The ACT
and College and Career Readiness

North Carolina House Committee on Education
Strategy and Practices Meeting
September 28, 2016

ACT Mission: Helping people achieve education and workplace success

- **Elementary–High School** educational assessment
- **Postsecondary Education** awareness, engagement, placement, and enrollment assessment
- **Workforce Development** assessments and solutions

ACT is the nation's leader in college and career readiness, providing research-based solutions grounded in more than 50 years of experience.

The ACT®

- Based on over 50 years of research
- Measures academic achievement and readiness in content areas of English, mathematics, reading, science w/ optional Writing.
- Only college admissions exam that measures Science
- Most widely accepted exam for college admission
- 20 States now administer the ACT as a measure of college and career readiness for 11graders

ACT Benchmarks and Standards—Data Driven

- **ACT National Curriculum Survey®** drives the test content
- **ACT College Readiness Benchmarks**—scores associated with postsecondary success in credit-bearing courses
- **ACT College and Career Readiness Standards**—empirically based on an analysis of the skills and knowledge students need to respond successfully to an assessment question

ACT National Curriculum Survey

Driving test content

- Determines what skills and knowledge postsecondary institutions expect
- Measures college-ready skills
- Collects information from diverse education audiences across the nation
- Provides consultation with content area experts

ACT College Readiness Benchmarks

- Based on ACT analysis of actual student performance in college

- The minimum ACT test scores required for students to have a high probability of success in corresponding first-year credit-bearing college courses
  - 50% chance of earning a B or better
  - 75% chance or better of earning a C or better

The ACT College Readiness Benchmarks

College Course	ACT Subject-Area Test	ACT Benchmark
English Composition	English	18
College Algebra	Mathematics	22
Social Sciences	Reading	22
Biology	Science	23

ACT College and Career Readiness Standards

- Direct link between what students have learned and what they are ready to learn next
- Help interpret what the scores earned on the ACT mean
- Identify the knowledge and skills students are likely to demonstrate at various score levels on each academic test
- Linked to college instruction

ACT College and Career Readiness Standards

Topics in the flow to...	Score Range 13–15	Score Range 16–19	Score Range 20–23	Score Range 24–27	Score Range 28–32	Score Range 33–36
Number and Quantity (N)	**N 201.** Perform one-operation computation with whole numbers and decimals **N 202.** Recognize equivalent fractions and fractions in lowest terms **N 203.** Locate positive rational numbers (expressed as whole numbers, fractions, decimals, and mixed numbers) on the number line « View changes »	**N 301.** Recognize one-digit factors of a number **N 302.** Identify a digit's place value **N 303.** Locate rational numbers on the number line *Note: A matrix as a representation of data is treated here as a basic table.* « View changes »	**N** kn ele co rou of ide an fac **N** po ex **N** the on an be **N** ab ter **N** dis co be wit x-c y-c **N** ma wh « View changes »		**01.** Apply number perties involving me factorization **02.** Apply number perties involving en/odd numbers factors/multiples **03.** Apply number perties involving itive/negative nbers **04.** Apply the ts that π is tional and that the are root of an ger is rational only at integer is a fect square **05.** Apply perties of rational onents **06.** Multiply two nplex numbers **07.** Use relations lving addition, traction, and lar multiplication ectors and of trices « View changes »	**N 701.** Analyze and draw conclusions based on number concepts **N 702.** Apply properties of rational numbers and the rational number system **N 703.** Apply properties of real numbers and the real number system, including properties of irrational numbers **N 704.** Apply properties of complex numbers and the complex number system **N 705.** Multiply matrices **N 706.** Apply properties of matrices and properties of matrices as a number system « View changes »

