

**NCEA**  
NATIONAL CENTER  
FOR EDUCATIONAL  
ACHIEVEMENT

ARKANSAS  
**College and  
Career  
Readiness**

2010

**ACT**<sup>®</sup>

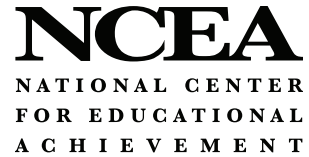




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The National Center for Educational Achievement (NCEA) is a department of ACT, Inc., a not-for-profit organization committed to helping people achieve education and workplace success. NCEA builds the capacity of educators and leaders to create educational systems of excellence for all students. We accomplish this by providing research-based solutions and expertise in higher performing schools, school improvement, and best practice research that lead to increased levels of college and career readiness.





# Arkansas College and Career Readiness 2010

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The following document presents the percentage of Arkansas students achieving the National Center for Educational Achievement's (NCEA) College and Career Readiness Targets and ACT's College Readiness Benchmarks.

The key to all students graduating college and career ready is to be able to identify whether or not students, starting in elementary school, are on the path to college and career readiness. NCEA provides educators with the opportunity to monitor students' progress on this path. NCEA's College and Career Readiness Targets, developed for the Arkansas Benchmark Exams, act as grade-level indicators of whether students are on pace to graduate from high school college and career ready.

NCEA's College and Career Readiness Targets combined with ACT's College Readiness Benchmarks on EXPLORE, PLAN, and the ACT test offer educators a system of indicators that can be used to monitor students' progress toward college and career readiness.

# NCEA CCR Targets for Arkansas

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## Grades 3–7 Arkansas Benchmark Exams

For literacy and mathematics, NCEA linked 2007-08 EXPLORE and 2006-07 Grade 7 Benchmark Exam scores, for the same students, to identify the College and Career Readiness (CCR) Targets on the Arkansas Benchmark Exams. For science, NCEA linked 2008-09 EXPLORE and 2007-08 Grade 7 Benchmark Exam scores, for the same students, to identify the CCR Target. NCEA established CCR Targets for Grades 3-6 by identifying comparable scores for those Benchmark Exams.

NCEA's Grades 3-7 CCR Targets are generally between the state's Proficient and Advanced standards in literacy, and close to the state's Advanced standard in mathematics and science.

**Grades 3–7 CCR Targets<sup>1</sup>**

	Literacy			Mathematics			Science		
	Advanced	CCR Target	Proficient	Advanced	CCR Target	Proficient	Advanced	CCR Target	Proficient
Grade 3	654	635	500	586	615	500	n/a	n/a	n/a
Grade 4	748	700	559	640	659	559	n/a	n/a	n/a
Grade 5	799	752	604	697	688	604	250	258	200
Grade 6	823	772	641	722	754	641	n/a	n/a	n/a
Grade 7	867	795	673	764	752	673	250	261	200

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<sup>1</sup> Based on the 2007 Arkansas Benchmark Exams

# ACT College Readiness Benchmarks for Arkansas

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## EXPLORE, PLAN, and the ACT

**ACT's College Readiness Benchmarks**

Test	EXPLORE Score	PLAN Score	The ACT Score
English	13	15	18
Mathematics	17	19	22
Reading	15	17	21
Science	20	21	24

The ACT College Readiness Benchmarks are scores on the ACT test that represent the level of achievement required for students to have a high probability of success in selected credit-bearing, first-year college courses.

ACT has also established College Readiness Benchmarks for EXPLORE and PLAN. These scores indicate whether students, based on their performance on EXPLORE (Grade 8) or PLAN (Grade 10), are on target to be ready for first-year college-level work when they graduate from high school.<sup>2</sup>

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<sup>2</sup> Excerpt from: ACT. (2008). *The Forgotten Middle: Ensuring that All Students Are on Target for College and Career Readiness before High School*. Iowa City, IA: ACT, Inc.

