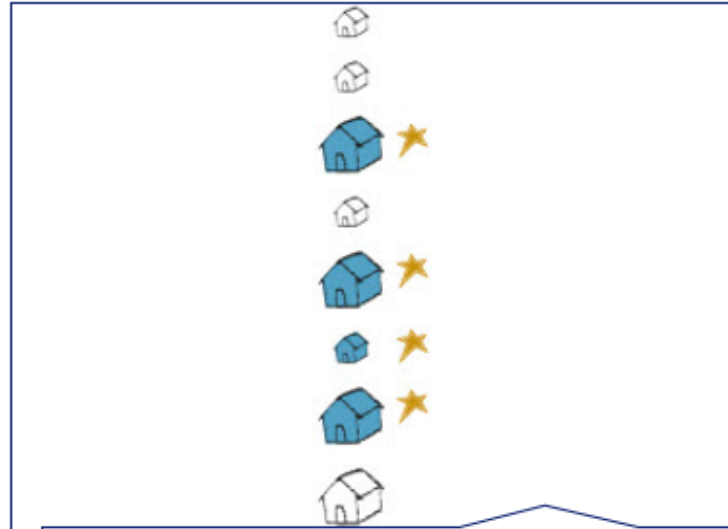
NAEP Jurisdictions

- NAEP produces **jurisdiction-level** results for...
 - All 50 states,
 - Department of Defense Education Activity
 - District of Columbia,
 - Puerto Rico, and
 - 26 urban districts
-

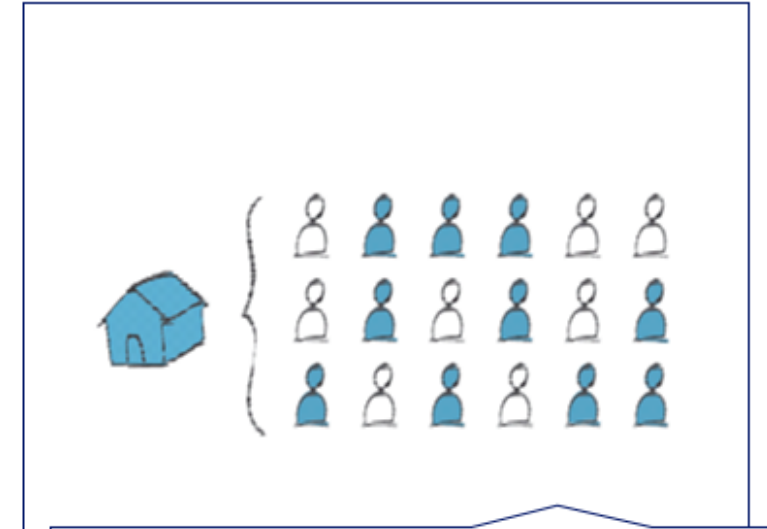
NAEP School and Student Selection



1. Identify all eligible schools



2. Sample schools



3. Sample students

Sample Sizes (National Public)

- Representative samples of schools and students



Reading



Mathematics

Grade	Schools	Students	Schools	Students
4	5,550	112,100	5,540	104,400
8	5,010	107,700	5,010	108,000

NOTE: Student sample sizes rounded to the nearest hundred. School sample sizes rounded to the nearest ten.

Sample Sizes (Idaho)

- Representative samples of schools and students



Reading



Mathematics

Grade	Schools	Students	Schools	Students
4	90	1600	90	1700
8	80	1800	80	1800

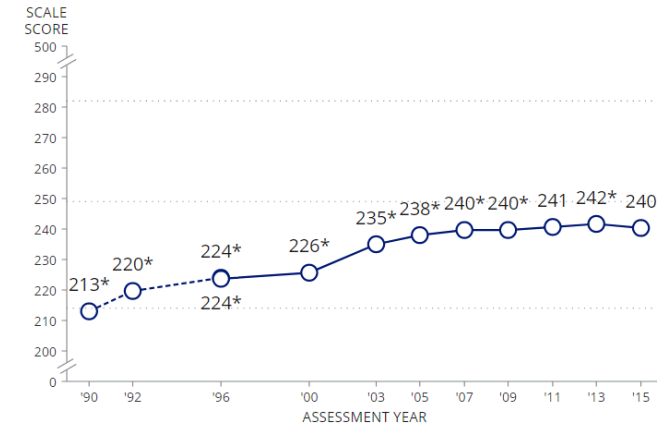
NOTE: Student sample sizes rounded to the nearest hundred. School sample sizes rounded to the nearest ten.

NAEP Administration

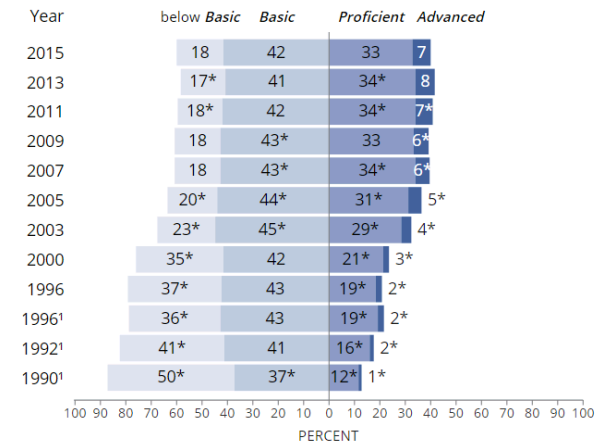
- January to March 2022
 - Administered as a digitally based assessment on tablets
 - Each student assessed in one subject
 - Students take a small portion of the item pool
 - Accommodations provided as necessary for
 - Students with disabilities
 - English learners
-

NAEP Results

- Scale Scores
 - 0 – 500 on mathematics and reading assessments
 - Cannot be compared across grade levels or content areas



- Achievement Levels
 - Below NAEP Basic
 - NAEP Basic
 - NAEP Proficient
 - NAEP Advanced