Score Range 16–19

N 301. Recognize one-digit factors of a number

N 302. Identify a digit's place value

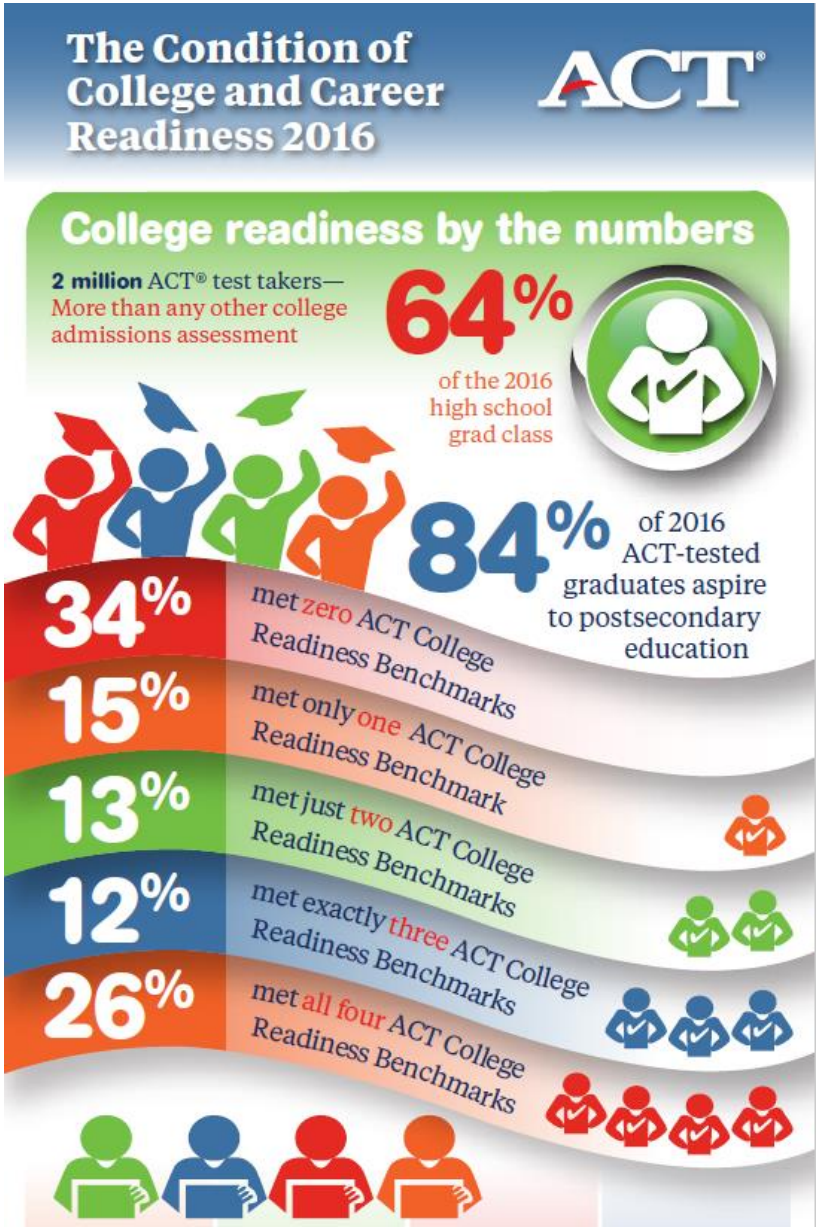
N 303. Locate rational numbers on the number line

Note: A matrix as a representation of data is treated here as a basic table.