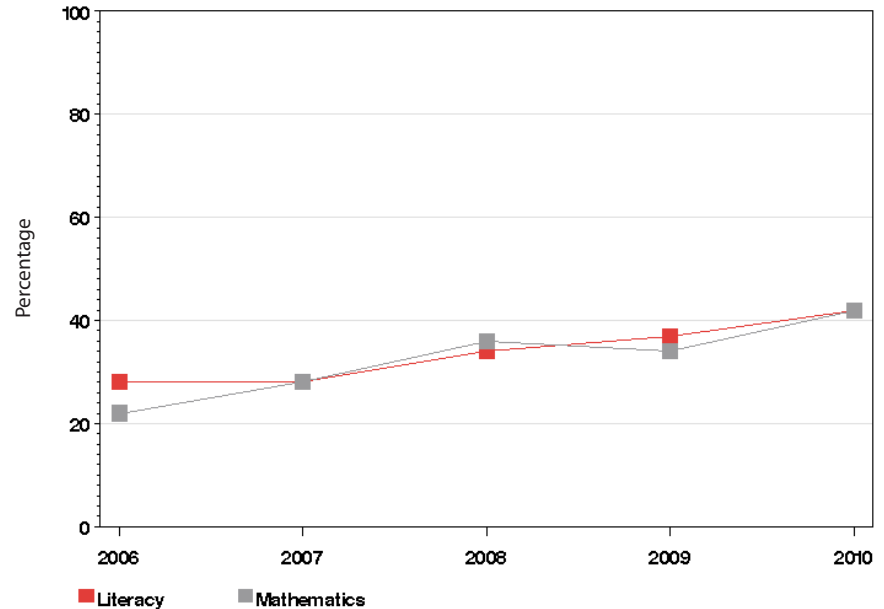
# Percentage of Students Meeting NCEA CCR Targets

## Grade 3 Arkansas Benchmark Exams

The percentage of students reaching the NCEA CCR Targets for literacy and mathematics has increased across the last five years. For literacy, the percentage of students achieving the CCR Target grew from 28 percent in 2006 to 42 percent in 2010.

For mathematics, the percentage of students reaching the CCR Target grew from 22 percent in 2006 to 42 percent in 2010.

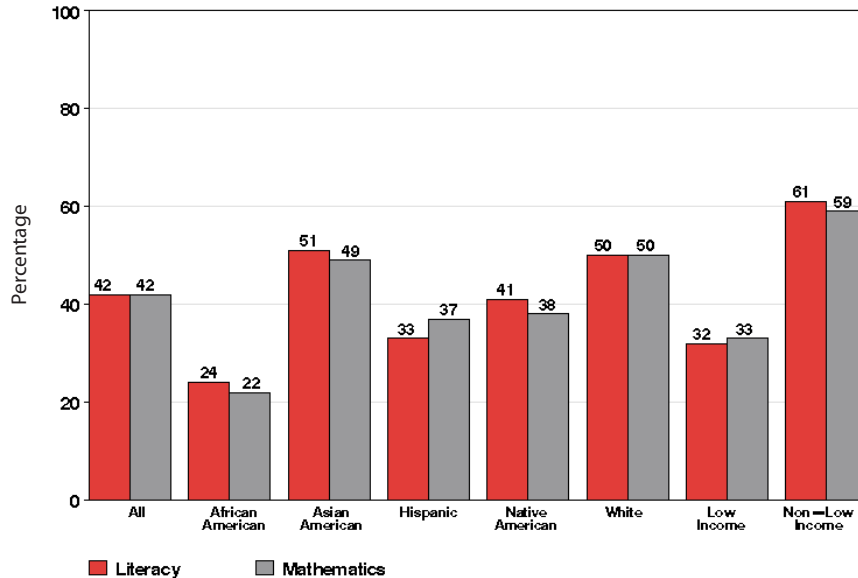
Percentage of Students Meeting NCEA CCR Targets  
in Grade 3, 2006–2010



# Percentage of Students Meeting NCEA CCR Targets

## Grade 3 Arkansas Benchmark Exams

Percentage of Students Meeting NCEA CCR Targets  
by Demographics in Grade 3, 2010



In 2010, 42 percent of all students reached the NCEA CCR Target in literacy for Grade 3. By subgroup, 61 percent of non-low-income students and 32 percent of low-income students achieved the Target for literacy.

