

The National Assessment of Educational Progress (NAEP) and Student Achievement in North Carolina

The Gold Standard



NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS



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NAEP 2015

4th Grade
8th Grade
Trends



2015 NAEP Reading Grade 4

	Nort	h Car	olina	Natio	nal P	ublic
	2013	2015	Change	2013	2015	Change
Average Scale Score	222	226		221	221	

NC 4th graders increase reading scores
No increase for the nation



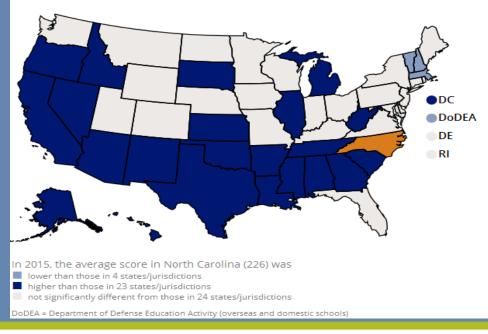
NAEP 2015 Reading Grade 4 NC (226) Higher Than National Public (221)

Lower than 4 states/jurisdictions (in light blue)

□ Higher than 23 states/jurisdictions (in dark blue)

Not significantly different from 24 states/jurisdictions (in white)

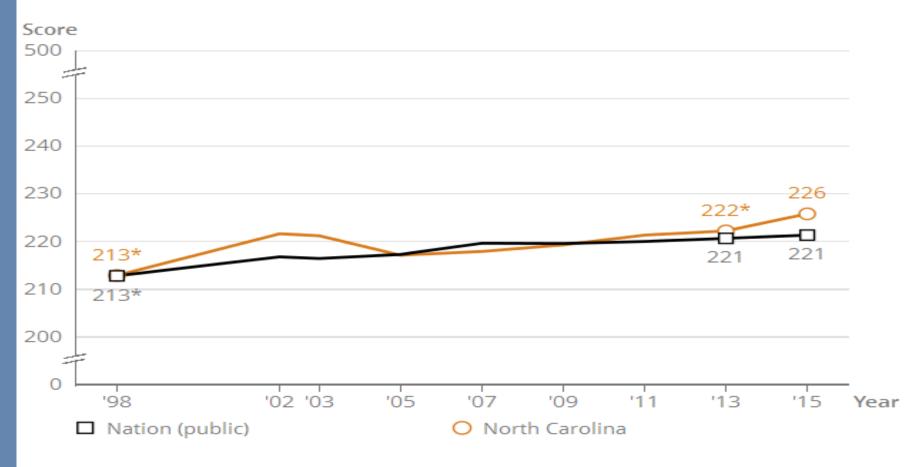
Compare the Average Score in 2015 to Other States/Jurisdictions





NAEP Reading Grade 4:1998–2015

Average Scores for State/Jurisdiction and Nation (public)



* Significantly different (p < .05) from 2015. Significance tests were performed using unrounded numbers.</p>



2015 NAEP Mathematics Grade 4

	Nort	h Car	olina	Natio	nal P	ublic
	2013	2015	Change	2013	2015	Change
Average Scale Score	245	244		241	240	

NC 4th graders maintain math score
Nation as a whole declined

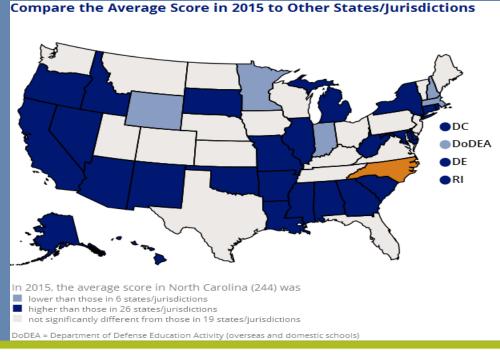


NAEP 2015 Mathematics Grade 4 NC (244) Higher Than National Public (240)

Lower than 6 states/jurisdictions (in light blue)

□ Higher than 26 states/jurisdictions (in dark blue)