ACT College and Career Readiness Standards—Ideas for Progress

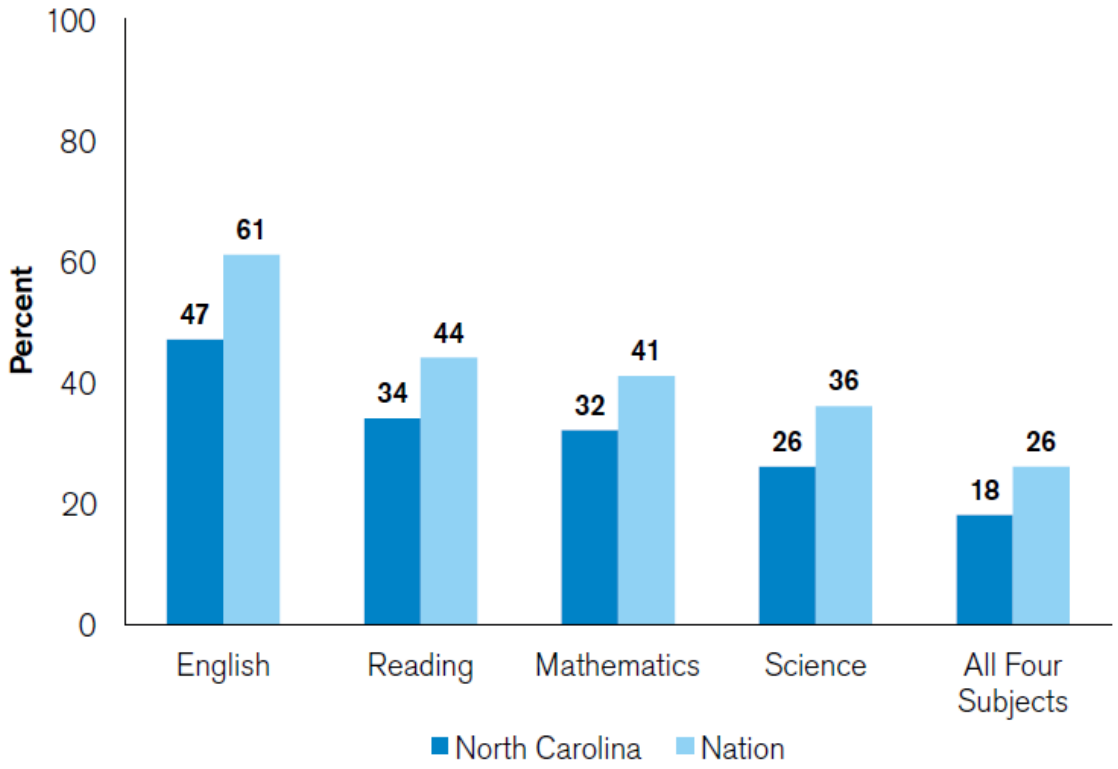
Score Range 16–19	
Number and Quantity	• apply elementary number concepts, including identifying patterns pictorially and numerically (e.g., triangular numbers, arithmetic and geometric sequences), ordering integers, and identifying factors of whole numbers • recognize, identify, and apply basic properties of real numbers (e.g., commutative, associative, identities) • describe the distance between zero and a point on the number line • measure and describe, with appropriate units, the distance between two points • arrange data into meaningful arrays • identify the dimensions of a matrix

How prepared are students?