For mathematics, 42 percent of students overall hit the Target. By subgroup, 59 percent of non-low-income students and 33 percent of low-income students met the Target for mathematics in Grade 3.

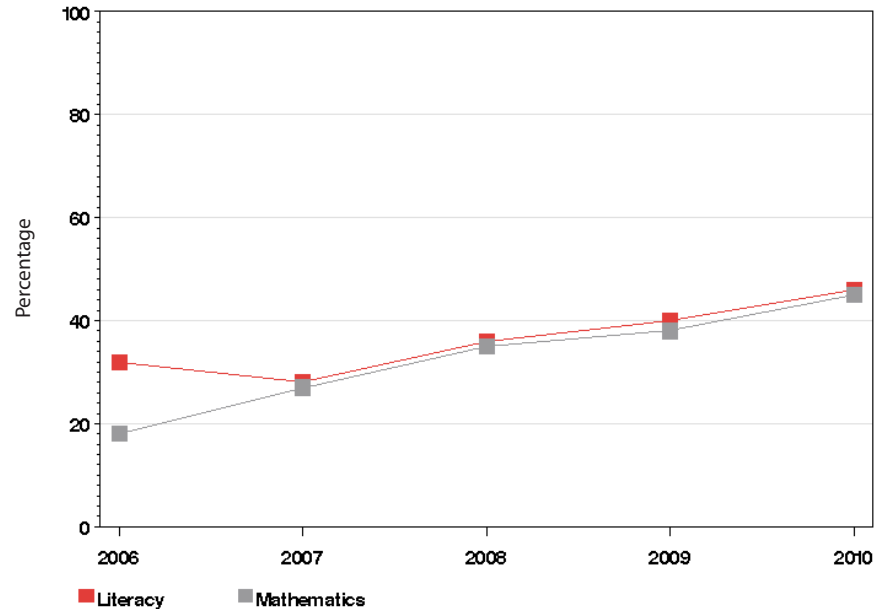
# Percentage of Students Meeting NCEA CCR Targets

## Grade 4 Arkansas Benchmark Exams

In Grade 4, the percentage of students achieving the CCR Target for literacy increased from 28 percent in 2007 to 46 percent in 2010.

The percentage of students achieving the Target for mathematics also increased across the last five years, from 18 percent in 2006 to 45 percent in 2010.

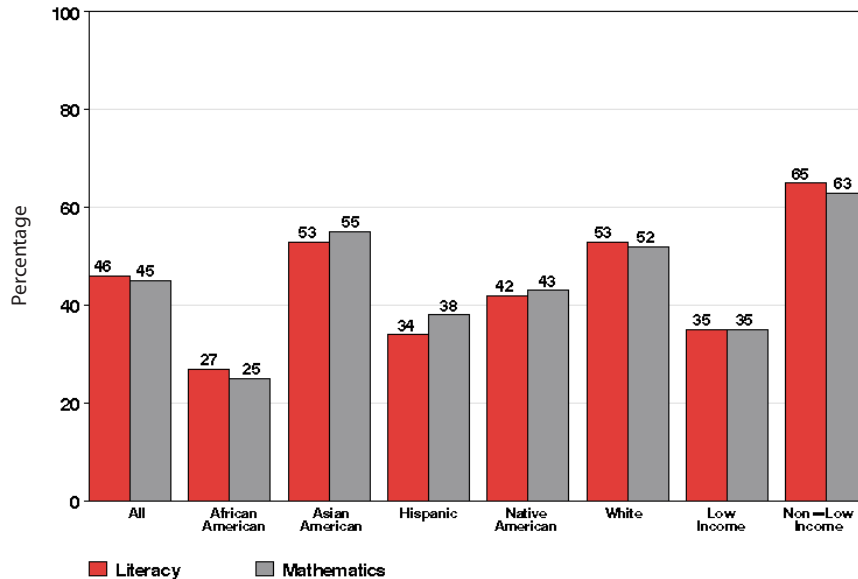
Percentage of Students Meeting NCEA CCR Targets  
in Grade 4, 2006–2010



# Percentage of Students Meeting NCEA CCR Targets

## Grade 4 Arkansas Benchmark Exams

Percentage of Students Meeting NCEA CCR Targets  
by Demographics in Grade 4, 2010



In 2010, 46 percent of all students achieved the CCR Target for literacy in Grade 4. By subgroup, 27 percent of African American, 53 percent of Asian American, 34 percent of Hispanic, 42 percent of Native American, 53 percent of White, 35 percent of low-income, and 65 percent of non-low-income students achieved this goal.