Grade 4 Reading Results



2022 Idaho average scale score (0-500)

ID - 215

7

jurisdictions significantly higher

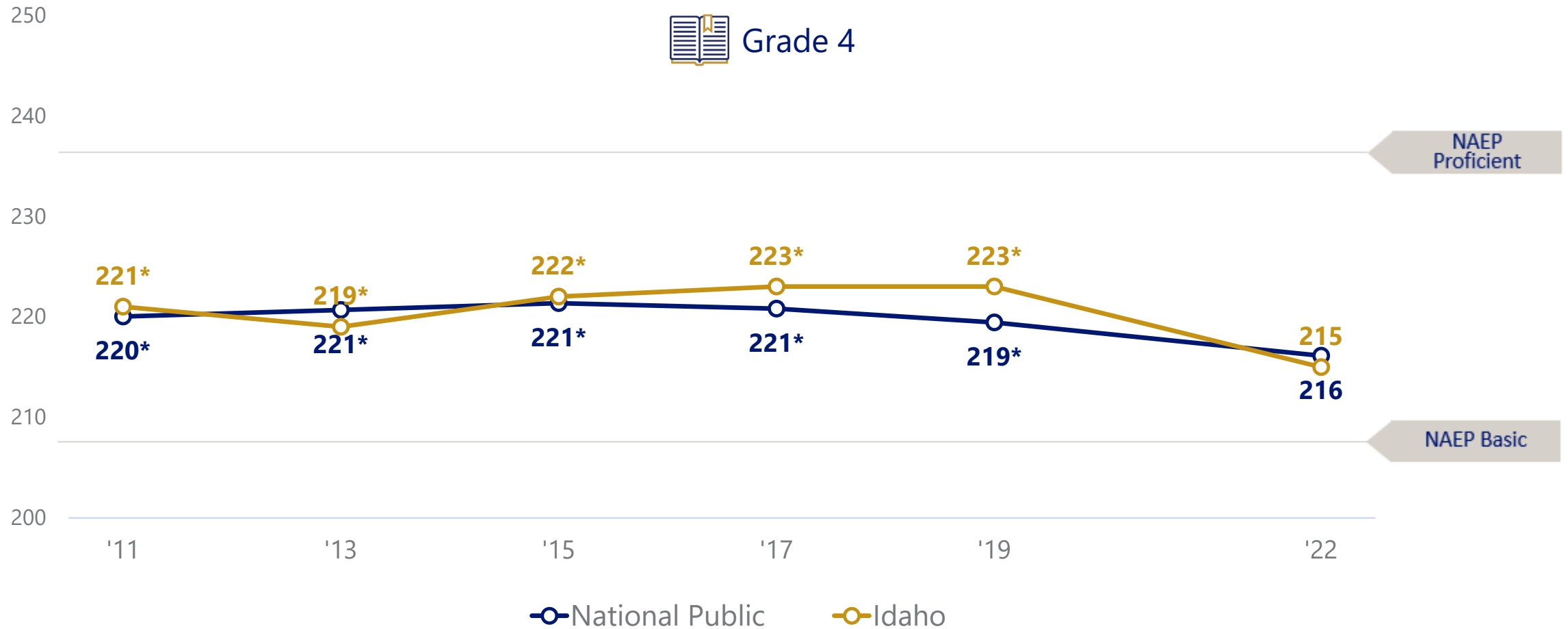
38

jurisdictions not significantly different

5

jurisdictions significantly lower

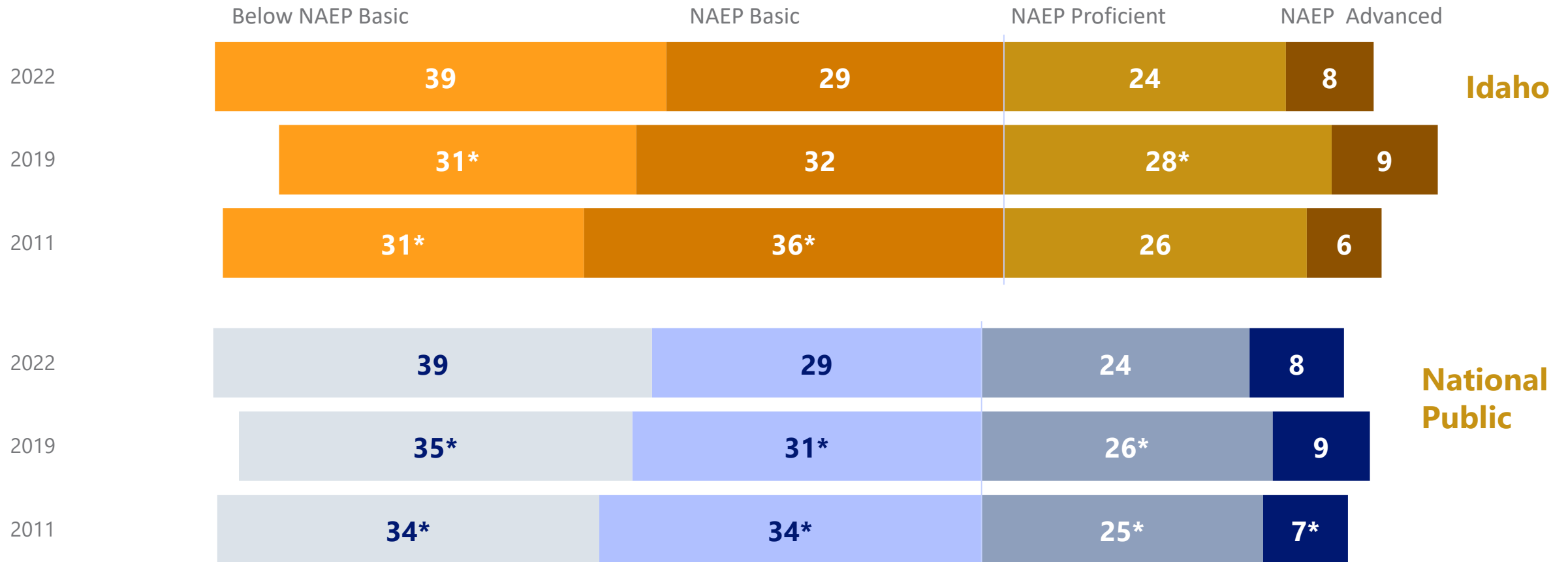
Average Scale Scores



*Significantly different ($p < .05$) from 2022.

Achievement Level Percentages

Grade 4



*Significantly different ($p < .05$) from 2022. NOTE: Detail may not sum to totals because of rounding.

Student Group Score Differences



Grade 4 – Differences since 2011

Jurisdiction	All Students	Male	Female	Eligible for NSLP	Students with Disabilities*	English language learners
State	↓6	↓8	↓4	↓7	↓17	↑15
National Public	↓4	↓4	↓4	↓4	↓5	◆

↑ Higher

↓ Lower

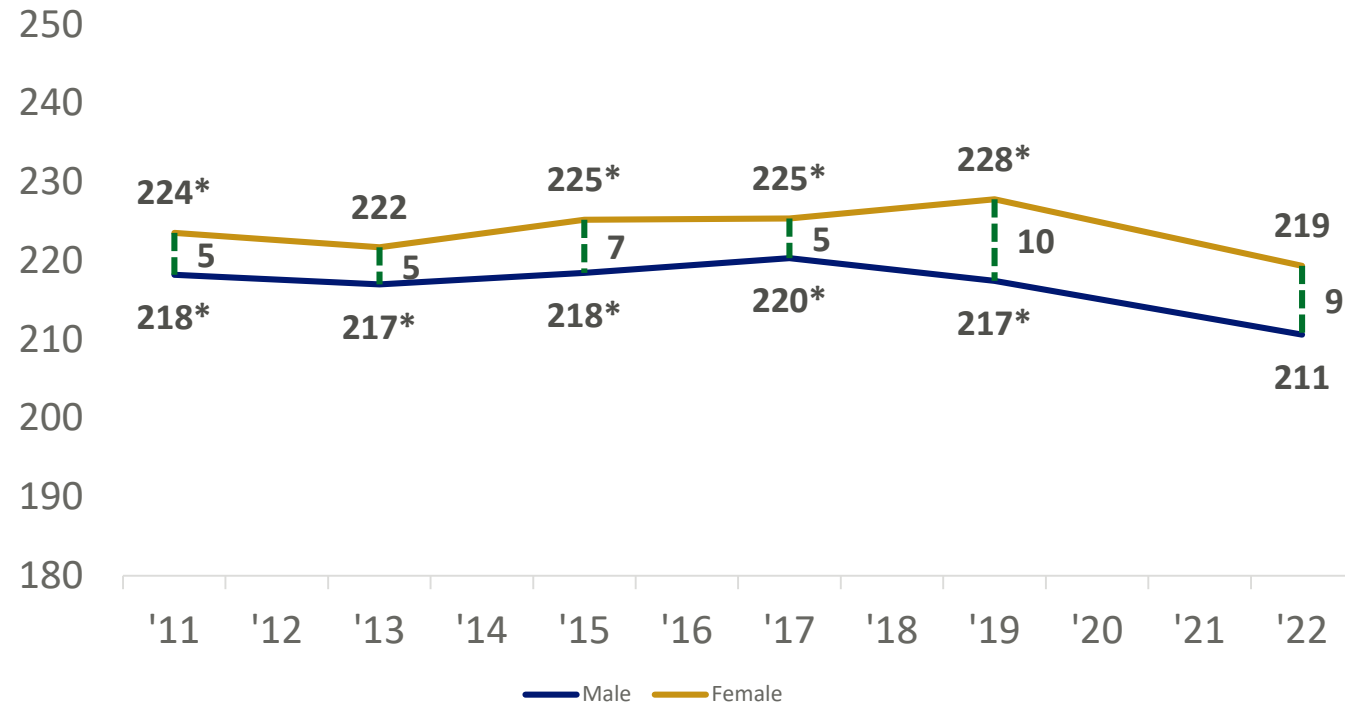
◆ No significant change

— Not available

Jurisdiction	White	Black	Hispanic	Asian/ Pacific Islander	American Indian/ Alaska Native	Two or more races
State	↓7	—	◆	—	—	—
National Public	↓4	↓7	◆	↑5/↓8	↓6	↓4

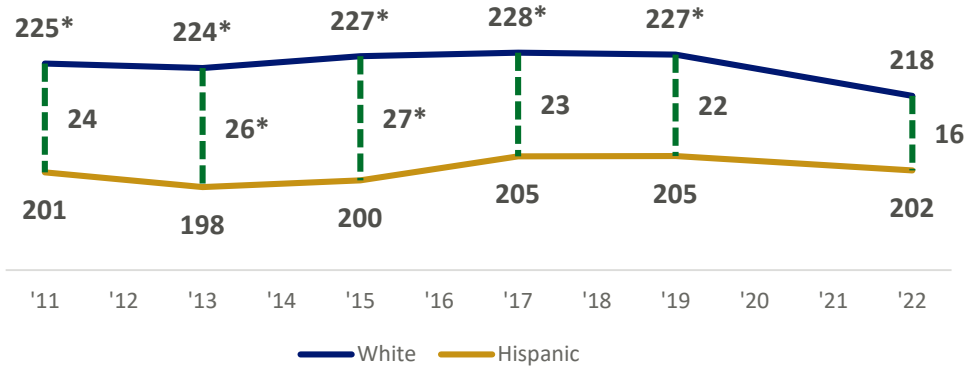
*Students with disabilities excluding those with a 504 plan.

