

NAEP 2019 Mathematics and Reading Results

Paul D. Kleinert, PhD

NAEP Coordinator

Assessment & Accountability

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”



The
Nation's
Report Card

National Assessment of
Educational Progress

What does NAEP measure?



Overall student performance for key demographic groups



Change over time



Differences between the nation, states, and urban districts

NAEP Subjects



Civics



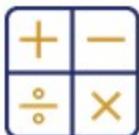
Economics



Geography



U.S. History



Mathematics



Music



Reading



Science



Technology &
Engineering Literacy

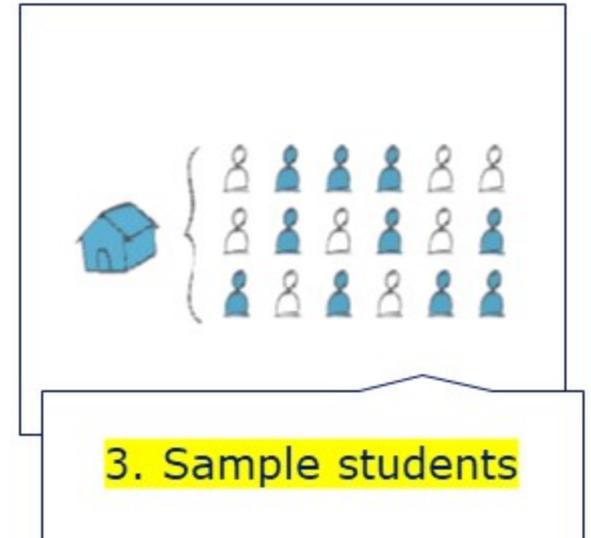
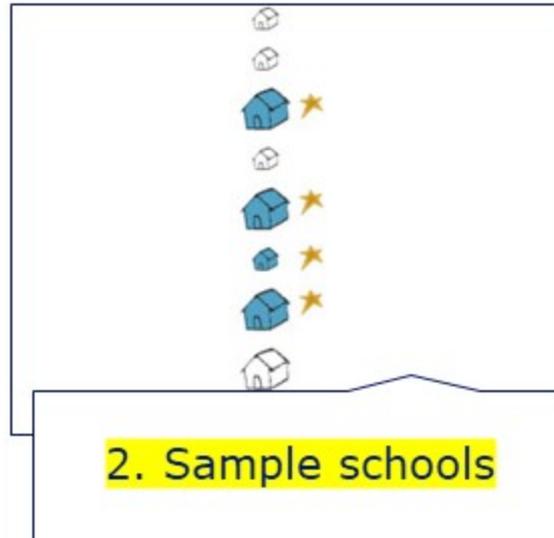
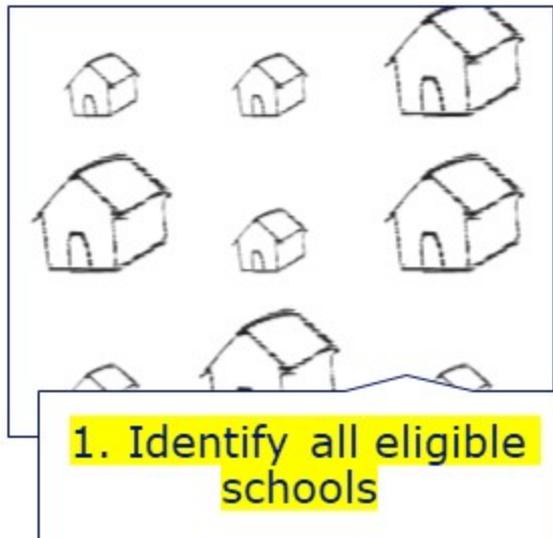


Visual Arts



Writing

NAEP School and Student Selection



Sample Sizes (National Public)

- Representative samples of schools and students

	Schools	Students	Schools	Students
Grade 4	7,810	143,600	7,830	144,700
Grade 8	6,560	142,200	6,560	138,100

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

NAEP Administration

- Six week period
- Each student assessed in one subject
- Students take a small portion of the assessment
- Accommodations provided as necessary for
 - students with disabilities
 - English language learners

JANUARY

M	T	W	T	F
	1	2	3	4
7	8	9	10	11
14	15	16	17	18
21	22	23	24	25
28	29	30	31	

FEBRUARY

M	T	W	T	F
				1
4	5	6	7	8
11	12	13	14	15
18	19	20	21	22
25	26	27	28	

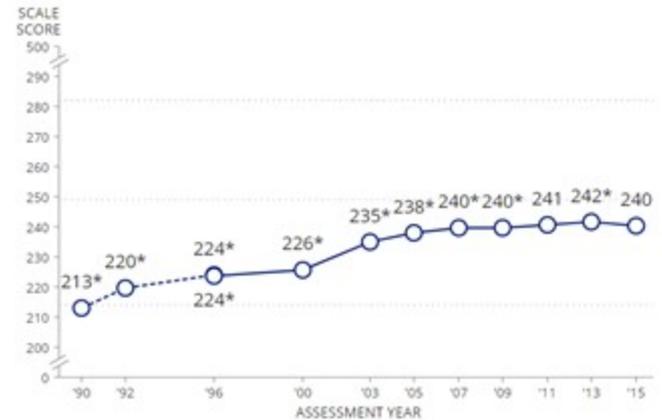
MARCH

M	T	W	T	F
				1
4	5	6	7	8
11	12	13	14	15
18	19	20	21	22
25	26	27	28	29

NAEP Results

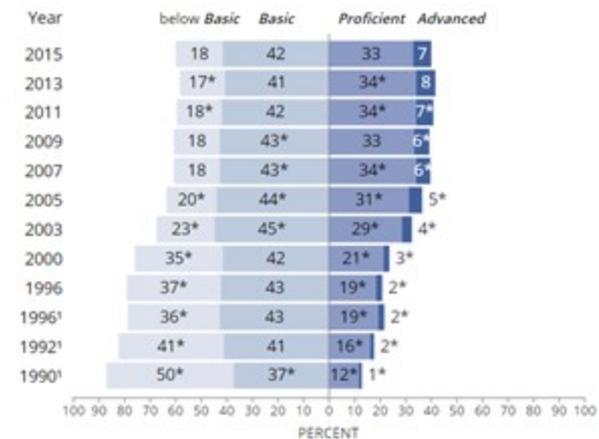
■ Scale Scores

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

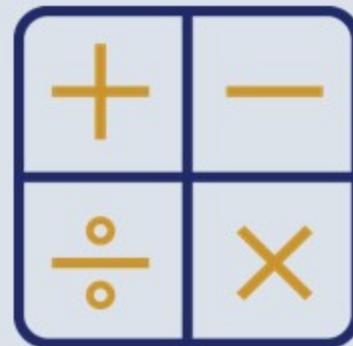


■ Achievement Levels

- Categorical scale
- Below Basic, Basic, Proficient, Advanced



Grade 4 Mathematics Results



2019 Idaho average scale score (0–500)

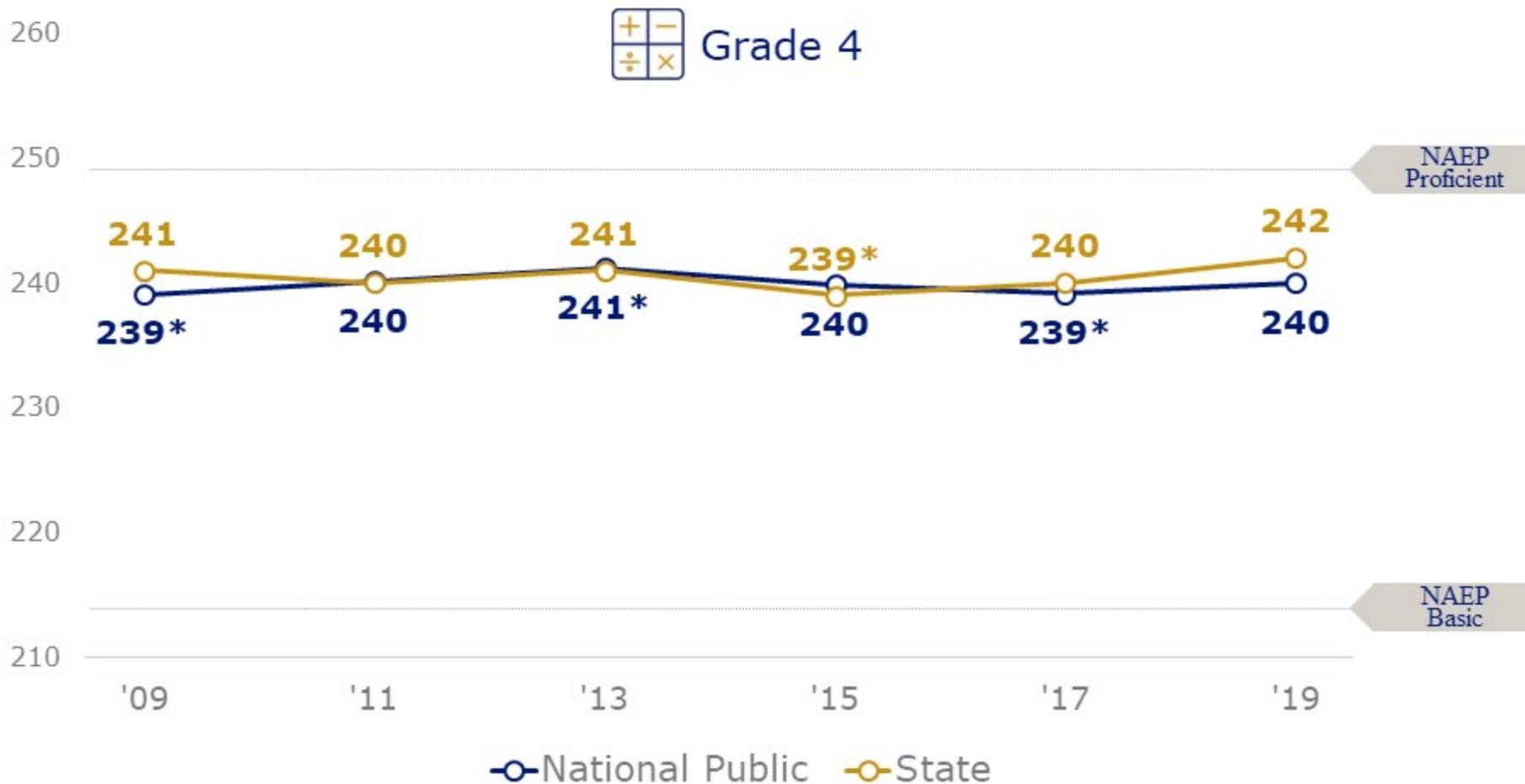
ID 242

7
jurisdictions
↑
performed
significantly higher

22
jurisdictions
◆
not significantly
different

22
jurisdictions
↓
performed
significantly lower

Average Scale Scores Math Grade 4



*Significantly different ($p < .05$) from 2019.