For mathematics, 35 percent of low-income students achieved the Target compared to 63 percent of non-low-income students.

# Percentage of Students Meeting NCEA CCR Targets

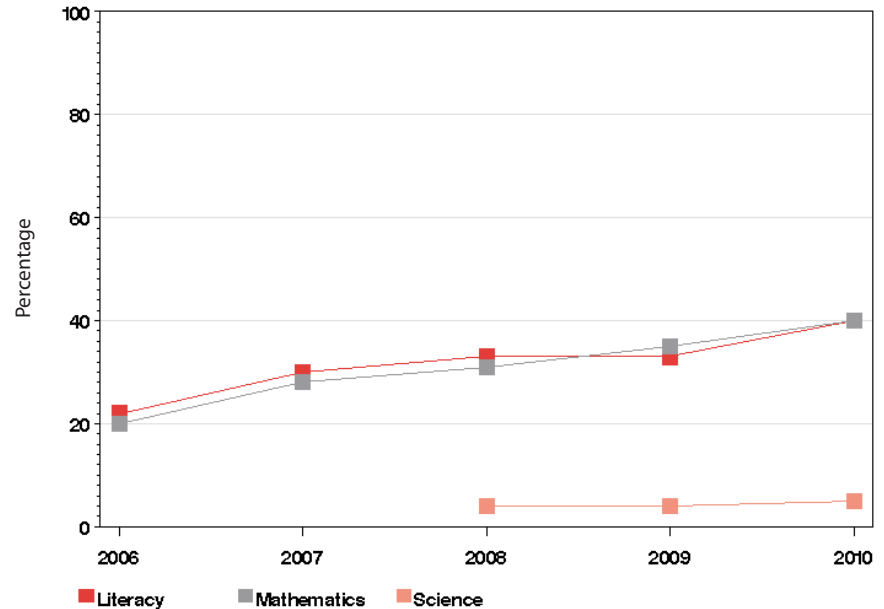
## Grade 5 Arkansas Benchmark Exams

For literacy, the percentage of students reaching the CCR Target in Grade 5 increased from 22 percent in 2006 to 40 percent in 2010.

For mathematics, the percentage of students reaching the CCR Target has increased yearly. In 2006, 20 percent of students achieved the CCR Target. By 2010, 40 percent of students achieved the CCR Target in mathematics.

There are only three years of data available for science. The percentage of students reaching the CCR Target for science was 4 percent for both 2008 and 2009, and 5 percent in 2010.