North Carolina ACT tested 2016 Graduates

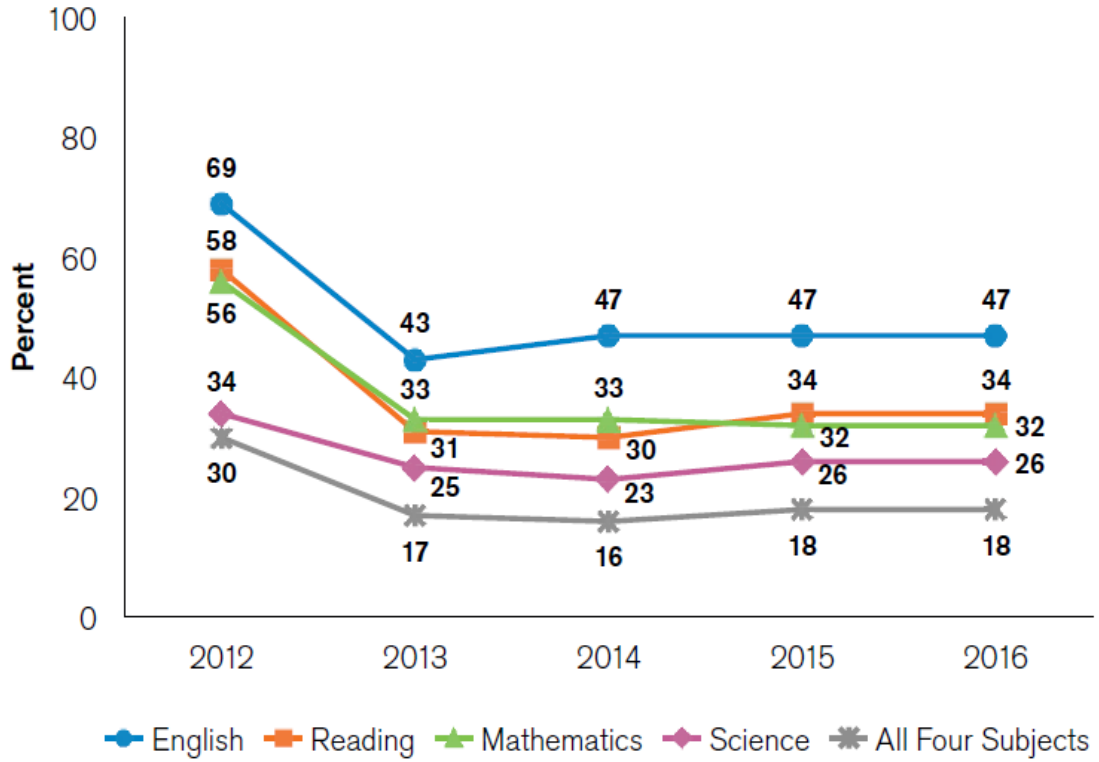
Percent of 2016 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks by Subject



Note: Percents in this report may not sum to 100% due to rounding.

North Carolina ACT tested 2016 Graduates

Percent of 2012–2016 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks*



* ACT College Readiness Benchmarks in reading and science were revised in 2013.