Achievement Level Percentages Math Grade 4



Percentage of students at each NAEP achievement level



*Significantly different ($p < .05$) from 2019.

NOTE: Detail may not sum to totals because of rounding.

Student Group Score Differences Math Grade 4



Grade 4 – Differences since 2009

	All Students	Male	Female	Eligible for NSLP	Students with Disabilities	English language learners
Idaho	◆	◆	◆	◆	◆	◆
National Public	↑1	↑2	◆	↑1	↓6	↑2

↑ Higher

↓ Lower

◆ No significant change

— Not available

	White	Black	Hispanic	Asian/ Pacific Islander	American Indian/ Alaska Native	Two or more races
Idaho	◆	—	◆	—	—	—
National Public	◆	↑2	↑3	↑6	◆	◆

ACHIEVEMENT LEVELS - at or above *Basic*

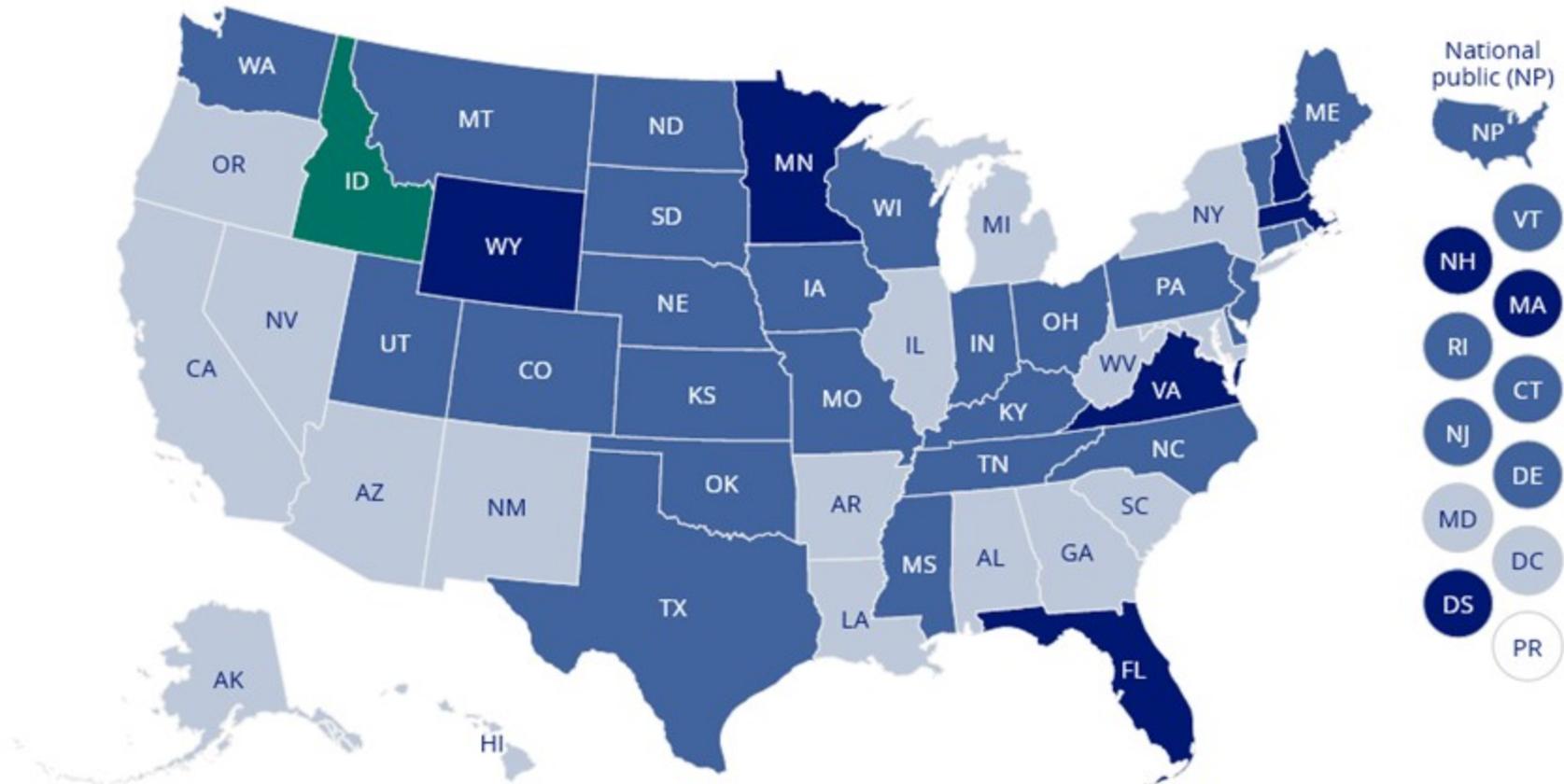
2019 Idaho percentage at or above *Basic*

ID 82%



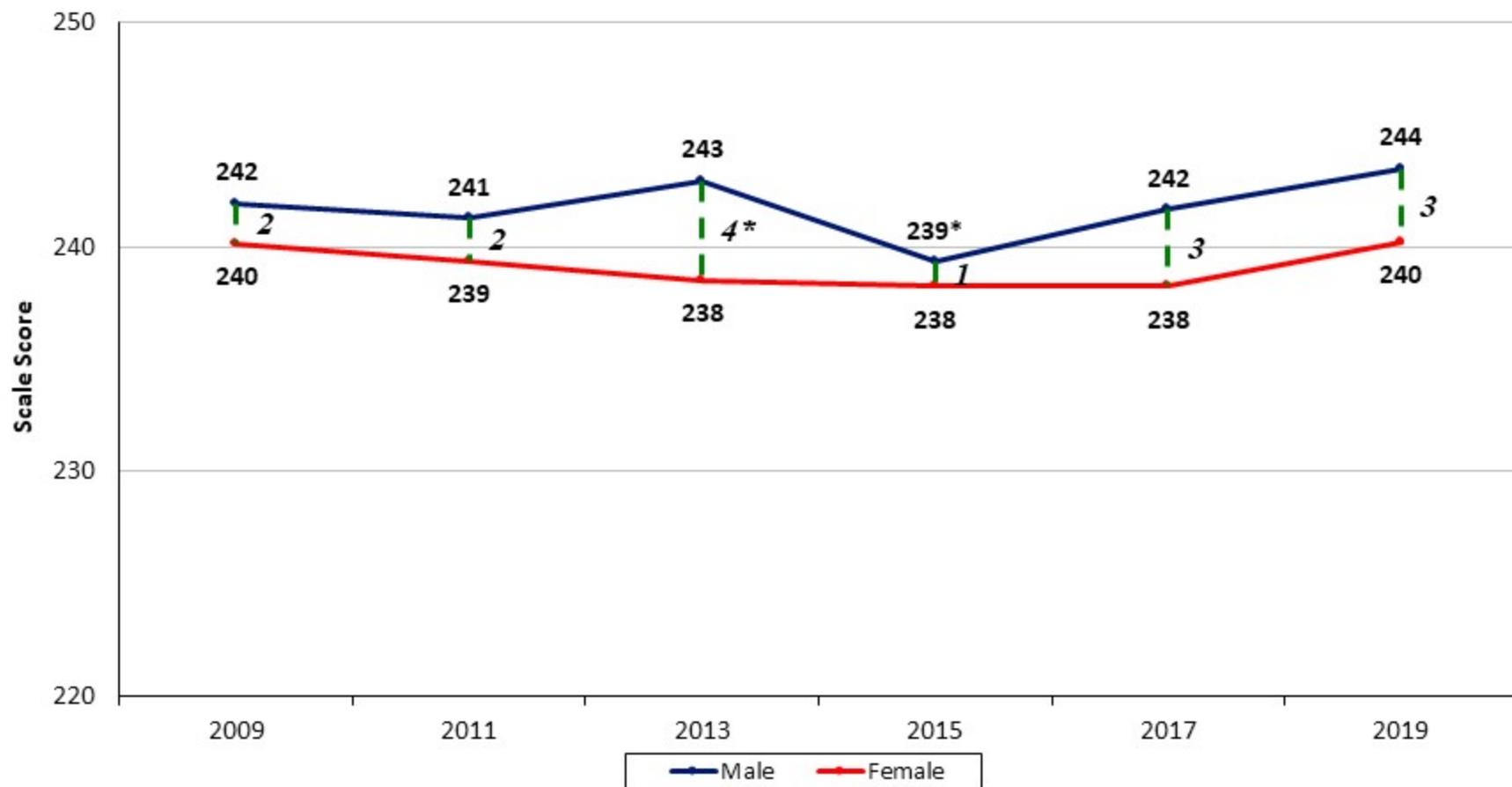
Mathematics, Grade 4

Difference in percentage at or above basic between all jurisdictions and Idaho, for All students [TOTAL], 2019