Percentage of Students Meeting NCEA CCR Targets  
in Grade 5, 2006–2010

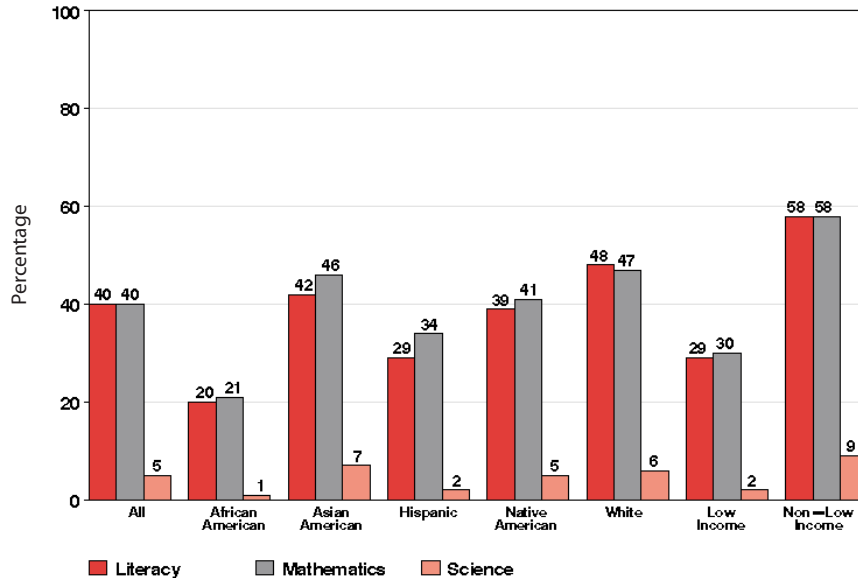




# Percentage of Students Meeting NCEA CCR Targets

## Grade 5 Arkansas Benchmark Exams

Percentage of Students Meeting NCEA CCR Targets  
by Demographics in Grade 5, 2010



In 2010, 40 percent of all students achieved the CCR Target for literacy in Grade 5. Twenty percent of African American, 42 percent of Asian American, 29 percent of Hispanic, 39 percent of Native American, 48 percent of White, 29 percent of Native American, 48 percent of White, 29 Percent of low-income, and 58 percent of non-low-income students achieved the Target.

For mathematics, 21 percent of African American, 46 percent of Asian American, 34 percent of Hispanic, 41 percent of Native American, and 47 percent of White students achieved the Target in 2010.

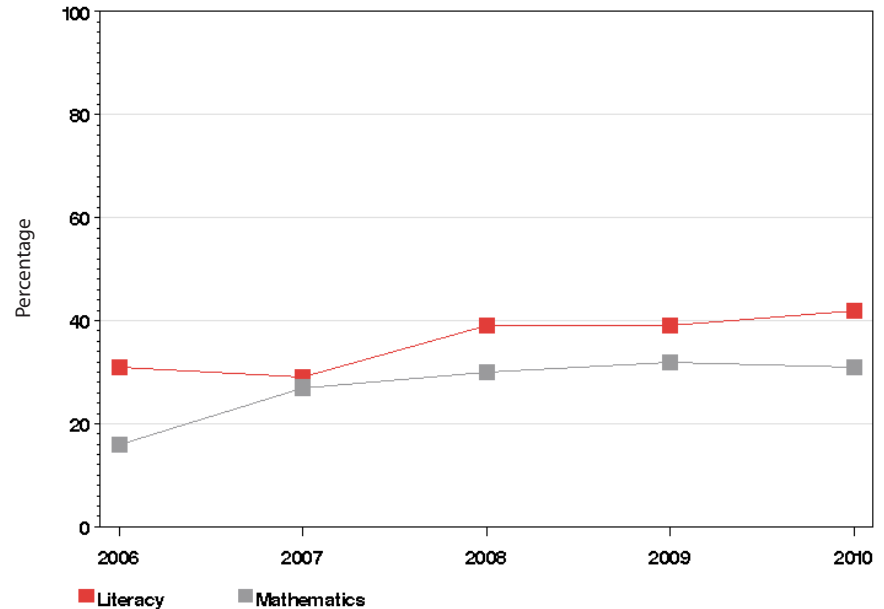
In science, 5 percent of students overall reached the Target for Grade 5. Very few students reach the Target even in the most advantaged groups.

# Percentage of Students Meeting NCEA CCR Targets

## Grade 6 Arkansas Benchmark Exams

Across the five years displayed here, a greater percentage of Grade 6 students met the CCR Target in literacy than met the mathematics CCR Target. In 2006, 31 percent of students achieved the literacy Target, while only 16 percent of students scored at or above the mathematics Target. The trend held through to 2010, when 42 percent of Grade 6 students achieved the literacy Target, while 31 percent hit the mathematics Target.