NAEP Reading Grade 4
Gap - Average Scale Score: 2011-2022

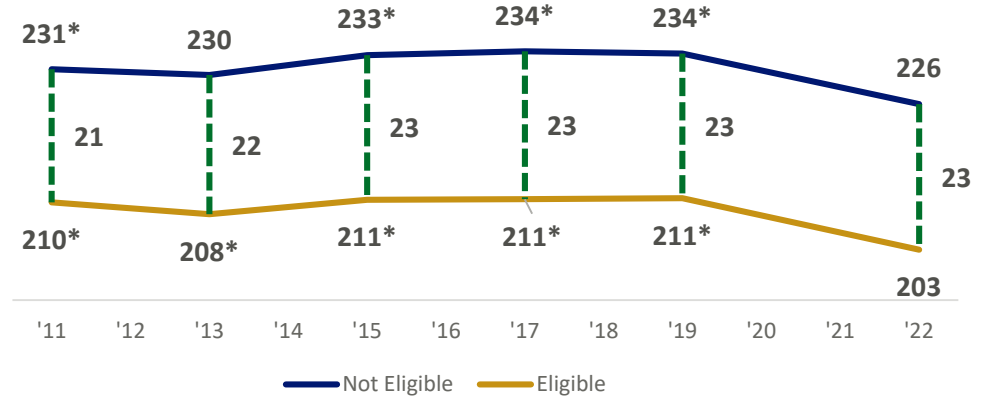


*all y-axes 70 point scale on gap graphs

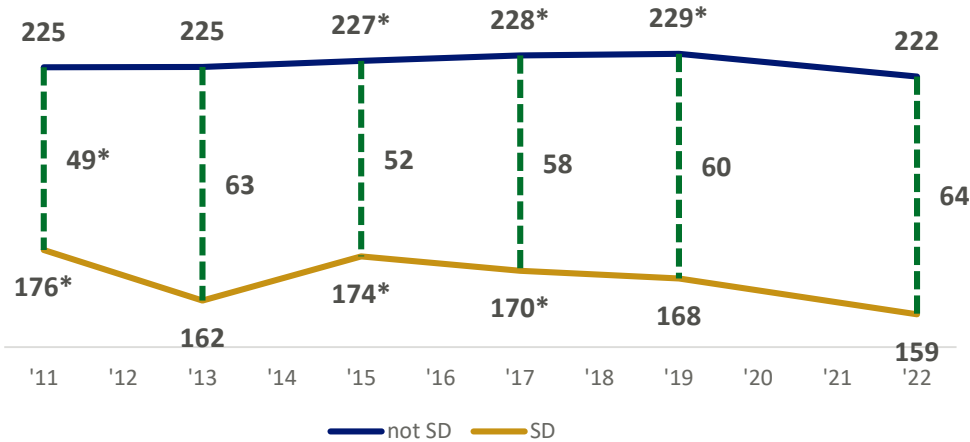
Hispanic White Gap



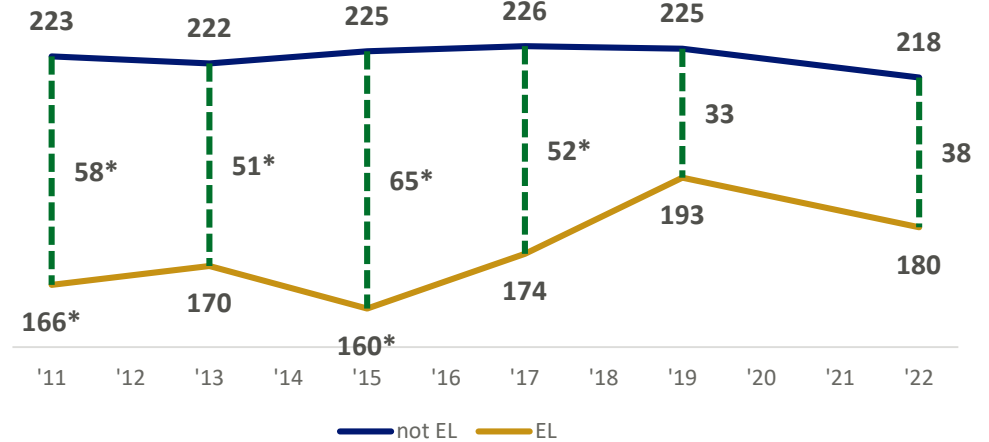
NSLP Gap



SD Gap



EL Gap



*SD and EL y-axes are 80 point gap to accommodate gap ranges

Grade 8 Reading Results



2022 Idaho average scale score (0-500)

ID - 264

2

jurisdictions significantly higher

18

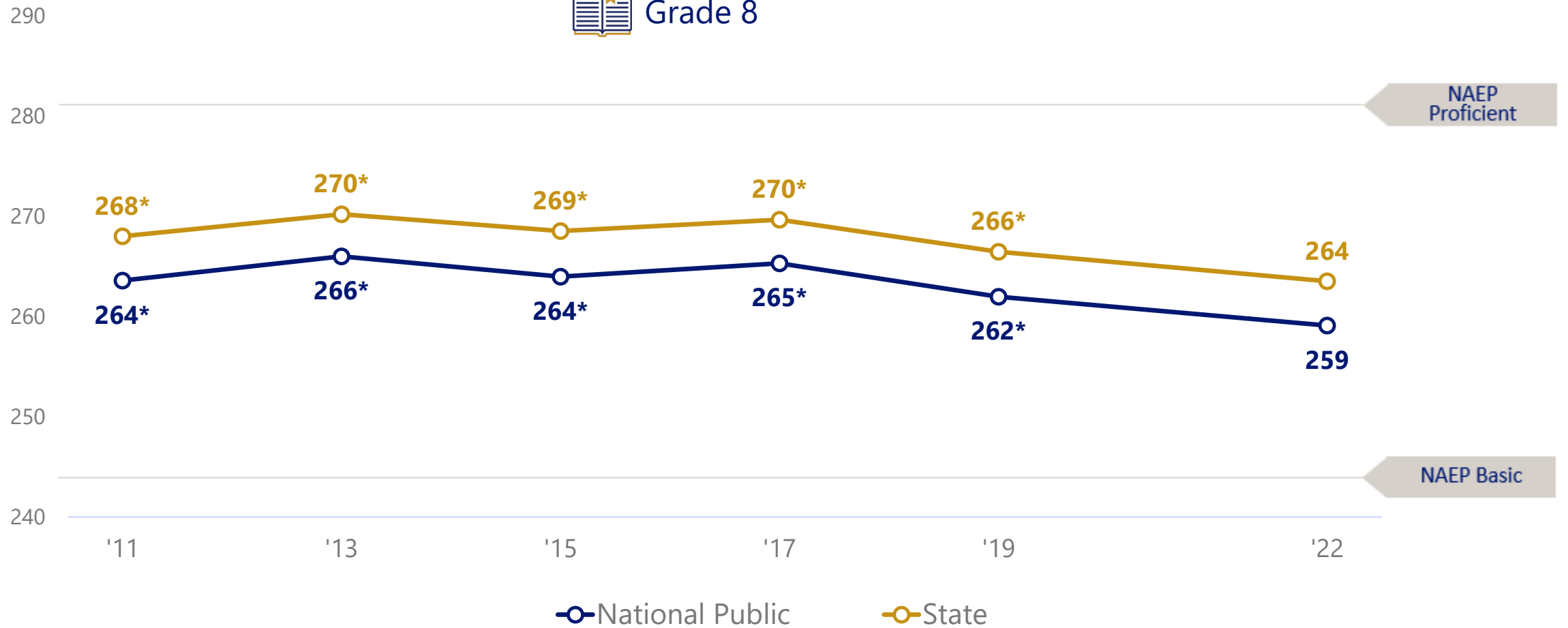
jurisdictions not significantly different

30

jurisdictions significantly lower

Average Scale Scores

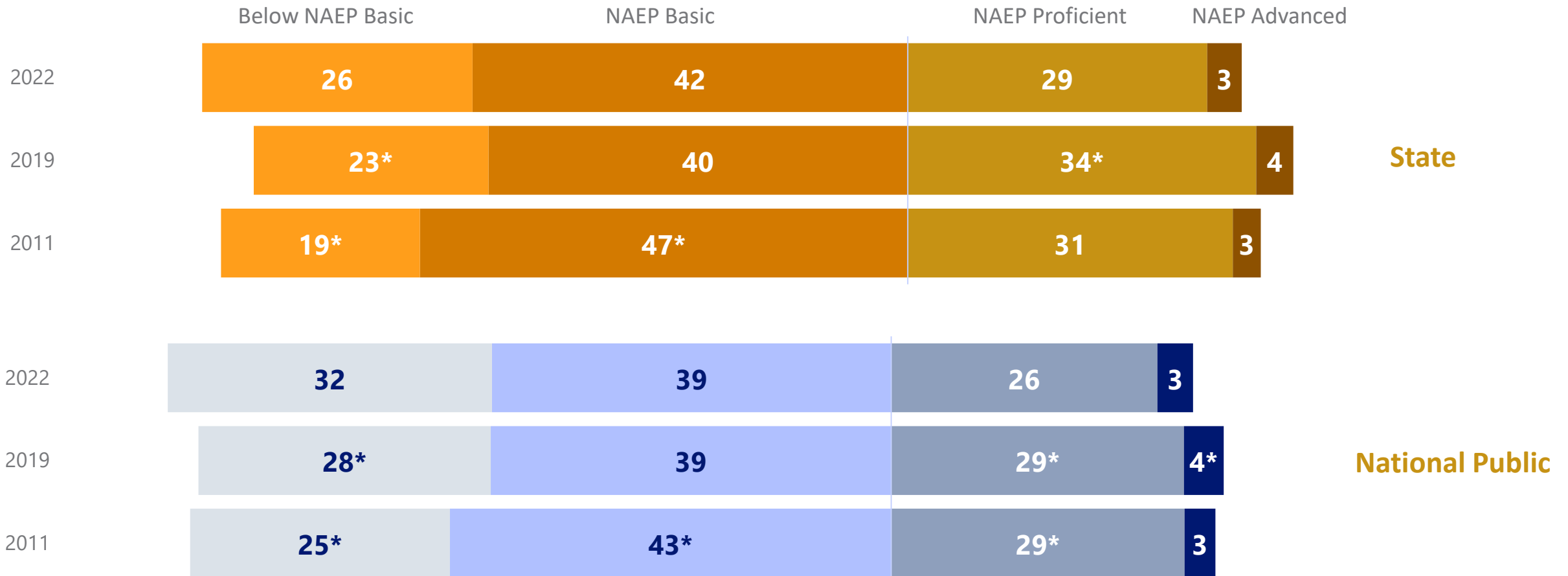
 Grade 8



*Significantly different (p < .05) from 2022.