Gap Analysis Math Grade 4

NAEP Mathematics Grade 4
Gap - Average Scale Score: 2009-2019

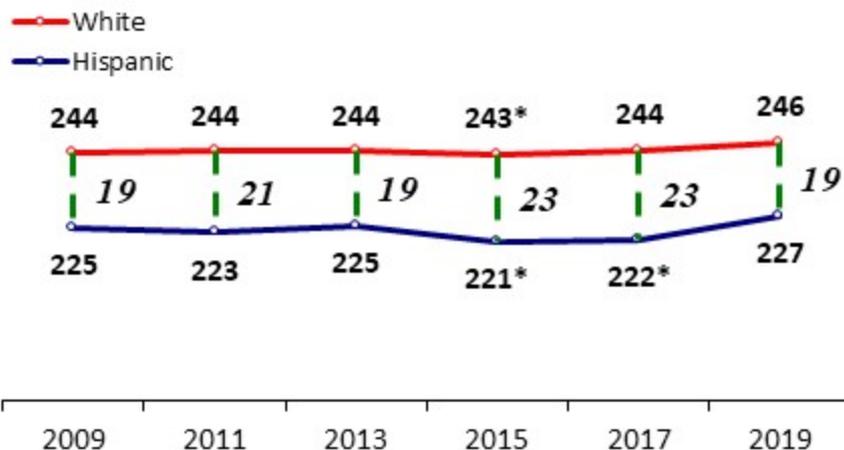


NOTE: The NAEP Mathematics scale ranges from 0 to 500. Observed differences are not necessarily statistically significant.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP).