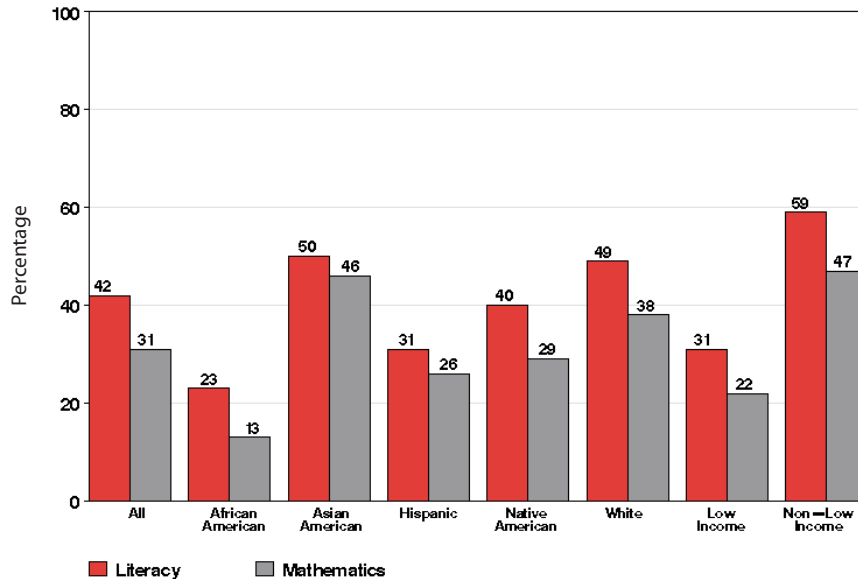
Percentage of Students Meeting NCEA CCR Targets  
in Grade 6, 2006–2010



# Percentage of Students Meeting NCEA CCR Targets

## Grade 6 Arkansas Benchmark Exams

Percentage of Students Meeting NCEA CCR Targets  
by Demographics in Grade 6, 2010



For every subgroup in Grade 6, there is a gap between the percentage of students reaching the literacy CCR Target and the percentage reaching the mathematics CCR Target.

For example, 23 percent of African American students achieved the literacy Target, while only 13 percent of the same students scored at or above the mathematics Target. For Hispanic students, the number drops from 31 percent achieving the literacy Target to 26 percent achieving the mathematics Target.

Forty-nine percent of White students scored at or above the literacy Target, while 38 percent of the students achieved the mathematics Target. For low-income students, 31 percent achieved the literacy Target, while 22 percent of the same population achieved the mathematics Target.

# Percentage of Students Meeting NCEA CCR Targets

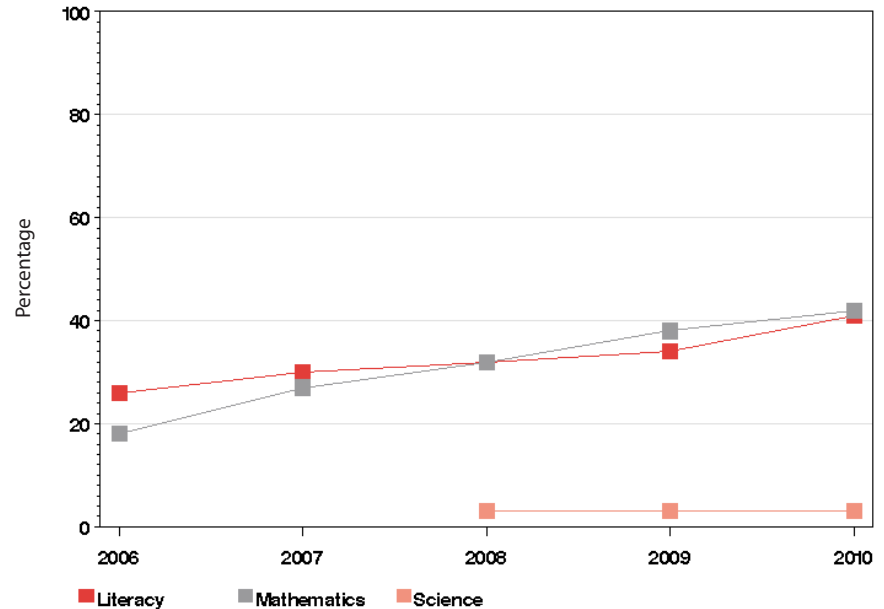
## Grade 7 Arkansas Benchmark Exams

The percentage of Grade 7 students achieving the literacy and mathematics CCR Targets increased over the last five years. In 2006, 26 percent of students reached the literacy Target. This number increased to 41 percent in 2010.