Achievement Level Percentages

Grade 8



*Significantly different ($p < .05$) from 2022. NOTE: Detail may not sum to totals because of rounding.

Student Group Score Differences



Grade 8 – Differences since 2011

Jurisdiction	All Students	Male	Female	Eligible for NSLP	Students with Disabilities*	English Learners
State	↓4	↓5	↓5	↓6	◆	↓7
National Public	↓4	↓4	↓5	↓4	◆	◆

↑ Higher

↓ Lower

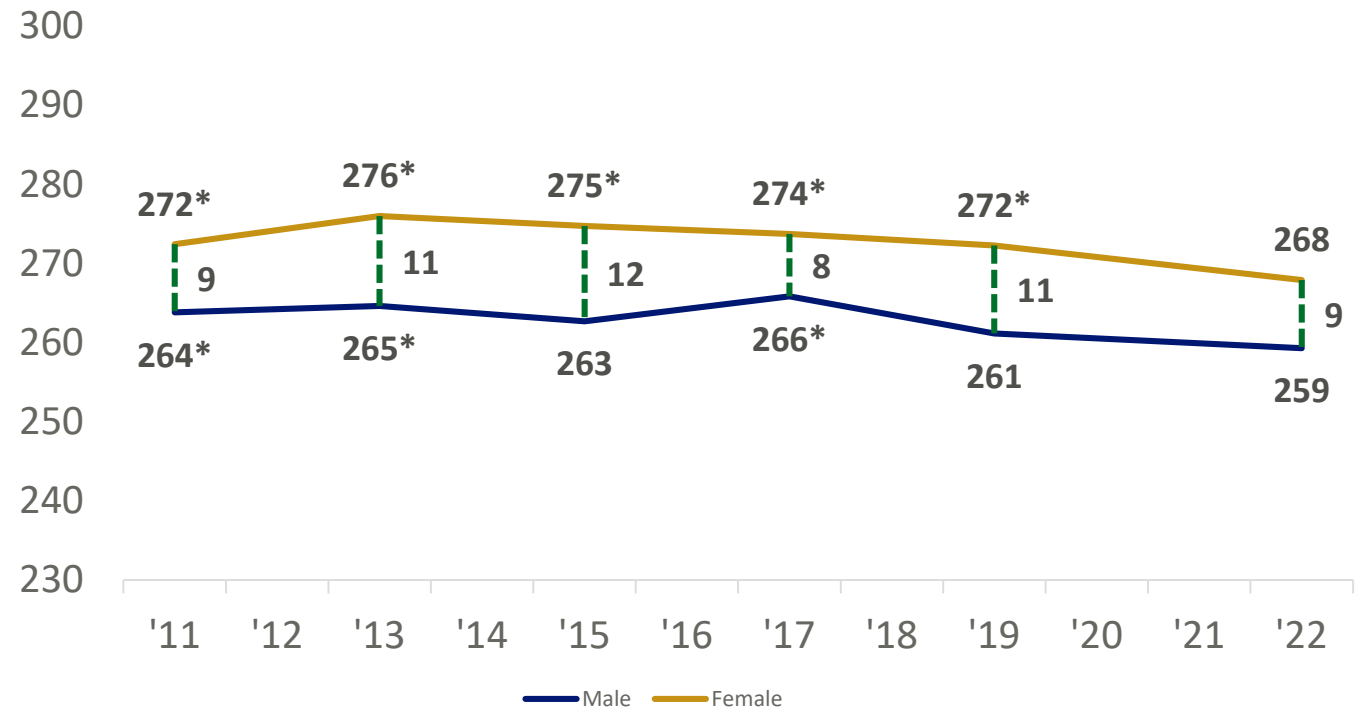
◆ No significant change

— Not available

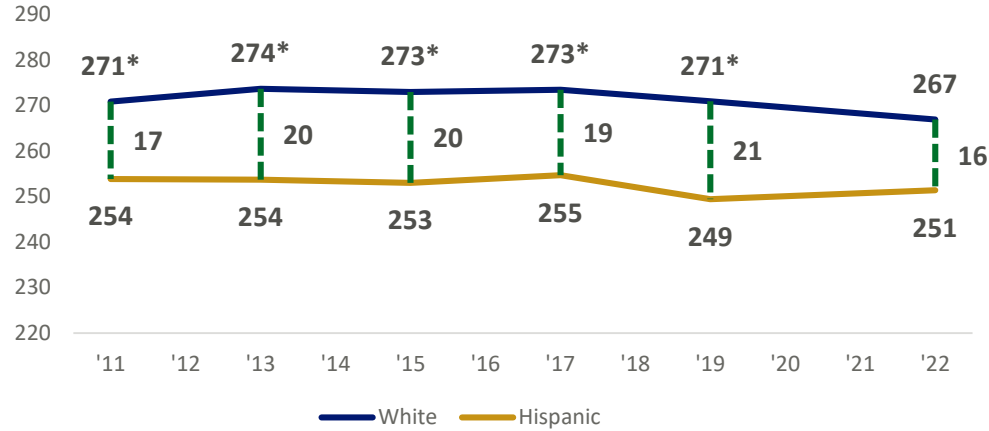
Jurisdiction	White	Black	Hispanic	Asian/ Pacific Islander	American Indian/ Alaska Native	Two or more races
State	↓4	—	◆	—	—	—
National Public	↓5	↓5	◆	↑6/◆	↓7	↓4

*Students with disabilities excluding those with a 504 plan.

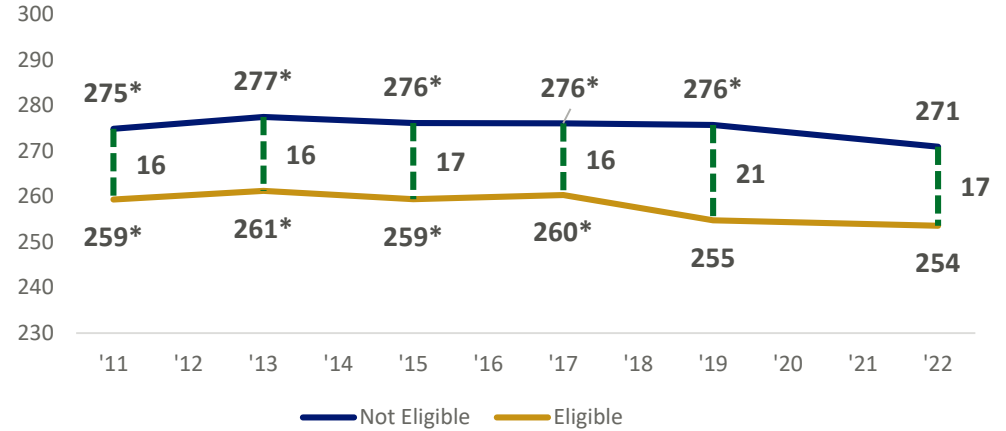
NAEP Reading Grade 8
Gap - Average Scale Score: 2011-2022