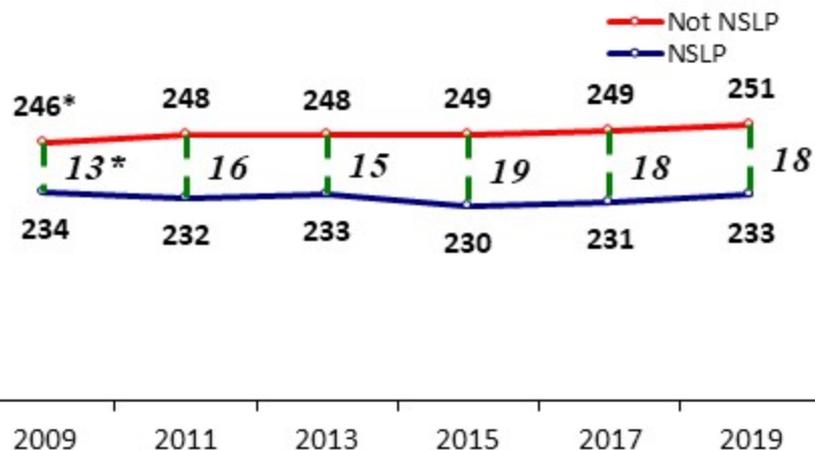
Gap Analyses Math Grade 4

all gaps are significant *gap different from 2019

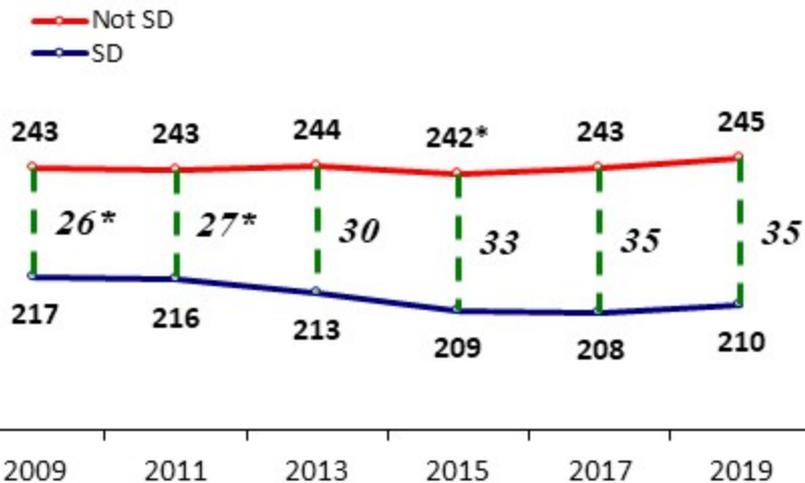
Hispanic White Gap



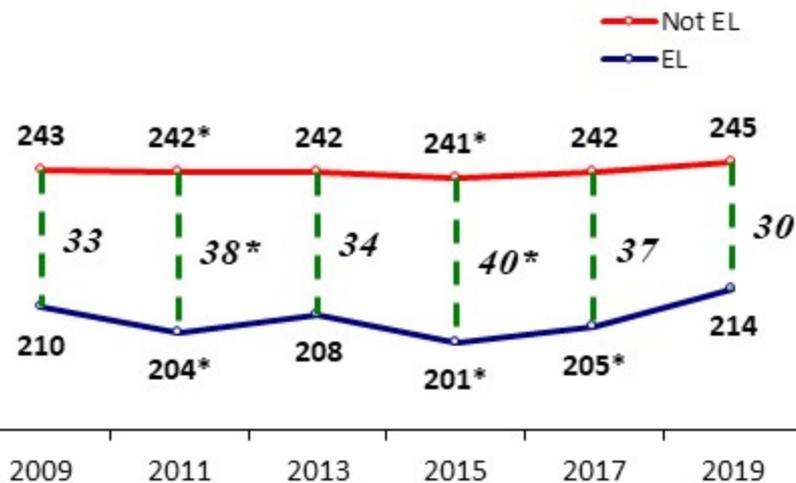
NSLP Gap



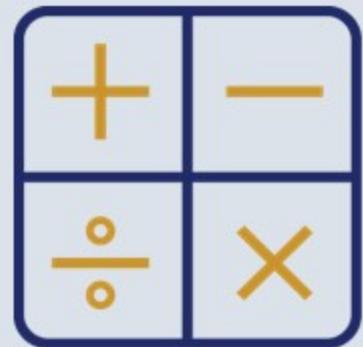
SD Gap



EL Gap



Grade 8 Mathematics Results



2019 Idaho average scale score
(0–500)

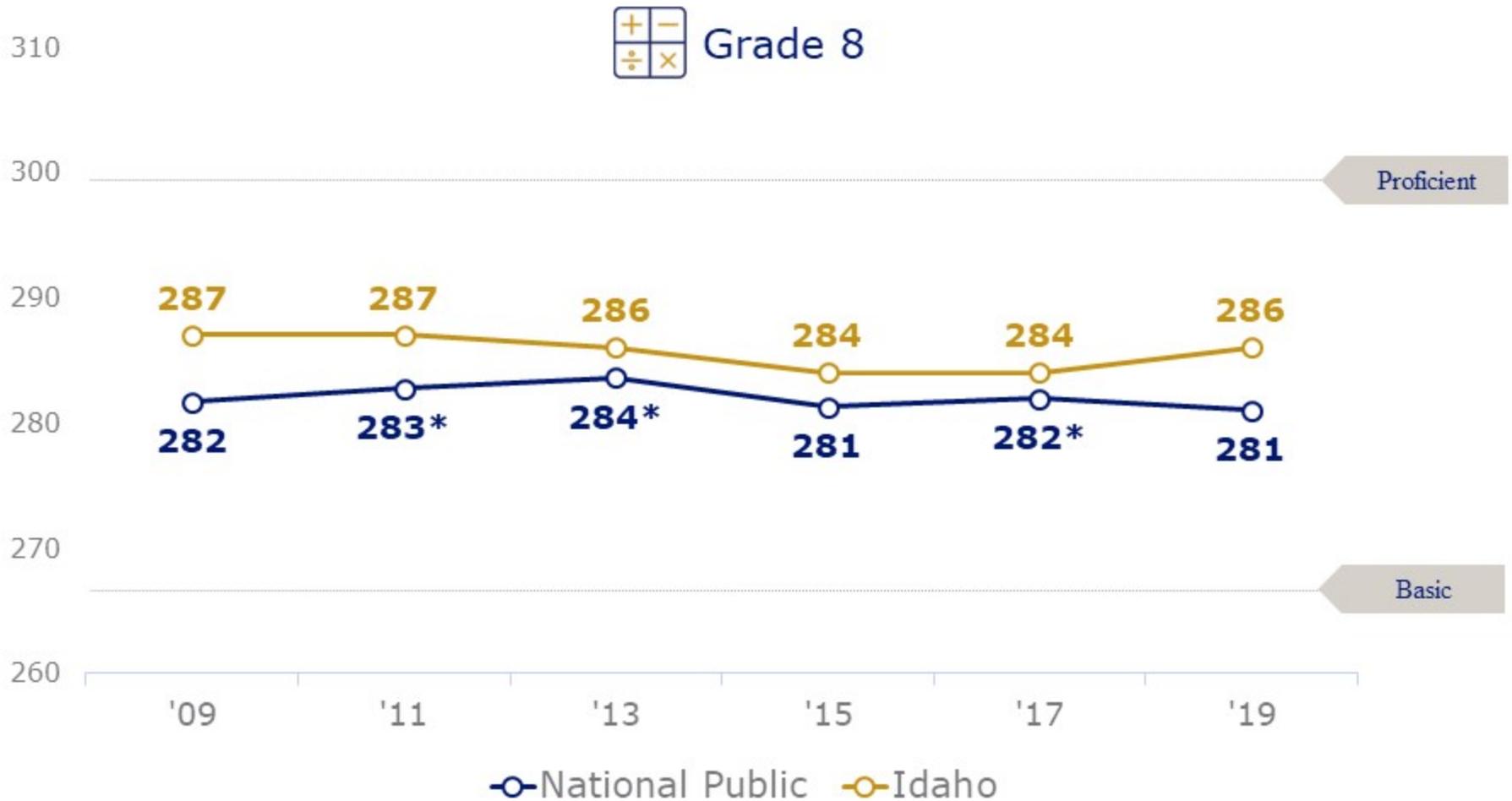
ID 286

4
jurisdictions
↑
performed
significantly higher

17
jurisdictions
◆
not significantly
different

30
jurisdictions
↓
performed
significantly lower

Average Scale Scores Math Grade 8

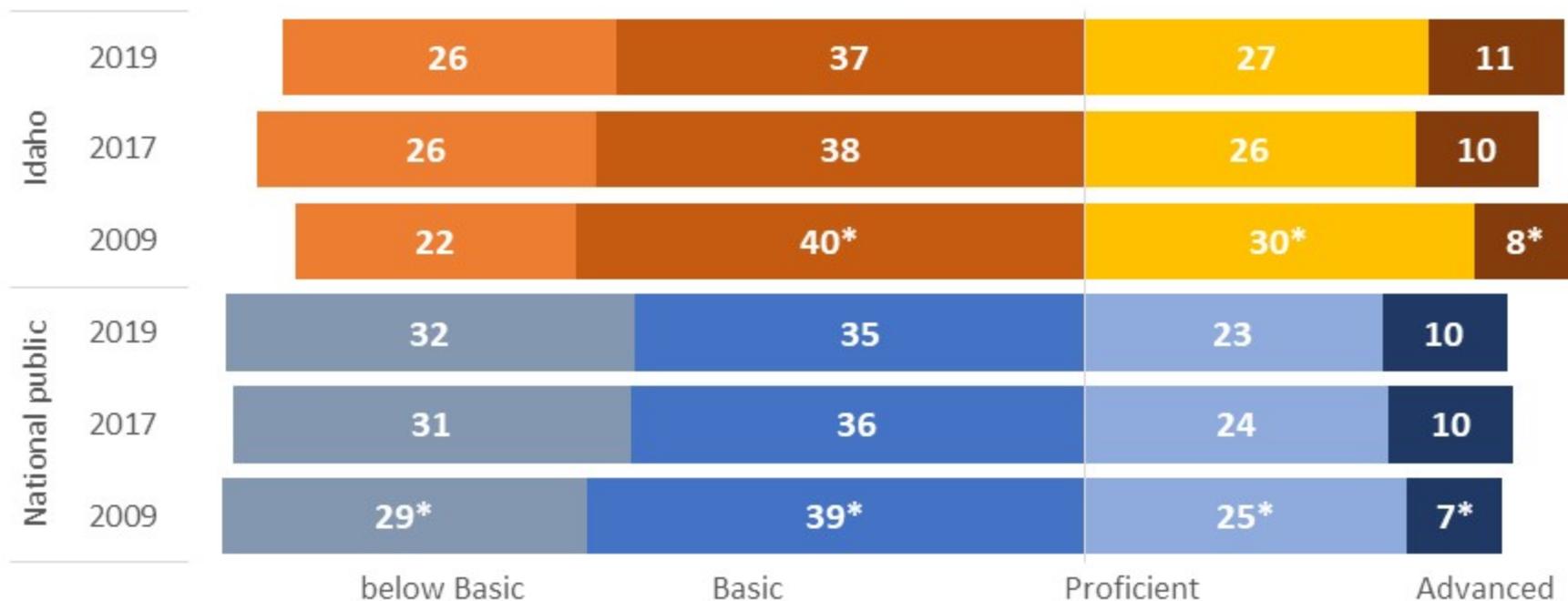


*Significantly different ($p < .05$) from 2019.

Achievement Level Percentages Math Grade 8



Percentage of students at each NAEP achievement level



*Significantly different ($p < .05$) from 2019.

NOTE: Detail may not sum to totals because of rounding.

Student Group Score Differences Math Grade 8



Grade 8 – Differences since 2009

	All Students	Male	Female	Eligible for NSLP	Students with Disabilities	English language learners
Idaho	◆	◆	◆	↓4	◆	◆
National Public	◆	↓2	◆	◆	◆	◆

↑ Higher

↓ Lower

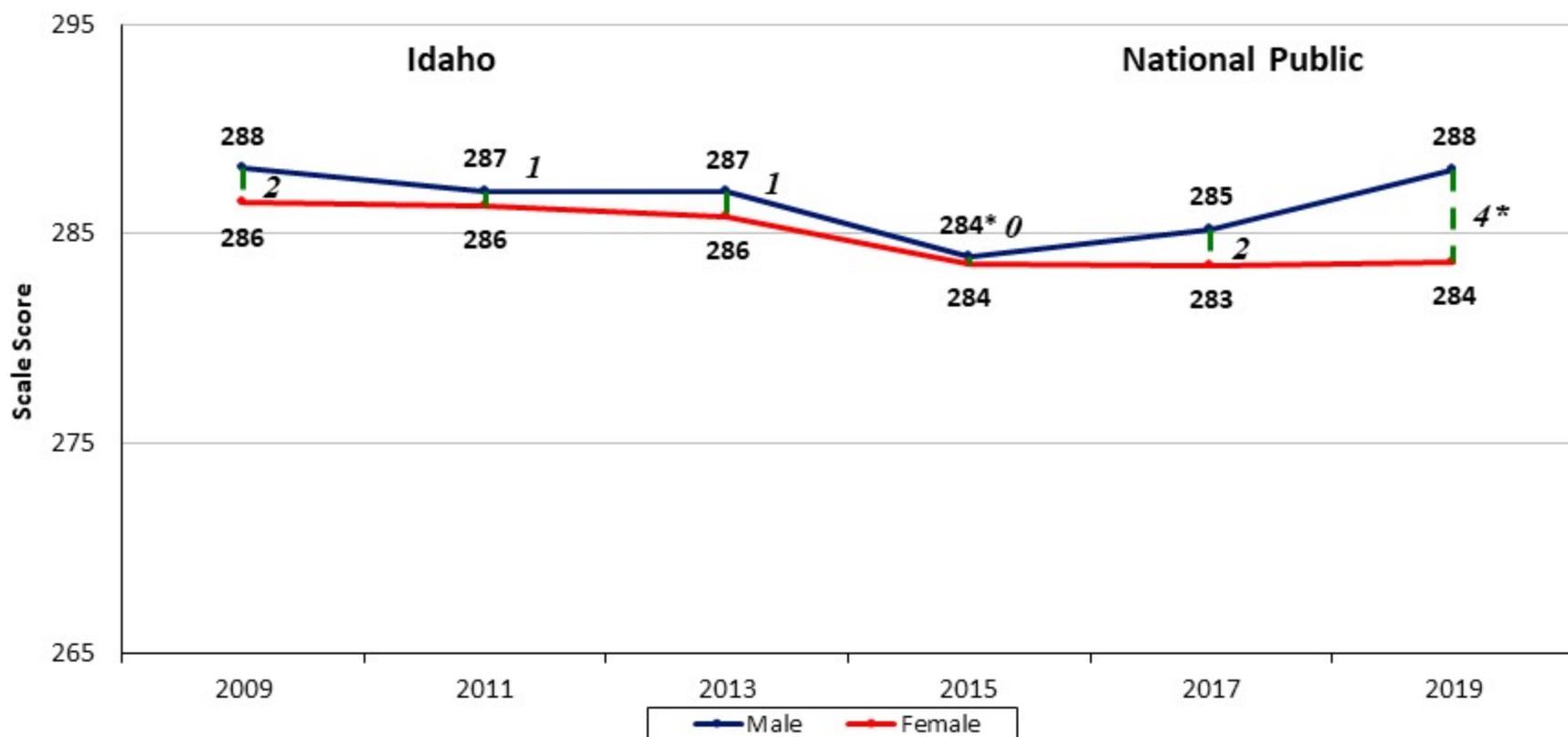
◆ No significant change

— Not available

	White	Black	Hispanic	Asian/ Pacific Islander	American Indian/ Alaska Native	Two or more races
Idaho	◆	—	◆	—	—	—
National Public	◆	◆	◆	↑9	◆	◆

Gap Analysis Math Grade 8

NAEP Mathematics Grade 8, Male-Female Gap



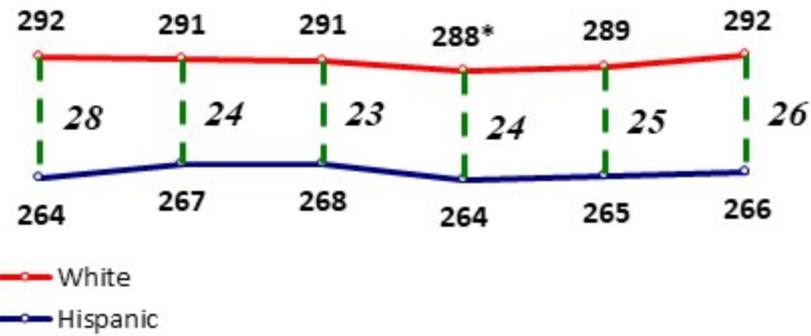
NOTE: The NAEP Mathematics scale ranges from 0 to 500. Observed differences are not necessarily statistically significant.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP).