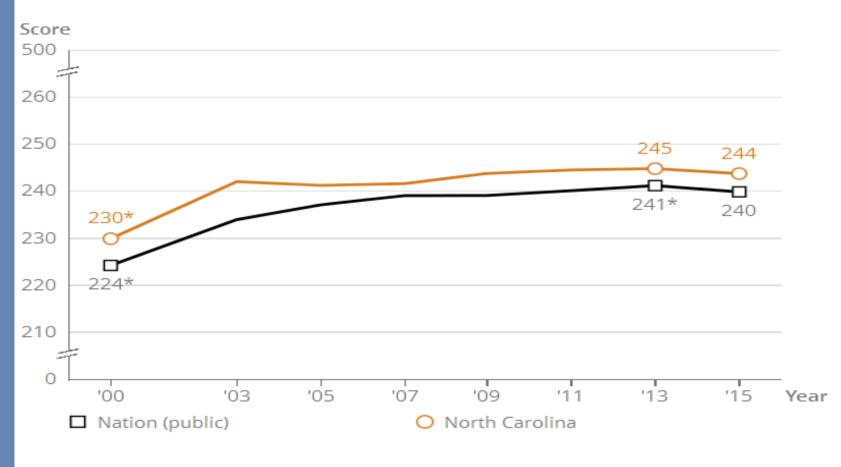
Not significantly different from 19 states/jurisdictions (in white)





NAEP Math Grade 4: 2000–2015

Average Scores for State/Jurisdiction and Nation (public)



* Significantly different (p < .05) from 2015. Significance tests were performed using unrounded numbers.</p>



2015 NAEP Reading Grade 8

	Nort	h Car	olina	Natio	nal P	ublic
	2013	2015	Change	2013	2015	Change
Average Scale Score	265	261		266	264	

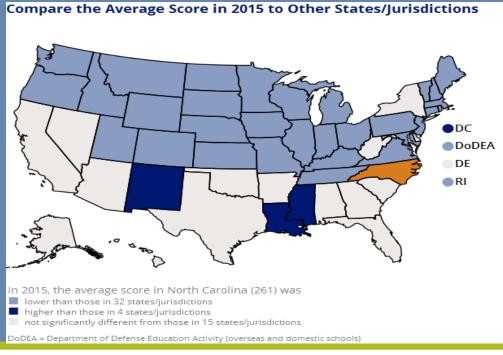
Unprecedented declines in the nationSimilar decline in NC



NAEP 2015 Reading Grade 8 NC (261) Lower than National Public (264)

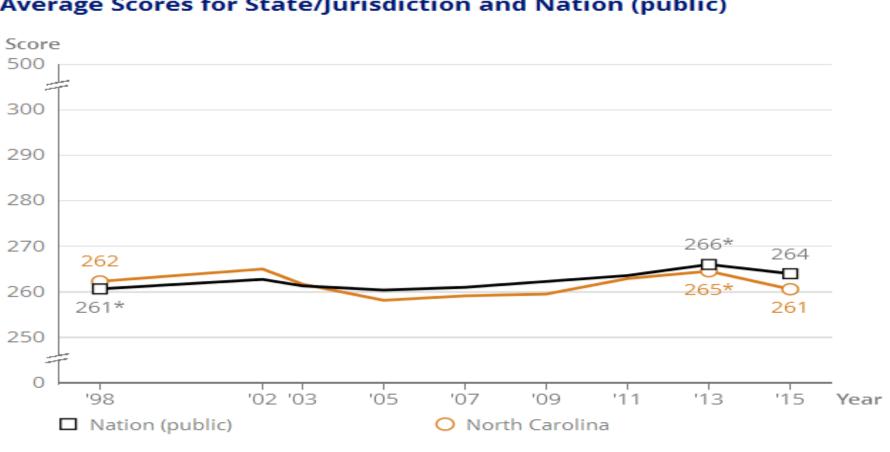
Lower than 32 states/jurisdictions (in light blue)