For mathematics, 18 percent of students reached the Target in 2006. By 2010, 42 percent of all Grade 7 students scored at or above the Target.

There are only three years of data available for the Grade 7 science exams. The percentage of students reaching the Target for science was 3 percent from 2008 to 2010.

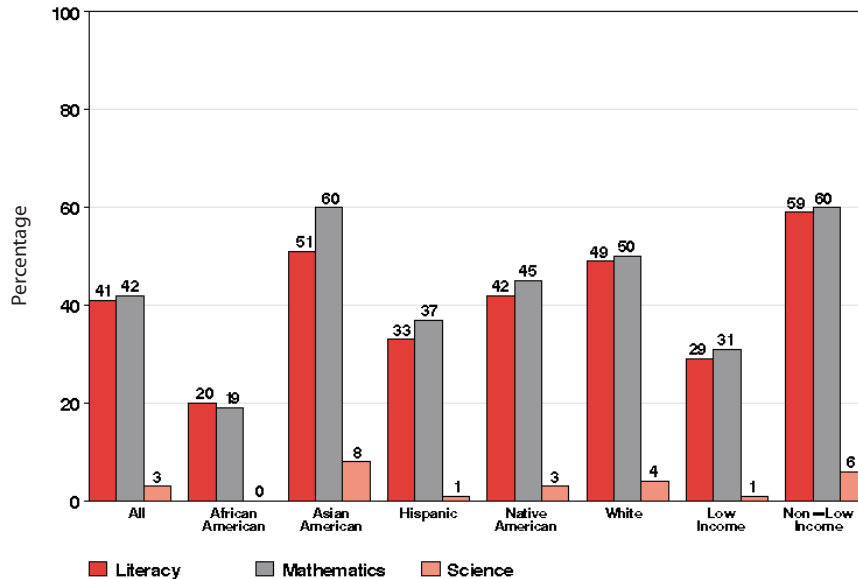
Percentage of Students Meeting NCEA CCR Targets  
in Grade 7, 2006–2010



# Percentage of Students Meeting NCEA CCR Targets

## Grade 7 Arkansas Benchmark Exams

Percentage of Students Meeting NCEA CCR Targets  
by Demographics in Grade 7, 2010



Forty-one percent of all grade 7 students achieved the CCR Target for literacy. By subgroup, 20 percent of African American, 51 percent of Asian American, 33 percent of Hispanic, 42 percent of Native American, 49 percent of White, 29 percent of low-income, and 59 percent of non-low-income students achieved the literacy Target.

For mathematics, there is a gap between the 60 percent of non-low-income students reaching the mathematics Target and the 31 non-low-income students achieving the same Target.

For science, 3 percent of students overall reached the Target. All subgroups had less than 10 percent meeting the Target.

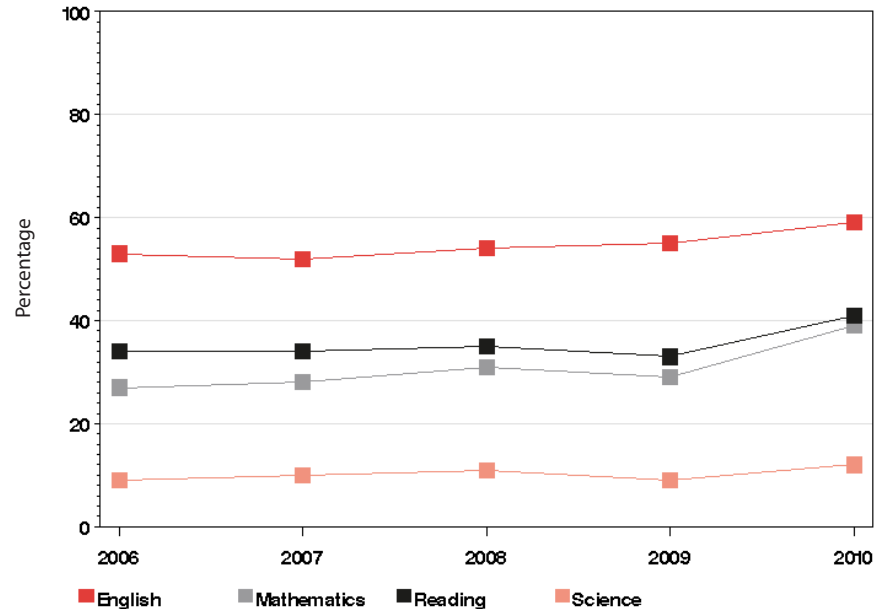
# Percentage of Students Meeting EXPLORE College Readiness Benchmarks