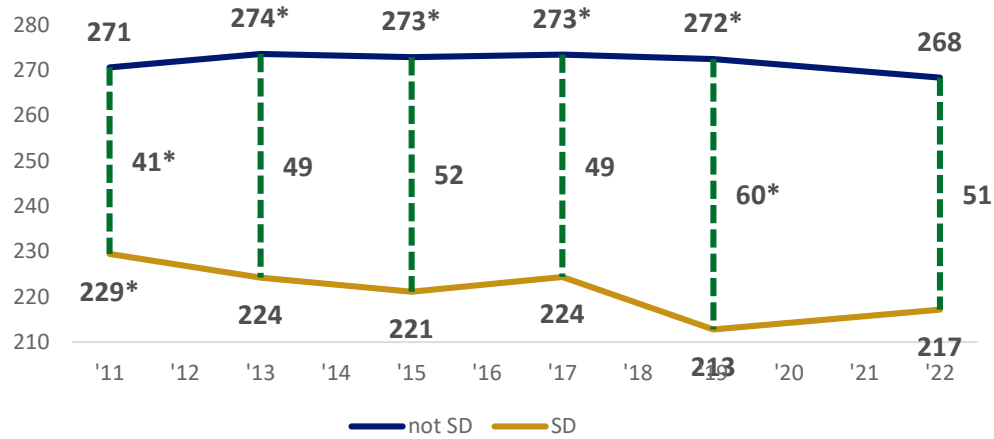
Hispanic White Gap



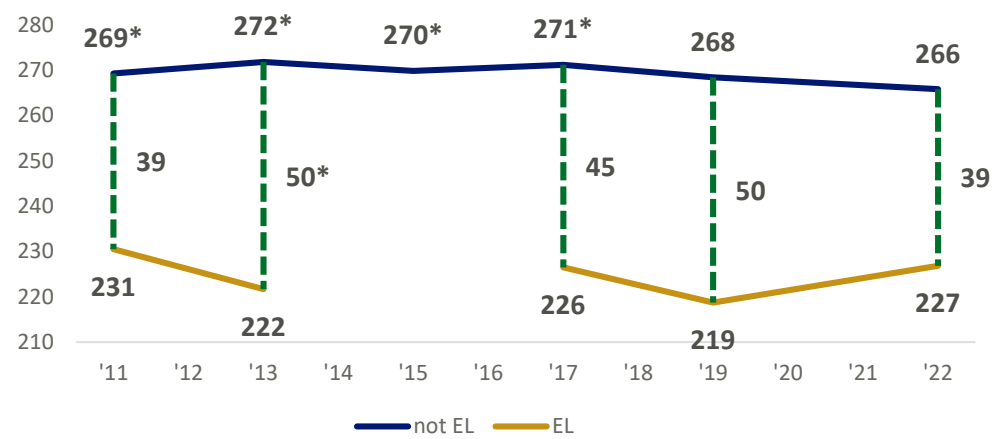
NSLP Gap



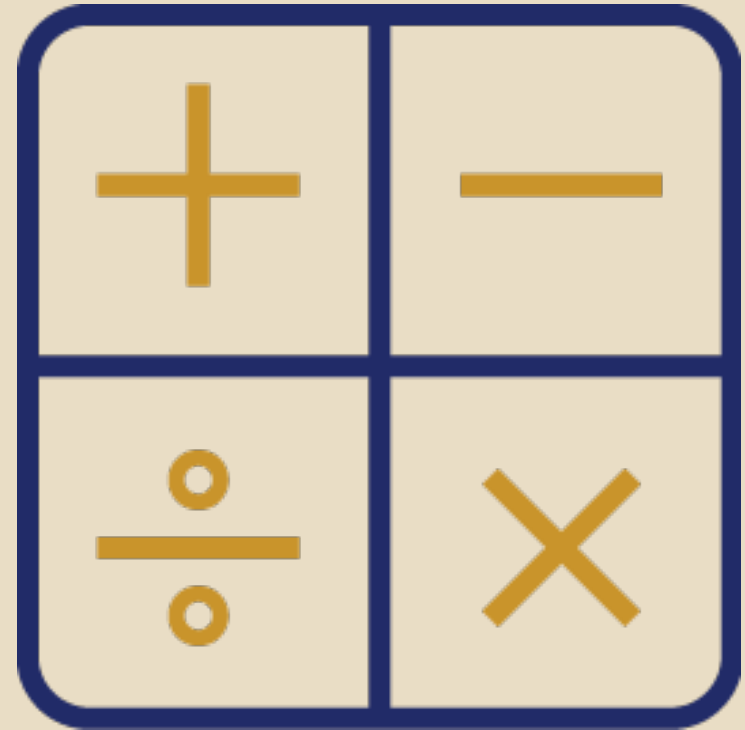
SD Gap



EL Gap



Grade 4 Mathematics Results



2022 Idaho average scale
score (0-500)

ID - 236

7

jurisdictions
significantly
higher

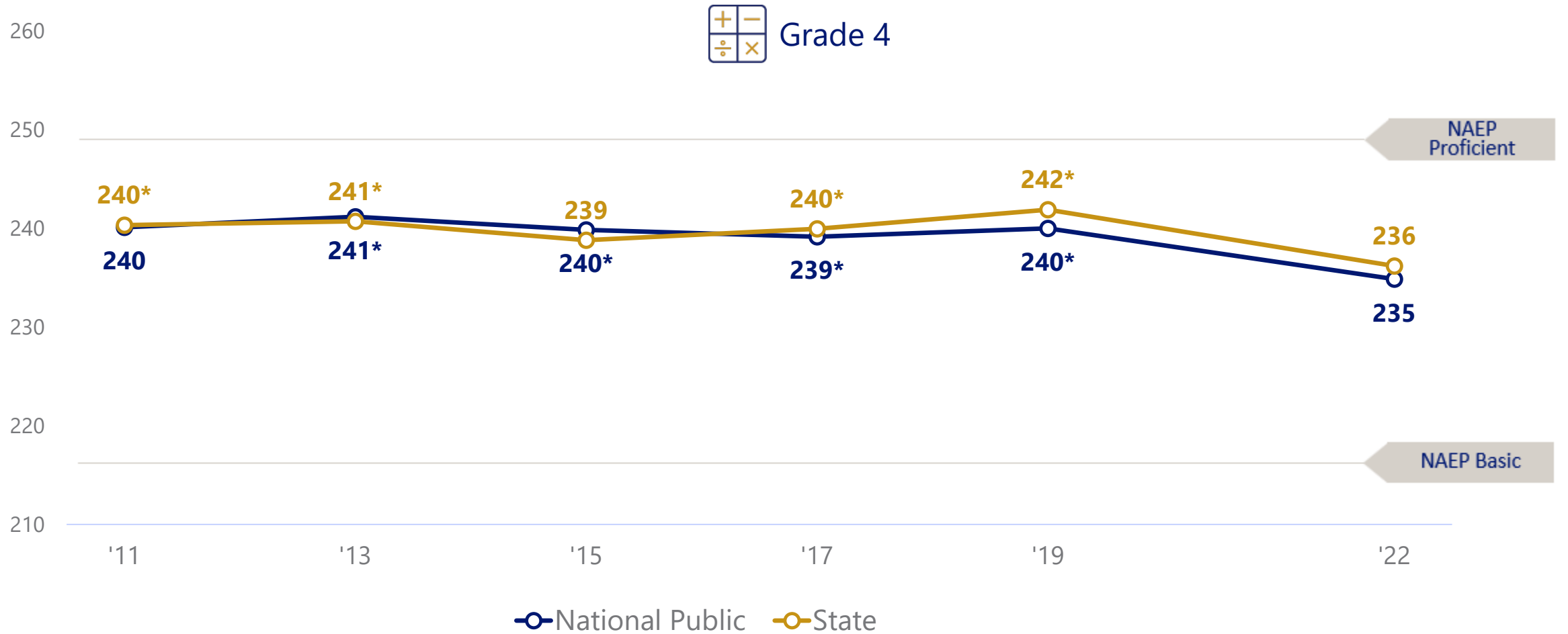
28

jurisdictions
not significantly
different

15

jurisdictions
significantly lower

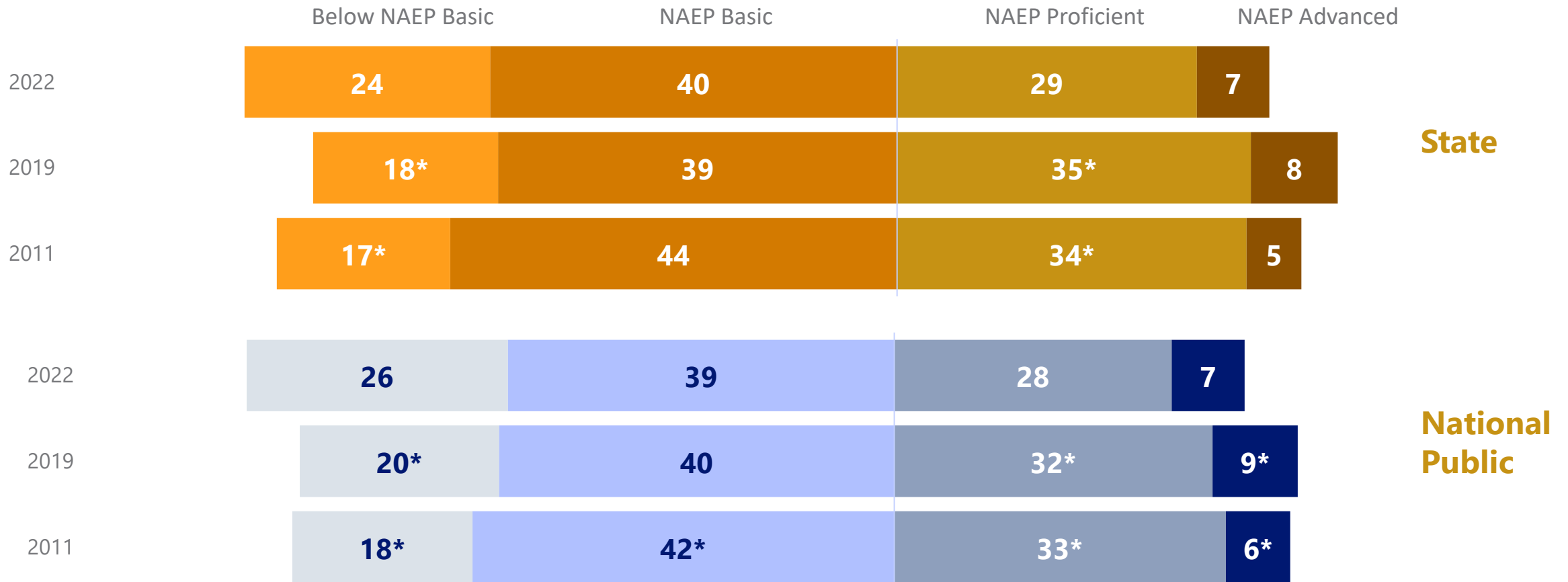
Average Scale Scores



*Significantly different ($p < .05$) from 2022.