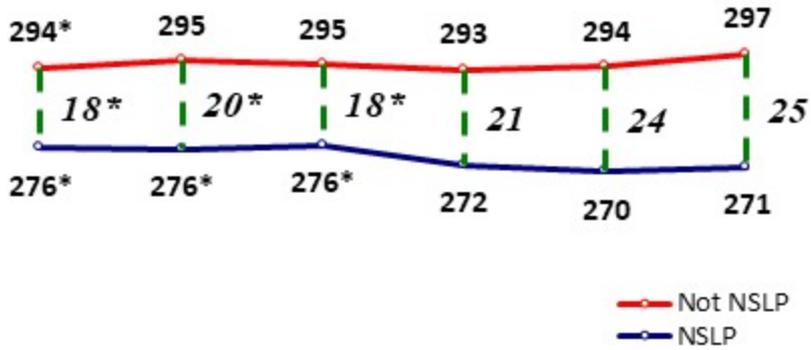
Gap Analyses Math Grade 8

all gaps are significant *gap different from 2019

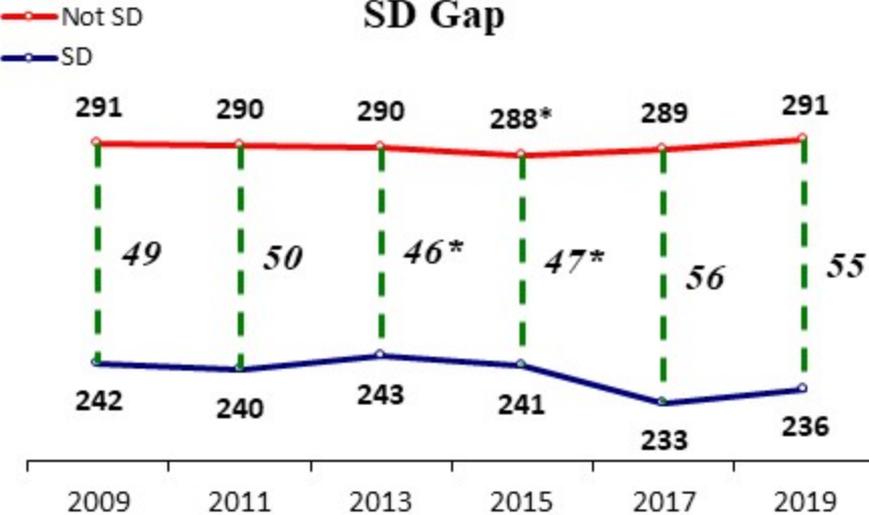
Hispanic White Gap



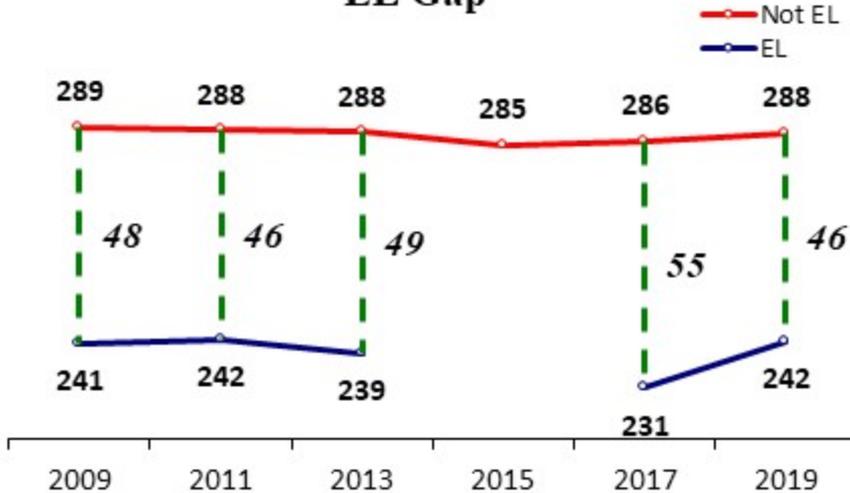
NSLP Gap



SD Gap



EL Gap



Grade 4 Reading Results



2019 Idaho average scale score
(0-500)

ID 223

4
jurisdictions
↑
performed
significantly higher

26
jurisdictions
◆
not significantly
different

21
jurisdictions
↓
performed
significantly lower

Average Scale Scores Reading Grade 4

 Grade 4



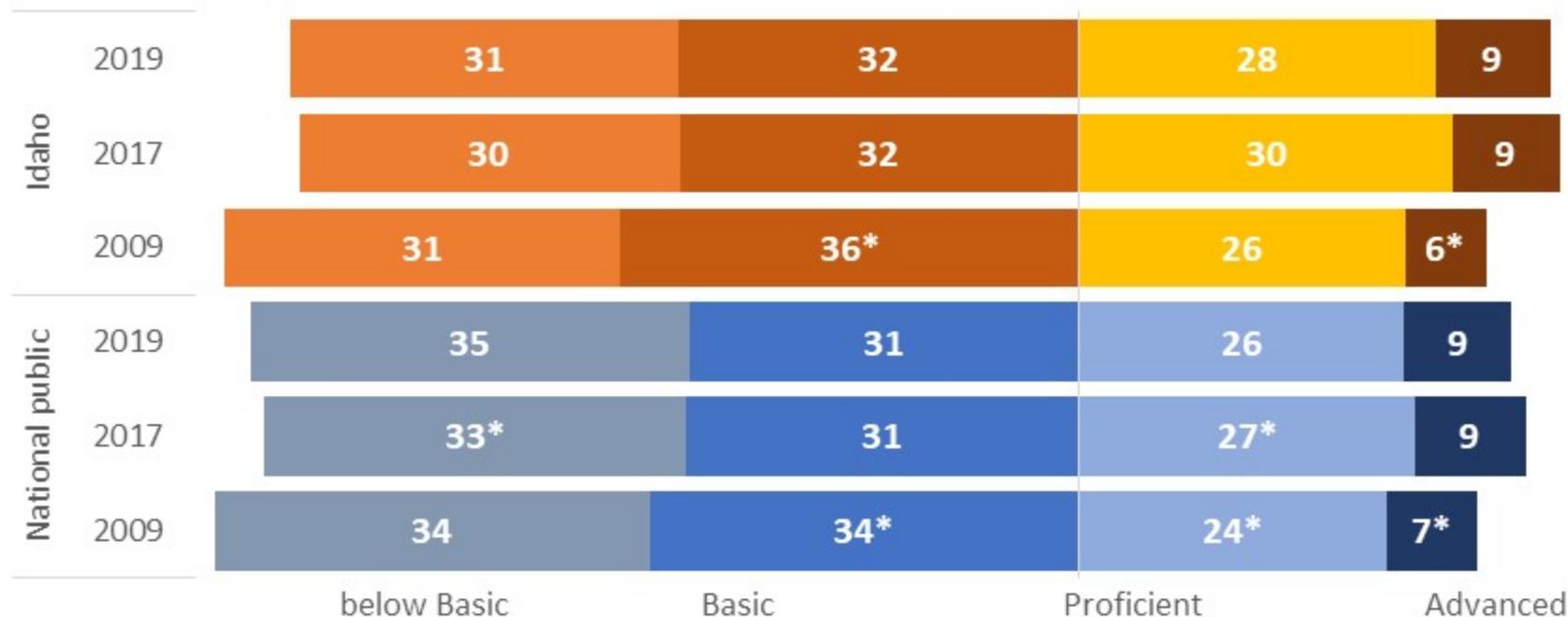
*Significantly different ($p < .05$) from 2019.

Achievement Level Percentages Reading Grade 4



Grade 4

Percentage of students at each NAEP achievement level



*Significantly different ($p < .05$) from 2019.

NOTE: Detail may not sum to totals because of rounding.

Student Group Score Differences Reading Grade 4

 Grade 4 – Differences since 2009

	All Students	Male	Female	Eligible for NSLP	Students with Disabilities	English language learners
Idaho	◆	◆	◆	◆	◆	↑15
National Public	◆	◆	◆	◆	↓6	↑3