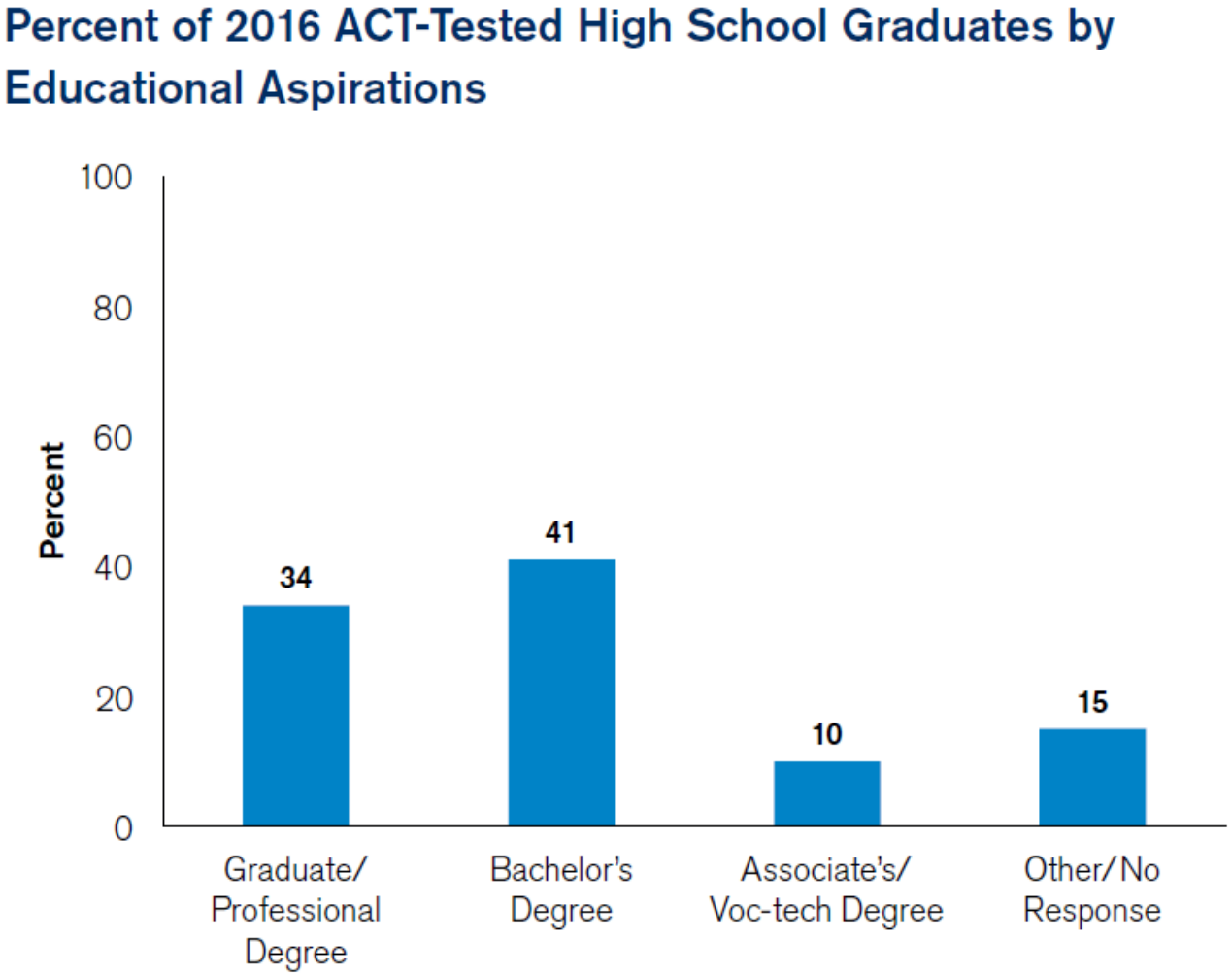
North Carolina ACT tested 2016 Graduates

The ACT

Student Condition Data Interest Trends: 2012–2016, State vs. Nation

Outcome	Cohort	2012	2013	2014	2015	2016
Percent Tested	North Carolina	20%	100%	100%	100%	100%
	Nation	52%	54%	57%	59%	64%
N Tested	North Carolina	18,817	95,782	97,443	100,557	103,902
	Nation	1,666,017	1,799,243	1,845,787	1,924,436	2,090,342
Average English Score	North Carolina	21	17.1	17.5	17.6	17.8
	Nation	20.5	20.2	20.3	20.4	20.1
Average Reading Score	North Carolina	22.2	18.8	19	19.2	19.5
	Nation	21.3	21.1	21.3	21.4	21.3
Average Mathematics Score	North Carolina	22.3	19.6	19.6	19.5	19.4
	Nation	21.1	20.9	20.9	20.8	20.6
Average Science Score	North Carolina	21.4	18.7	18.9	19	19.2
	Nation	20.9	20.7	20.8	20.9	20.8
Average Composite Score	North Carolina	21.9	18.7	18.9	19	19.1
	Nation	21.1	20.9	21	21	20.8

North Carolina 2016 ACT tested Graduates



Behaviors that Impact Access and Opportunity

- Among the ACT tested 2010 graduating class, 51% of White, 65% of Hispanic, and 66% of African American students took their first and only test as seniors. For the class of 2016, these figures as all below 2%

- Engaging students earlier increases postsecondary awareness, access, and opportunity, as well as allowing for intervention prior to and during the senior year.

Career Readiness of North Carolina ACT tested graduates

- In North Carolina, 55% of ACT tested graduates are considered making progress towards at least a gold ACT NCRC level.

- This compares to 68% nationally.