Achievement Level Percentages

 Grade 4



*Significantly different (p < .05) from 2022. NOTE: Detail may not sum to totals because of rounding.

Student Group Score Differences

 Grade 4 – Differences since 2011

Jurisdiction	All Students	Male	Female	Eligible for NSLP	Students with Disabilities*	English Learners
State	↓4	◆	↓9	↓6	◆	◆
National Public	↓5	↓3	↓7	↓7	◆	↓4

↑ Higher

↓ Lower

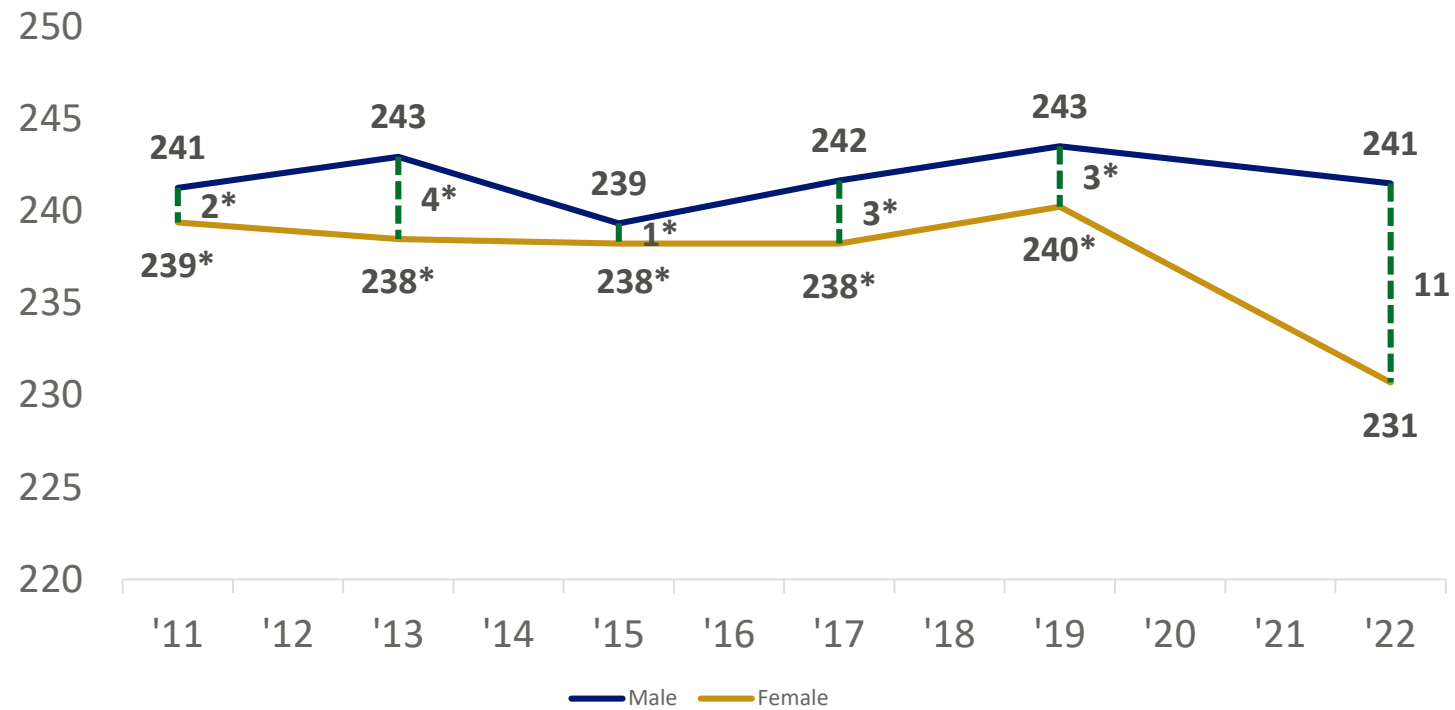
◆ No significant change

— Not available

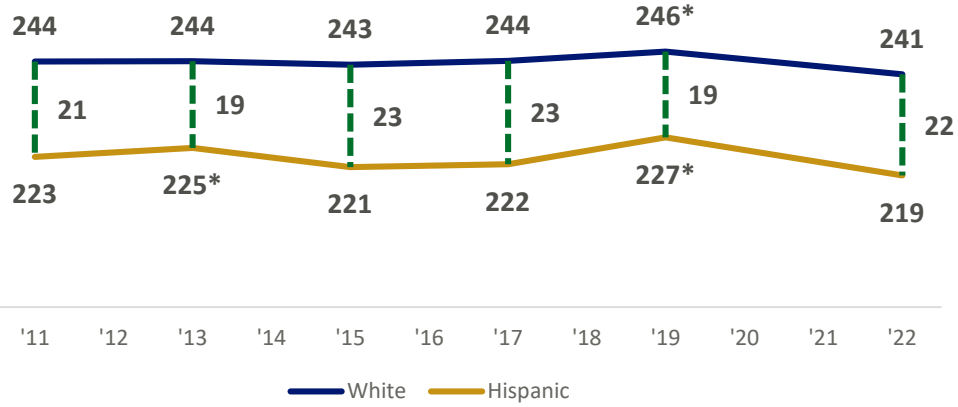
Jurisdiction	White	Black	Hispanic	Asian/ Pacific Islander	American Indian/ Alaska Native	Two or more races
State	◆	—	↓4	—	—	—
National Public	↓4	↓7	↓5	◆/↓13	↓7	↓6

*Students with disabilities excluding those with a 504 plan.

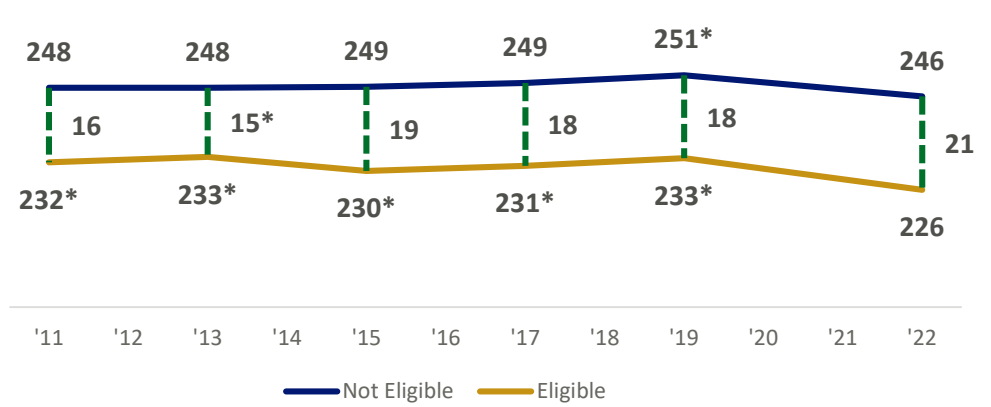
NAEP Mathematics Grade 4
Gap - Average Scale Score: 2011-2022