↑ Higher

↓ Lower

◆ No significant change

— Not available

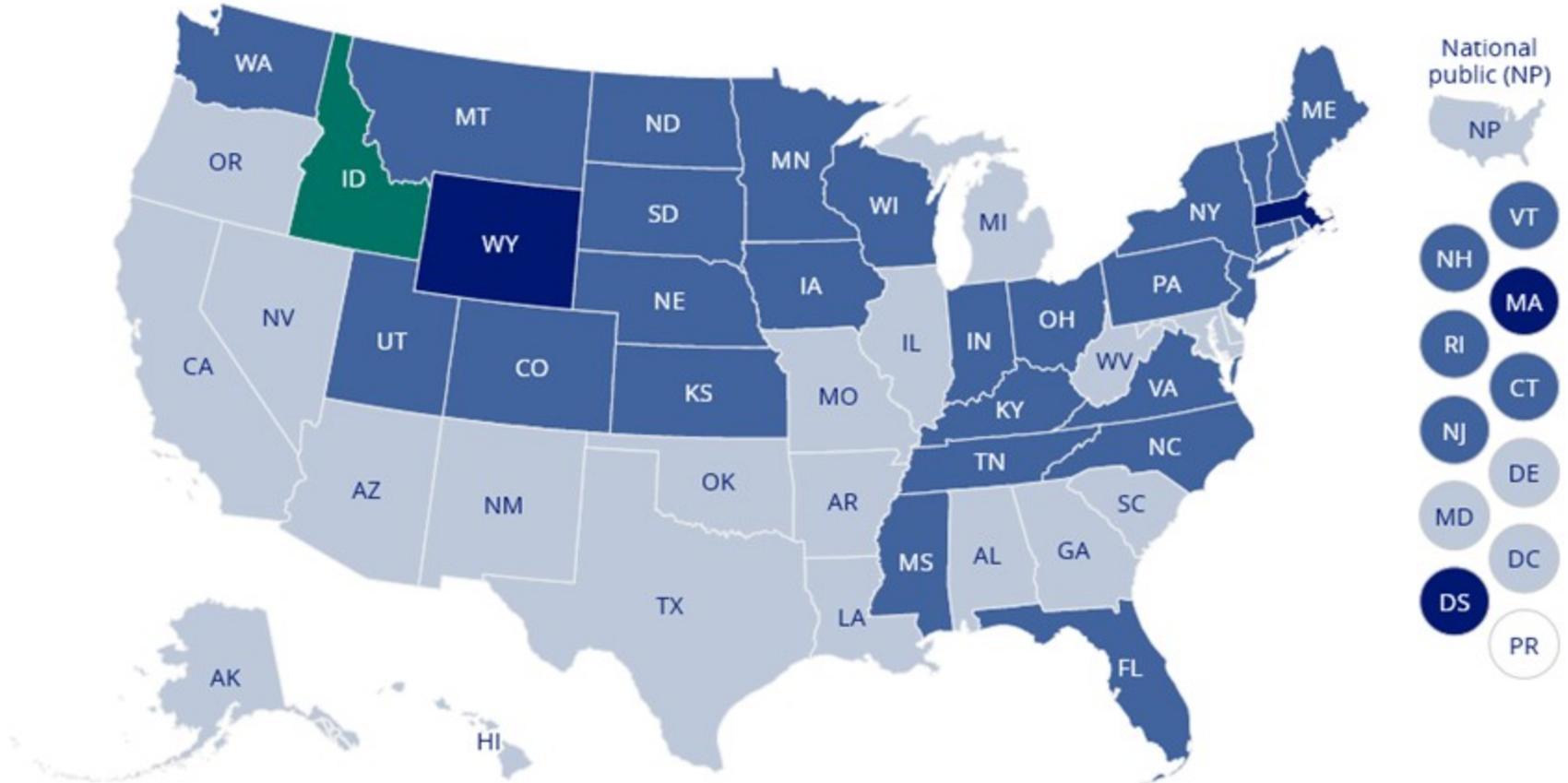
	White	Black	Hispanic	Asian/ Pacific Islander	American Indian/ Alaska Native	Two or more races
Idaho	◆	—	◆	—	—	—
National Public	◆	◆	↑4	◆	◆	◆

ACHIEVEMENT LEVELS - at or above *Basic*



Reading, Grade 4

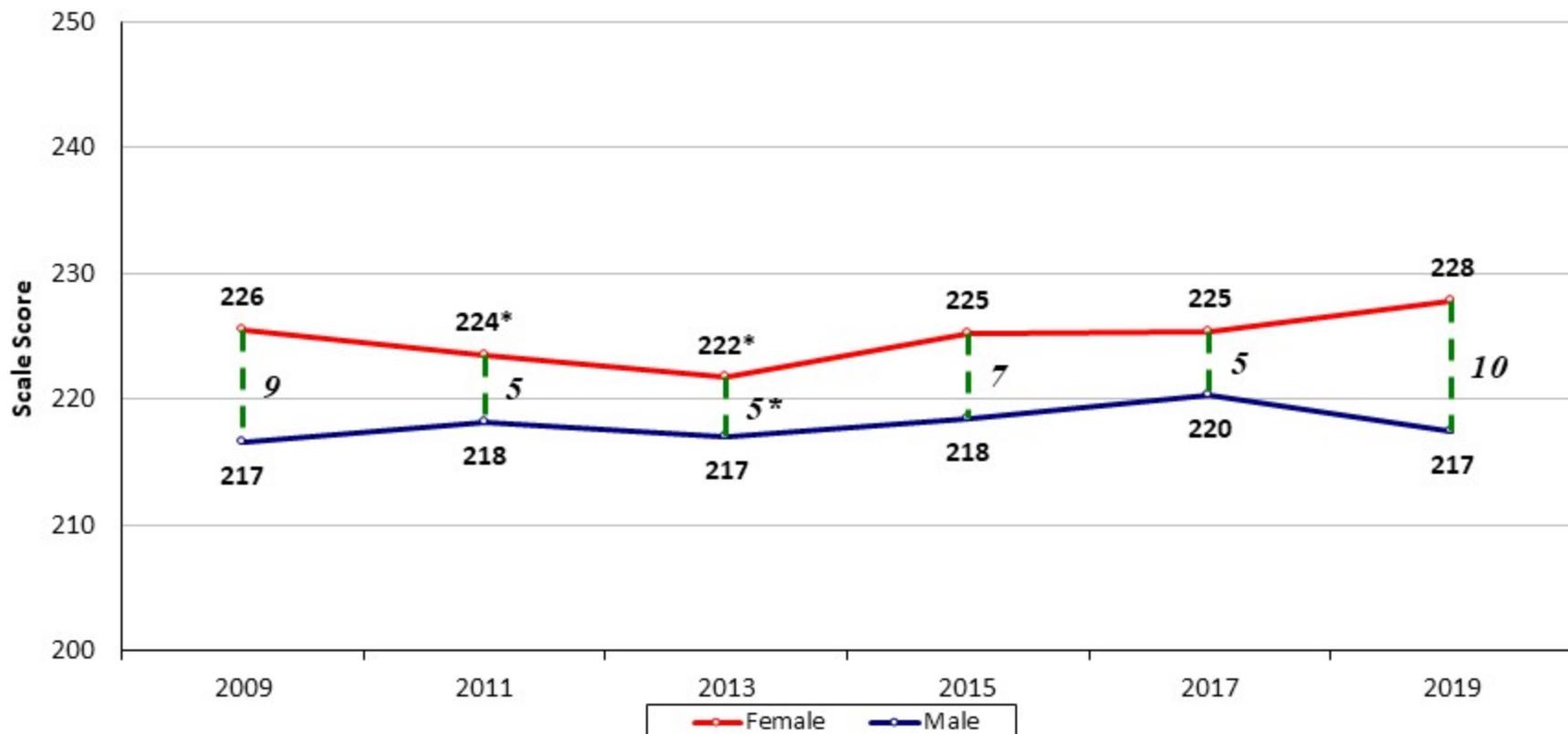
Difference in percentage at or above basic between all jurisdictions and Idaho, for All students [TOTAL], 2019



Gap Analysis, Reading Grade 4

all gaps are significant *gap different from 2019

NAEP Reading Grade 4, Female Male Gap



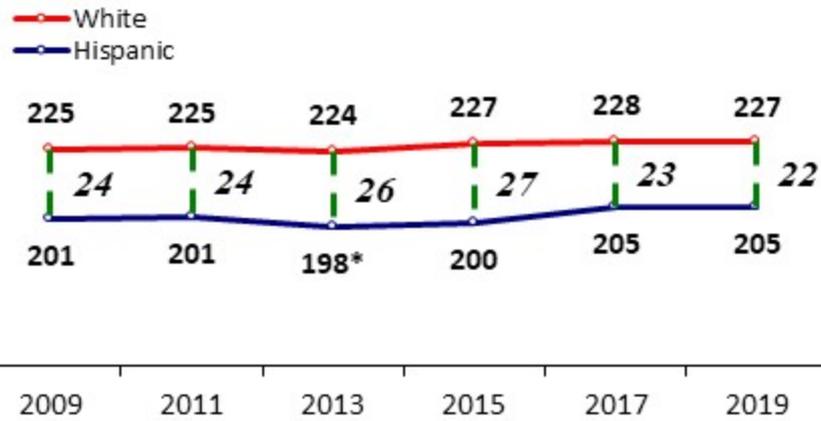
NOTE: The NAEP Reading scale ranges from 0 to 500. Observed differences are not necessarily statistically significant.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP).