- □ Higher than 4 states/jurisdictions (in dark blue)
- □ Not significantly different from15 states/jurisdictions (in white)





NAEP Reading Grade 8:1998–2015



Average Scores for State/Jurisdiction and Nation (public)

* Significantly different (p < .05) from 2015. Significance tests were performed using unrounded numbers.</p>



2015 NAEP Mathematics Grade 8

	North Carolina		National Public		ublic	
	2013	2015	Change	2013	2015	Change
Average Scale Score	286	281		284	281	Ļ

Unprecedented declines in the nation
Similar decline in NC



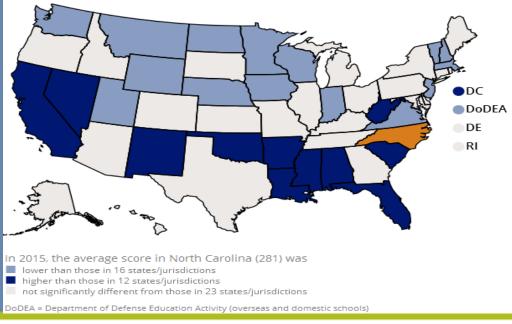
NAEP 2015 Mathematics Grade 8 NC (281) Not Significantly Different Than National Public (281)

Lower than 16 states/jurisdictions (in light blue)

Higher than 12 states/jurisdictions (in dark blue)

□ Not significantly different from 23 states/jurisdictions (in white)

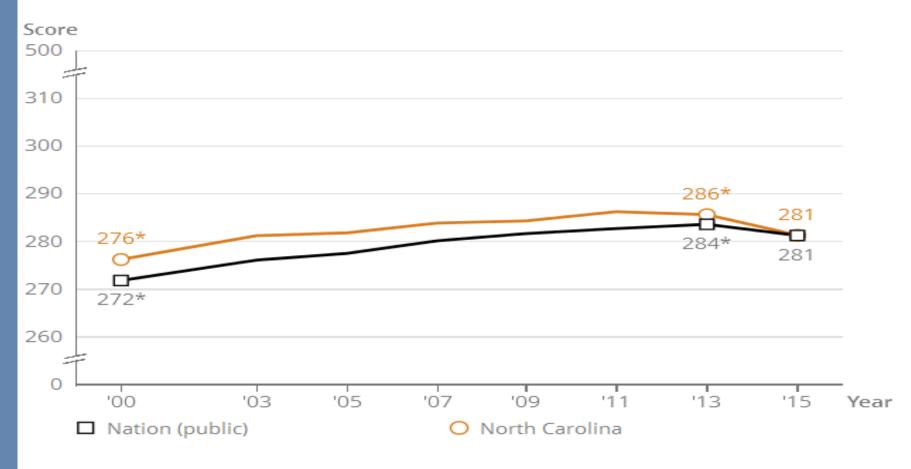
Compare the Average Score in 2015 to Other States/Jurisdictions





NAEP Math Grade 8: 2000–2015

Average Scores for State/Jurisdiction and Nation (public)



* Significantly different (p < .05) from 2015. Significance tests were performed using unrounded numbers.</p>



How Do NC End of Grade (EOG) Results Compare With NAEP?

- National Center for Educational Statistics (NCES) conducted 2013 NAEP mapping study to determine current rigor of state standards
- NCES study determined increased rigor in NC standards over the decades

Mapping State Proficiency Standards Onto NAEP Scales: Results From the 2013 NAEP Reading and Mathematics Assessments



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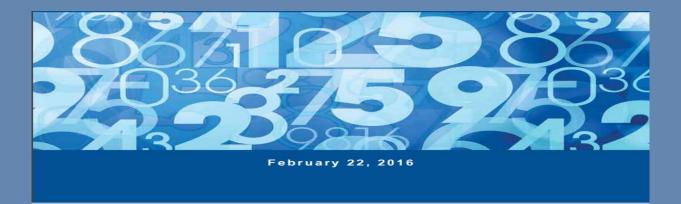
NAEP 2013 State Comparison Showed Increased Rigor In NC Proficiency Standards