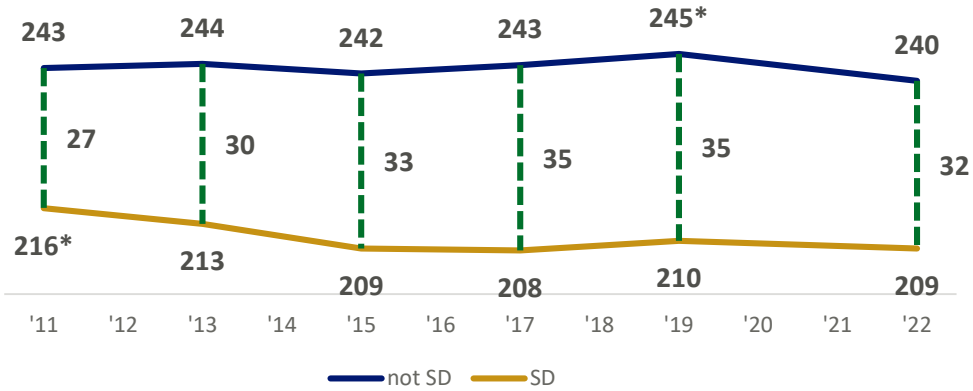
Hispanic White Gap



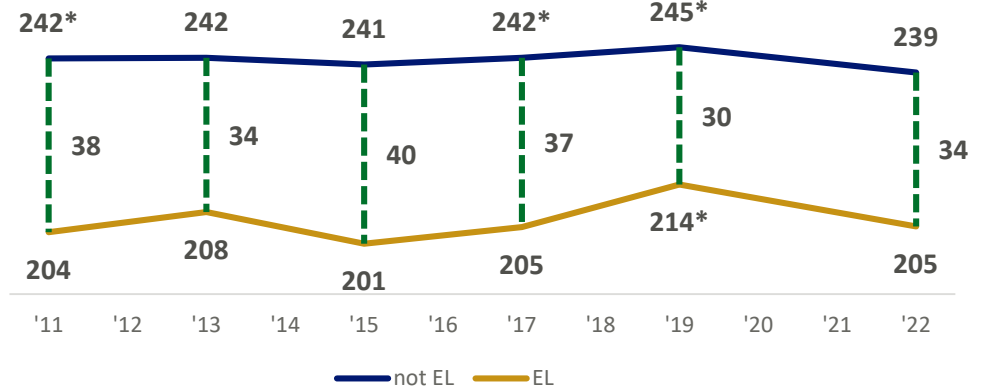
NSLP Gap



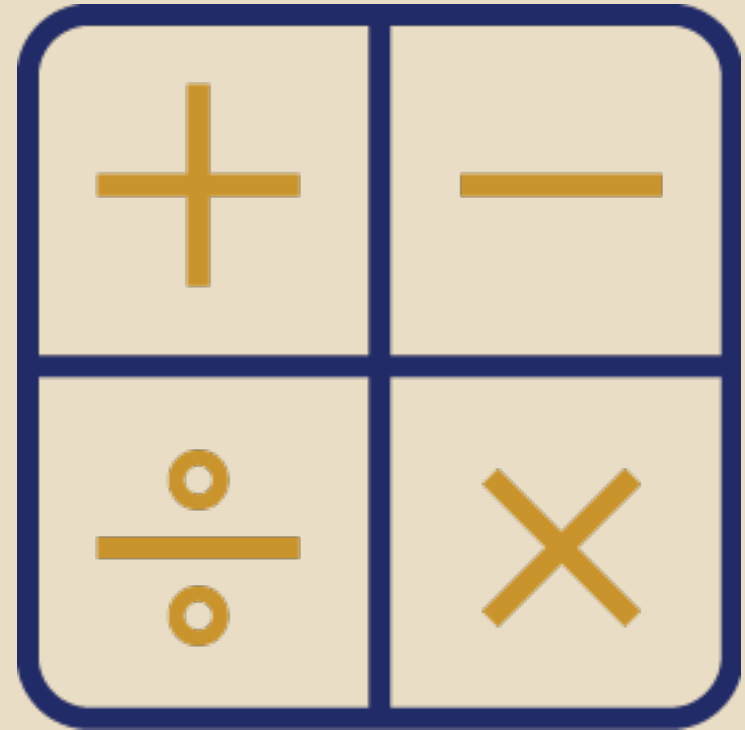
SD Gap



EL Gap



Grade 8 Mathematics Results



2022 Idaho average scale
score (0-500)

ID - 282

0

jurisdictions
significantly
higher

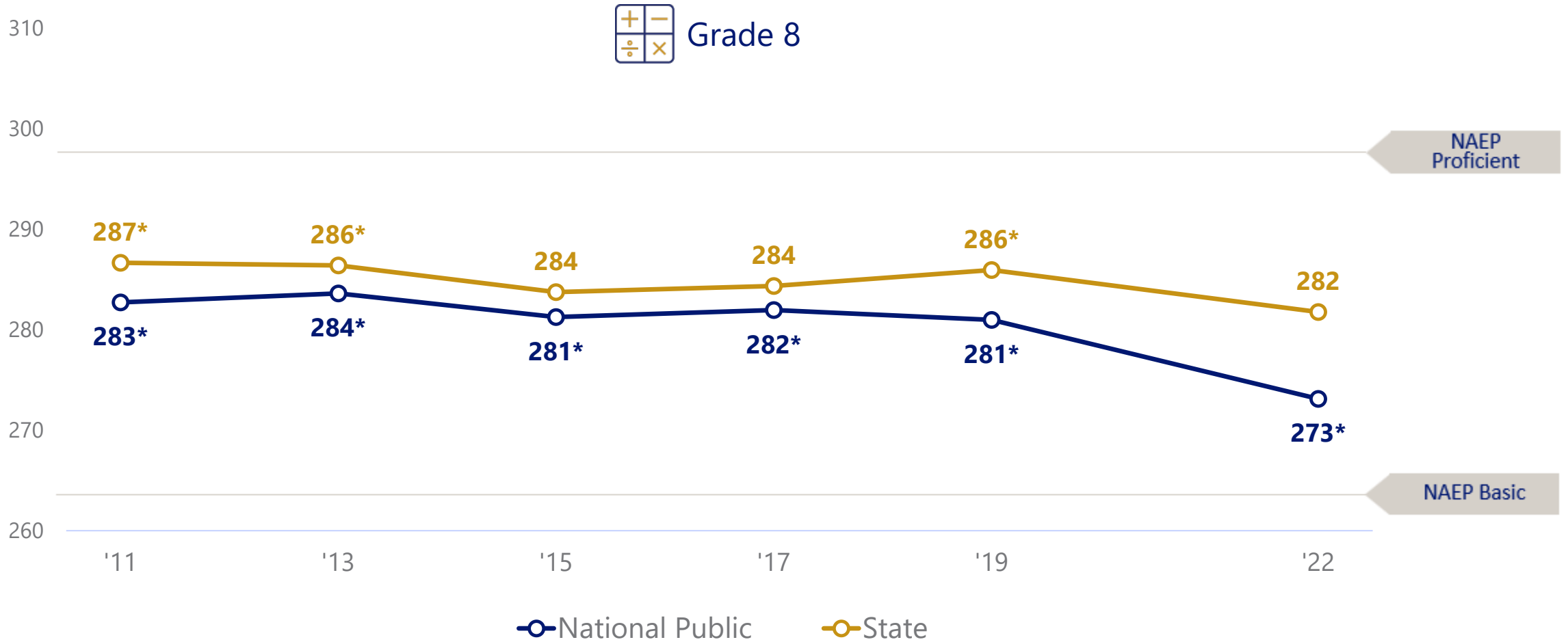
11

jurisdictions
not significantly
different

39

jurisdictions
significantly lower

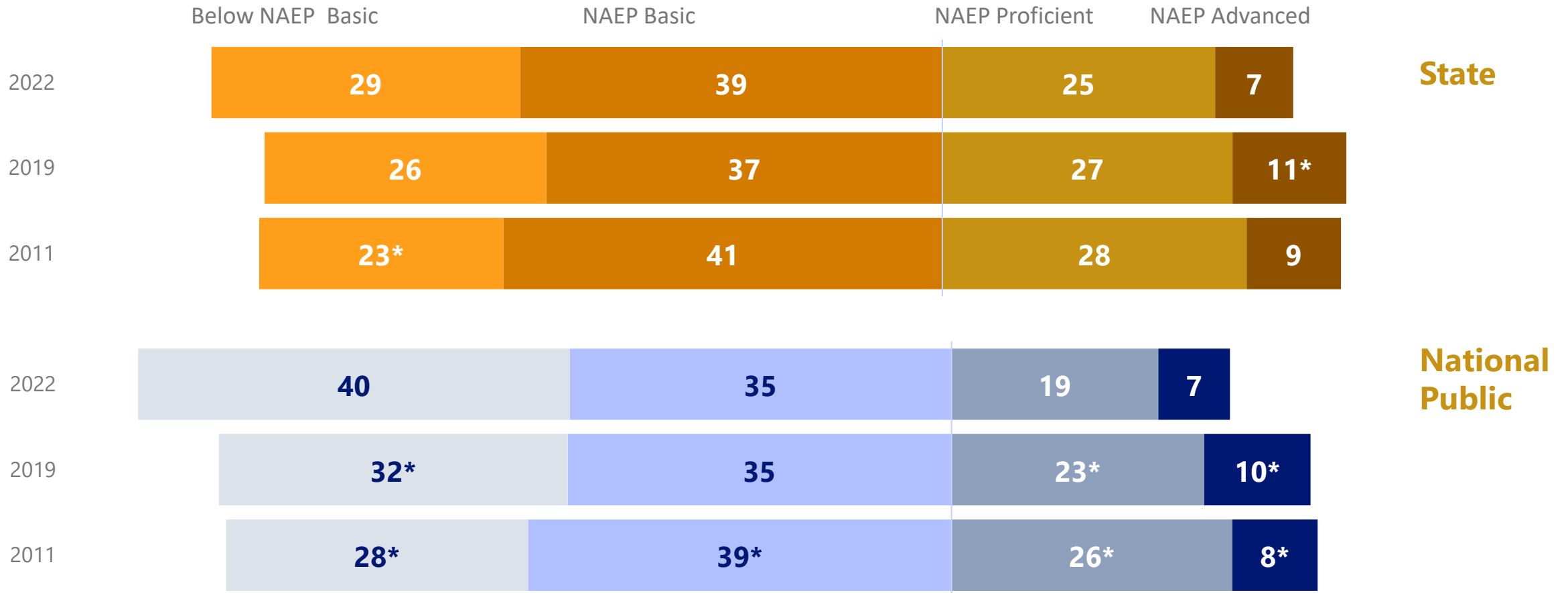
Average Scale Scores



*Significantly different ($p < .05$) from 2022.