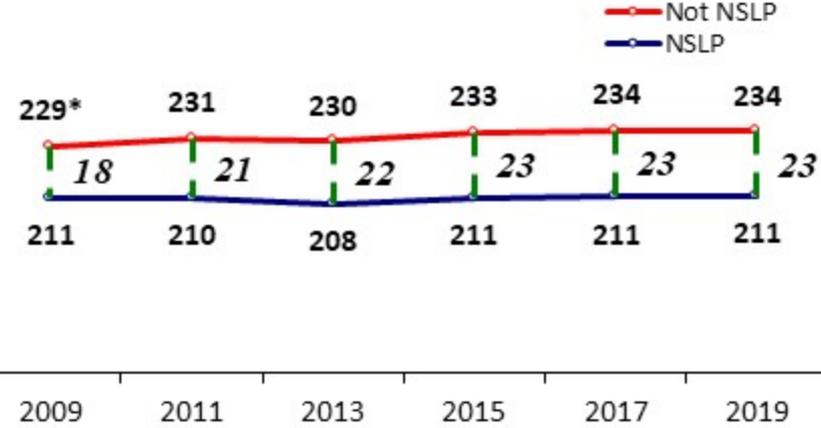
Gap Analyses, Reading Grade 4

all gaps are significant *different from 2019

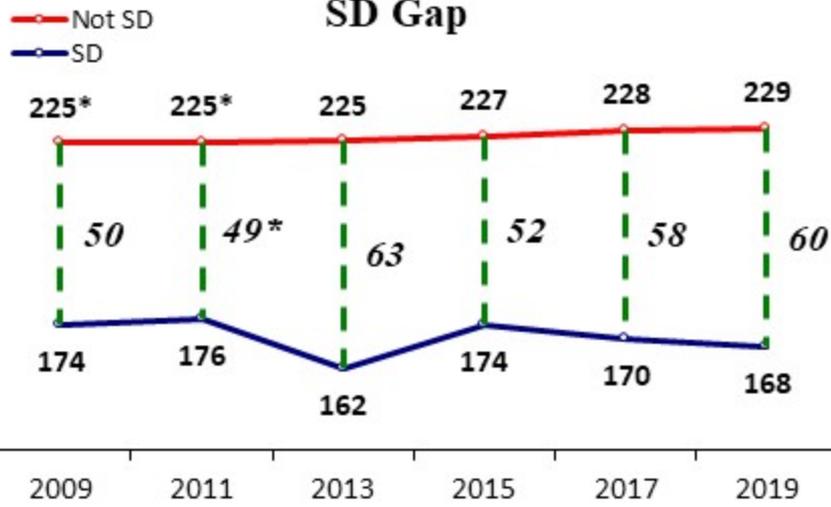
Hispanic White Gap



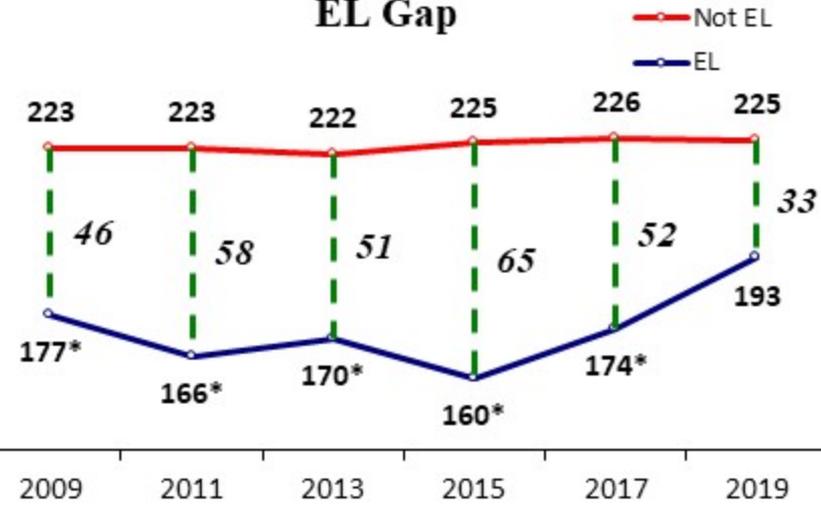
NSLP Gap



SD Gap



EL Gap



Grade 8 Reading Results



2019 Idaho average scale score
(0-500)

ID 266

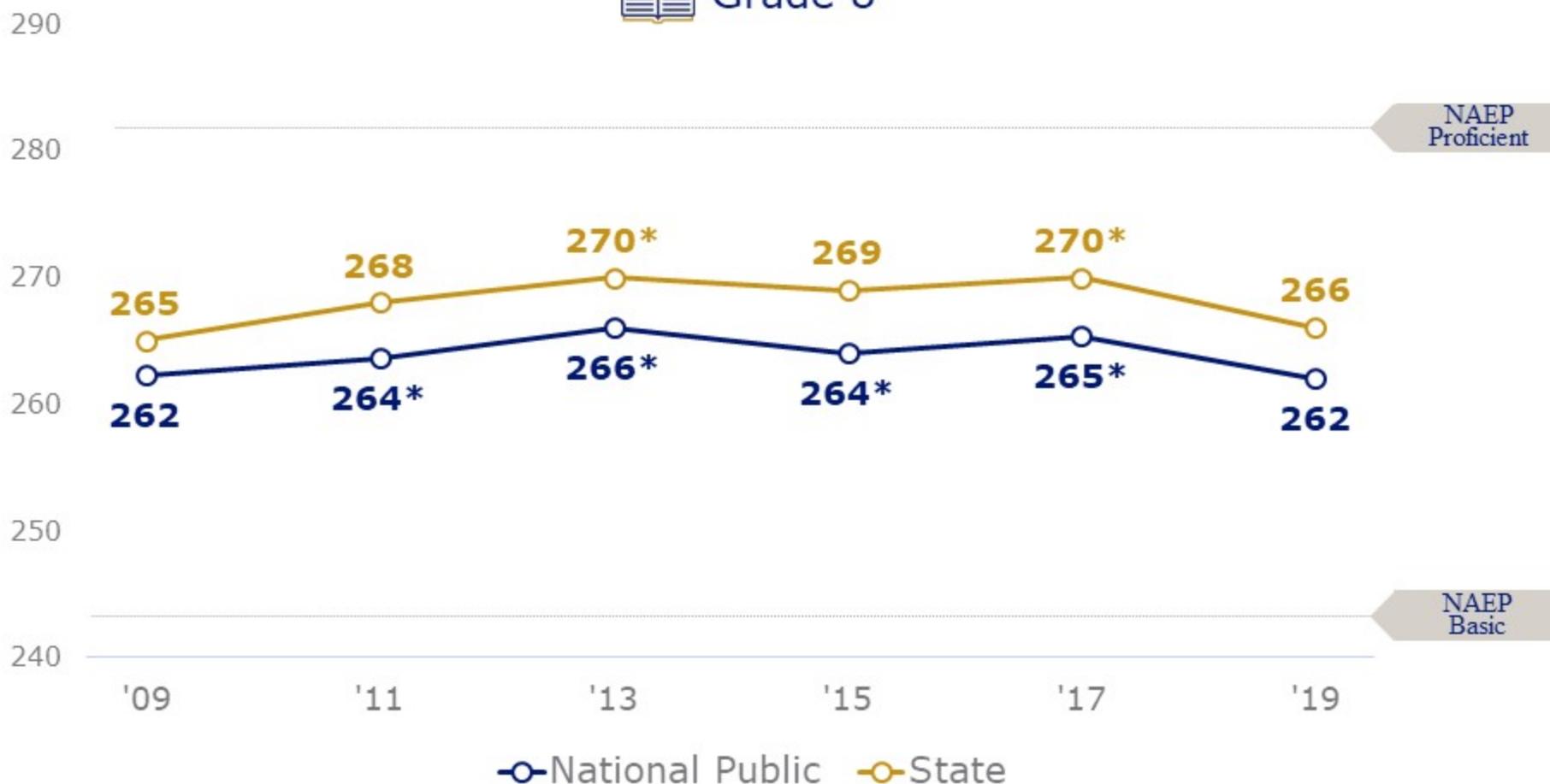
3
jurisdictions
↑
performed
significantly higher

19
jurisdictions
◆
not significantly
different

29
jurisdictions
↓
performed
significantly lower

Average Scale Score Reading Grade 8

 Grade 8



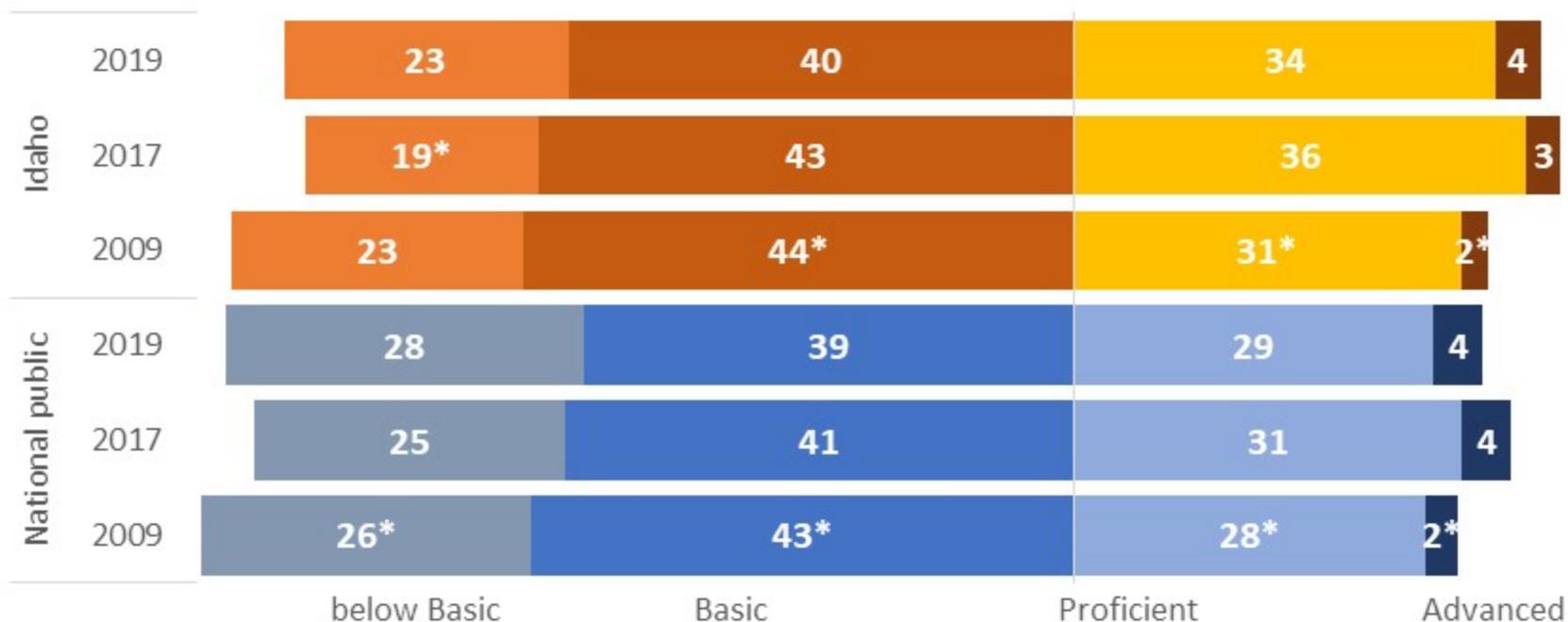
*Significantly different ($p < .05$) from 2019.