Grade	Subject	Year	Rank	
Grade 4	Reading	2013	4	
Grade 4	Reading	2011	24	
Grade 4	Mathematics	2013	5	
Grade 4	Mathematics	2011	35	
Grade 8	Reading	2013	3	
Grade 8	Reading	2011	25	
Grade 8	Mathematics	2013	3	
Grade 8	Mathematics	2011	45	



AIR National Benchmarks: NC Levels Mapped to NAEP

Grade 4 ELA	Grade 4 Math	Grade 8 ELA	Grade 8 Math
Level 4-Basic	Level 4-Basic	Level 4-Basic	Level 4-Basic
Level 5-Advanced	Level 5-Proficient	Level 5-Proficient	Level 5-Proficient





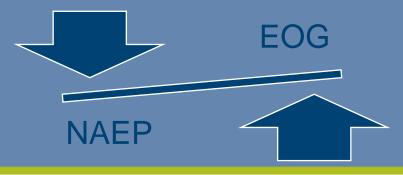
Achieve Conducted Rigor Studies In 2015 And 2016

- Achieve study compared state proficiency standards to NAEP proficiency standards
- Achieve rank ordered states



Achieve 2015 Report Methodology

- Achieve compared EOG data from 2013–14 and NAEP data from Spring 2013
- Achieve concluded positive correlation for states within 15 points of NAEP proficiency percentage
- Achieve outcome in 2015: North Carolina—Positive correlation with NAEP grade 8 mathematics





2015 Achieve Report

Percent NC EOG Grade 4 Reading (Level 3 and above)	Percent NAEP Grade 4 Reading (at or above proficient)	Difference
56	35	21
Percent NC EOG Grade 8 Mathematics (Level 3 and above)	Percent NAEP Grade 8 Mathematics (at or above proficient)	Difference
42	36	6



2015 States Recognized for Positive Correlation with NAEP

Reading 4th Grade

New York Wisconsin Utah Alabama Massachusetts Missouri Minnesota Tennessee

Mathematics 8th Grade New York **Massachusetts** Utah Michigan North Carolina Wisconsin Nevada Alabama Colorado Minnesota Wyoming Washington Kentucky West Virginia



Achieve 2016 Same Report: Different Methodology

- Achieve analysis concluded positive correlation for any state within 5 points of NAEP proficiency percentage rather than 15 points as used in 2015
- Also changed—In 2015 many other states began implementing new assessments more rigorous than their previous assessments



2016 Achieve Results

Percent NC EOG Grade 4 Reading (Level 3 and above)	Percent NAEP Grade 4 Reading (at or above proficient)	Difference
59	38	21
Percent NC EOG Grade 8 Mathematics (Level 3 and above)	Percent NAEP Grade 8 Mathematics (at or above proficient)	Difference
43	33	10



States Recognized for Positive Correlation with NAEP-2016

Arizona, Arkansas Colorado, Connecticut, Delaware, D.C., Georgia, Idaho, Illinois, Maine, Maryland, Massachusetts, Michigan, Mississippi, New Hampshire, New Mexico, New York, Rhode Island, South Dakota, South Carolina, Utah, Vermont, West Virginia, and Wisconsin



Achieve 2015 Result (If using CCR Proficiency)

Percent NC EOG Grade 4 Reading (Level 4 and above)	Percent NAEP Grade 4 Reading (at or above proficient)	Difference
45	35	10
Percent NC EOG Grade 8 Mathematics (Level 4 and above)	Percent NAEP Grade 8 Mathematics (at or above proficient)	Difference
35	36	1



Achieve 2016 Result (If using CCR Proficiency)

Percent NC EOG Grade 4 Reading (Level 4 and above)	Percent NAEP Grade 4 Reading (at or above proficient)	Difference
47	38	9
Percent NC EOG Grade 8 Mathematics (Level 4 and above)	Percent NAEP Grade 8 Mathematics (at or above proficient)	Difference
36	33	3



Discussion and Questions

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