Achievement Level Percentages

Grade 8



*Significantly different (p < .05) from 2022. NOTE: Detail may not sum to totals because of rounding.

Student Group Score Differences



Grade 8 – Differences since 2011

Jurisdiction	All Students	Male	Female	Eligible for NSLP	Students with Disabilities*	English Learners
State	↓5	↓4	↓5	↓7	◆	↓11
National Public	↓10	↓9	↓10	↓9	↓9	◆

↑ Higher

↓ Lower

◆ No significant change

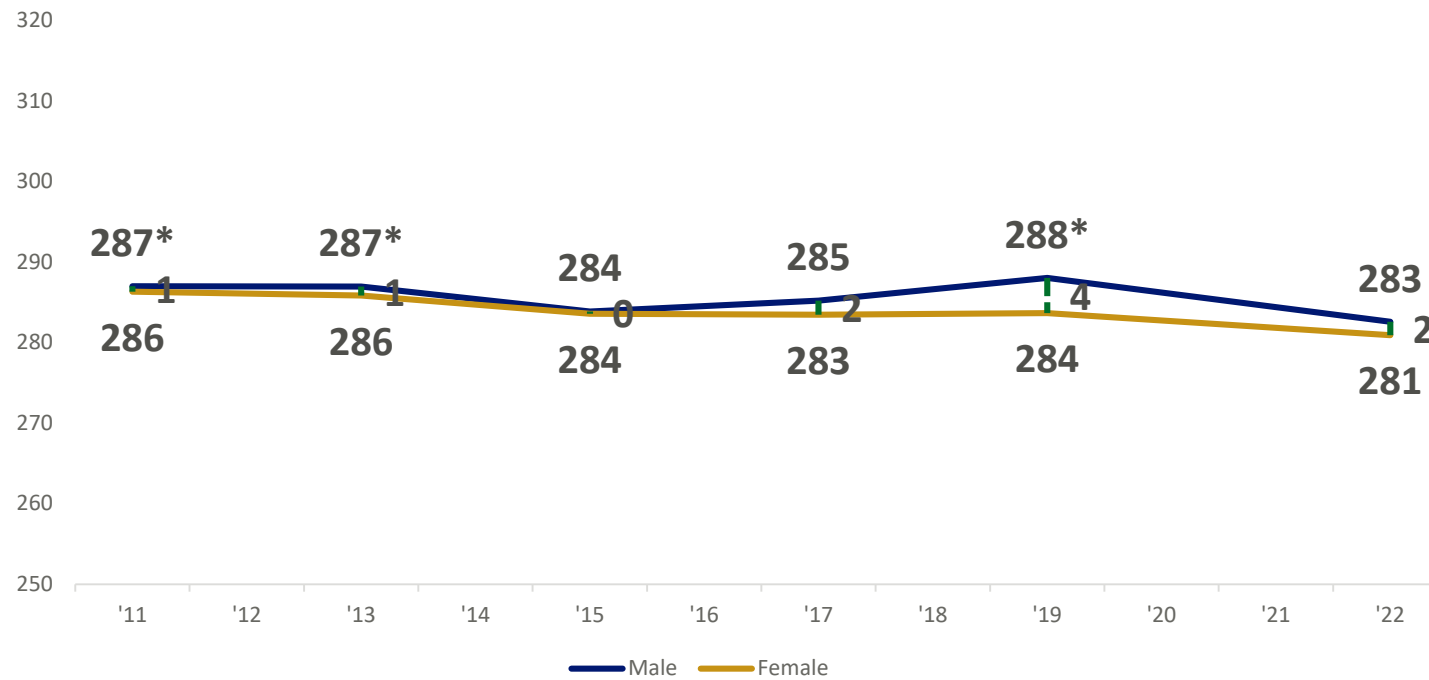
— Not available

Jurisdiction	White	Black	Hispanic	Asian/ Pacific Islander	American Indian/ Alaska Native	Two or more races
State	◆	—	◆	—	—	—
National Public	↓9	↓10	↓9	◆/◆	↓9	↓11

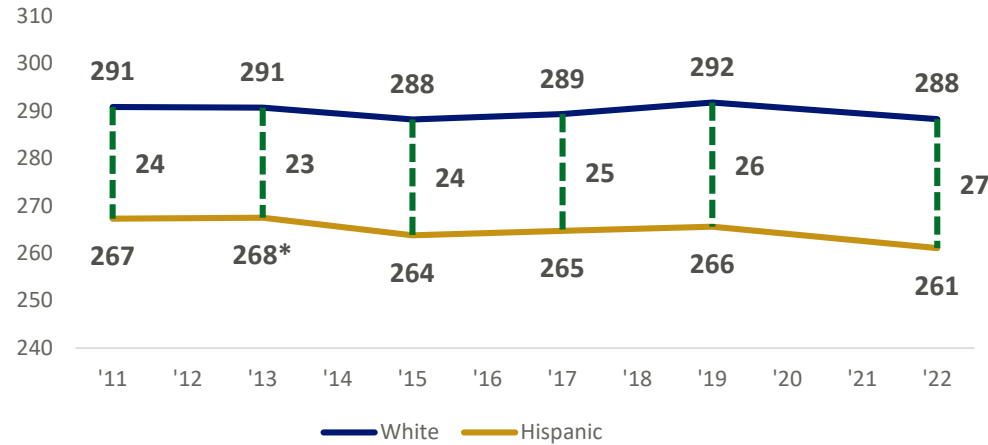
*Students with disabilities excluding those with a 504 plan.

NAEP Mathematics Grade 8

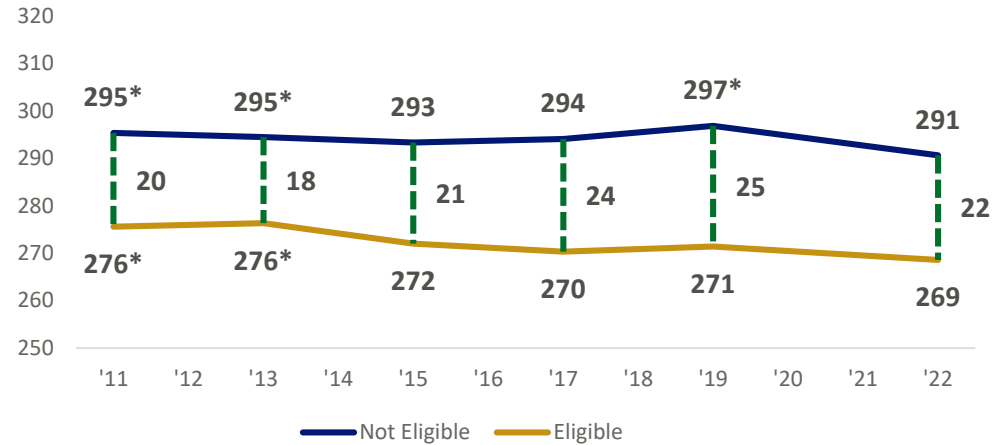
Gap - Average Scale Score: 2011-2022



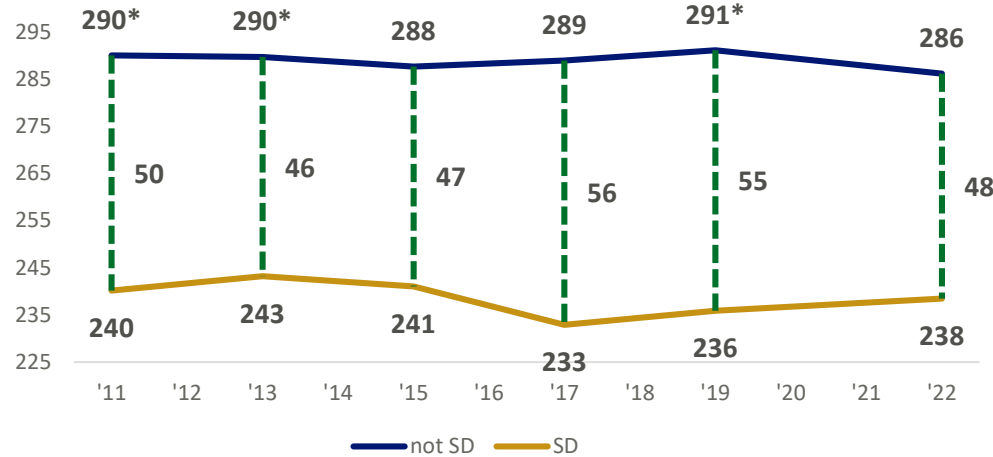
Hispanic White Gap



NSLP Gap



SD Gap



EL Gap