Achievement Level Percentages Reading Grade 8



Grade 8

Percentage of students at each NAEP achievement level



*Significantly different ($p < .05$) from 2019.

NOTE: Detail may not sum to totals because of rounding.

Student Group Score Differences Reading Grade 8

 Grade 8 – Differences since 2007

	All Students	Male	Female	Eligible for NSLP	Students with Disabilities	English language learners
Idaho	◆	◆	◆	◆	◆	◆
National Public	◆	◆	◆	◆	◆	◆

↑ Higher

↓ Lower

◆ No significant change

— Not available

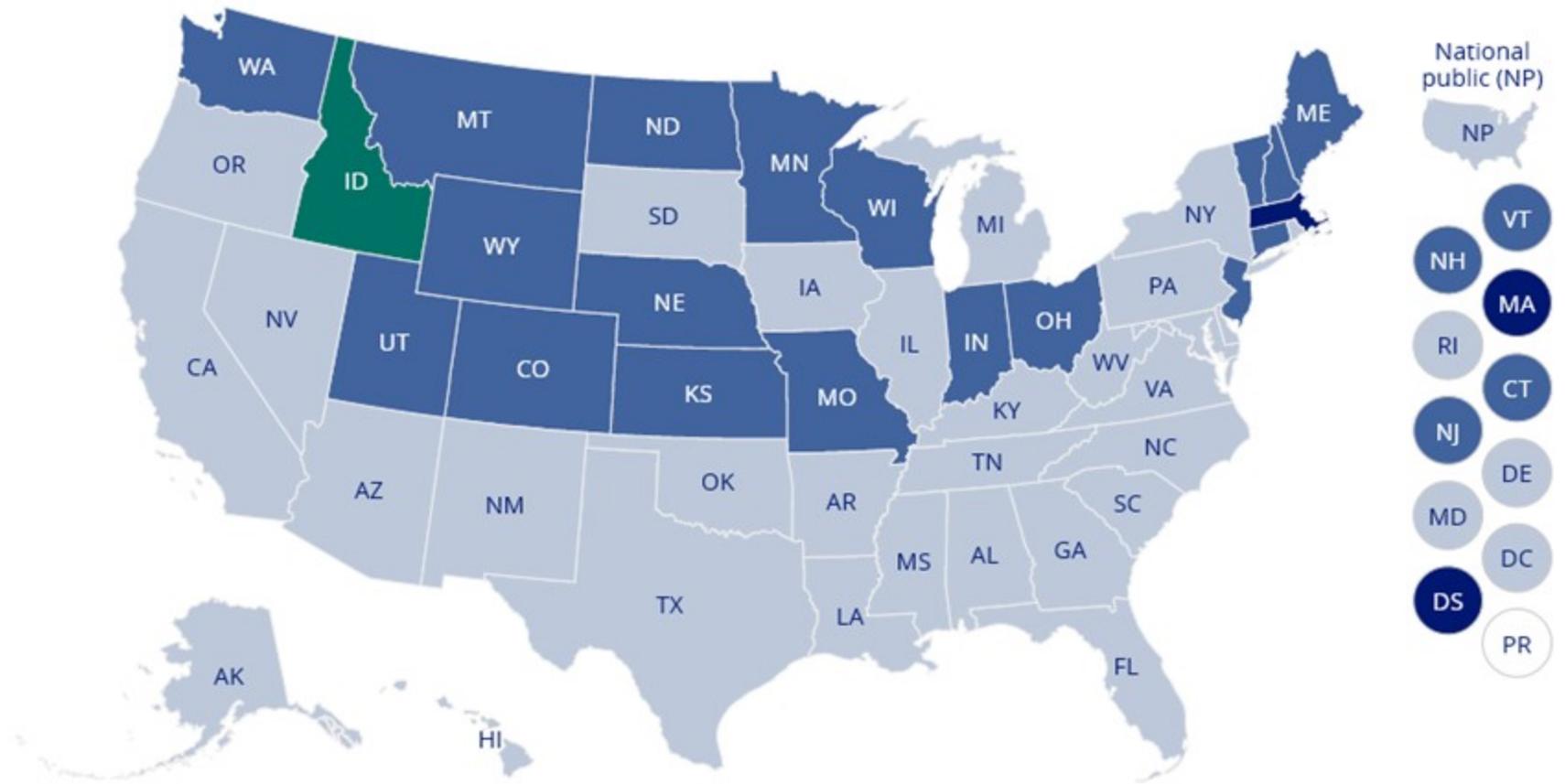
	White	Black	Hispanic	Asian/ Pacific Islander	American Indian/ Alaska Native	Two or more races
Idaho	◆	—	↑8	—	—	—
National Public	◆	◆	↑3	↑8	◆	◆

ACHIEVEMENT LEVELS - at or above *Basic*



Reading, Grade 8

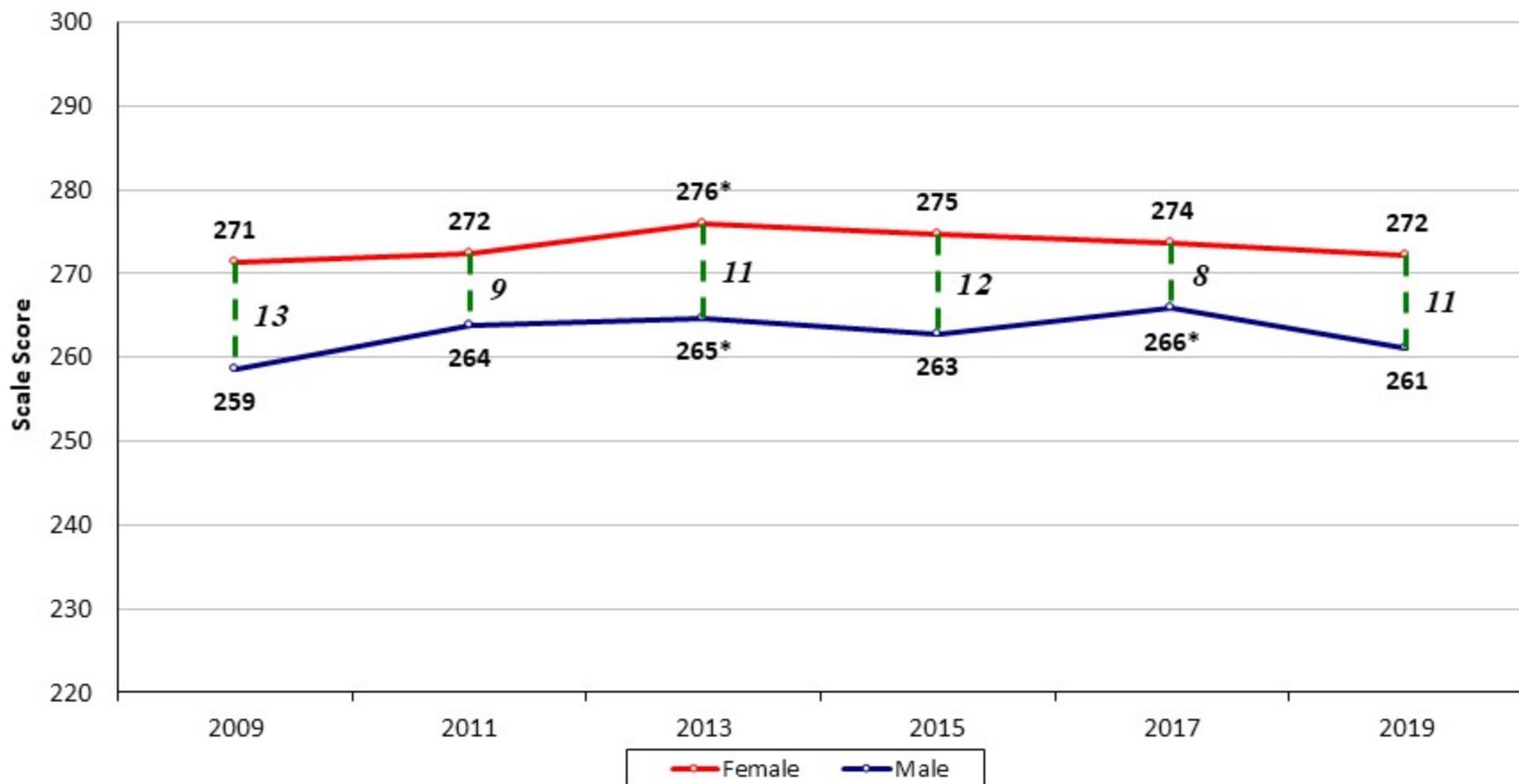
Difference in percentage at or above basic between all jurisdictions and Idaho, for All students [TOTAL], 2019



Gap Analysis, Reading Grade 8

all gaps are significant *different from 2019

NAEP Reading Grade 8, Female Male Gap



NOTE: The NAEP Reading scale ranges from 0 to 500. Observed differences are not necessarily statistically significant.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP).

Gap Analyses, Reading Grade 8

all gaps are significant *different from 2019