The percentage of students achieving EXPLORE College Readiness Benchmarks was consistent within subjects over the previous years. In 2010 there was a noticeable increase in the percentage of students meeting the college readiness benchmarks on EXPLORE.

Overall, the percentage of students meeting the EXPLORE College Readiness Benchmark in English, ranging from 54 percent in 2006 to 59 percent in 2010, is higher than the percentages of students meeting the Benchmarks in all other subjects.

For mathematics, 27 percent of students in 2006 and 39 percent in 2010 met the EXPLORE College Readiness Benchmark. For reading, 35 percent of students in 2006 and 41 percent in 2010 met the EXPLORE College Readiness Benchmark. For science, 10 percent of students in 2006 and 12 percent in 2010 met the EXPLORE College Readiness Benchmark.

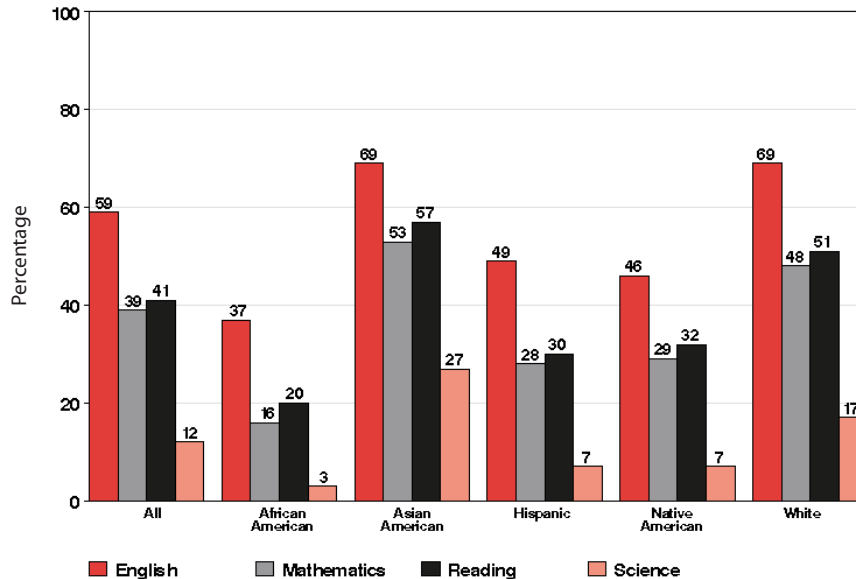
Percentage of Students Meeting  
EXPLORE College Readiness Benchmarks, 2006–2010<sup>3</sup>



<sup>3</sup> Figures calculated based on public school EXPLORE participation.

# Percentage of Students Meeting EXPLORE College Readiness Benchmarks

Percentage of Students Meeting  
EXPLORE College Readiness Benchmarks,  
by Demographics, 2010<sup>4</sup>



In 2010, 39 percent of students reached the EXPLORE College Readiness Benchmark in mathematics. By subgroup, 16 percent of African American, 53 percent of Asian American, 28 percent of Hispanic, 29 percent of Native American, and 48 percent of White students achieved this goal.

In 2010, 41 percent of students reached the EXPLORE College Readiness Benchmark in reading. By subgroup, 20 percent of African American, 57 percent of Asian American, 30 percent of Hispanic, 32 percent of Native American, and 51 percent of White students achieved this goal.

In 2010, 12 percent of students reached the EXPLORE College Readiness Benchmark in science. By subgroup, 3 percent of African American, 27 percent of Asian American, 7 percent of Hispanic, 7 percent of Native American, and 17 percent of White students achieved this goal.

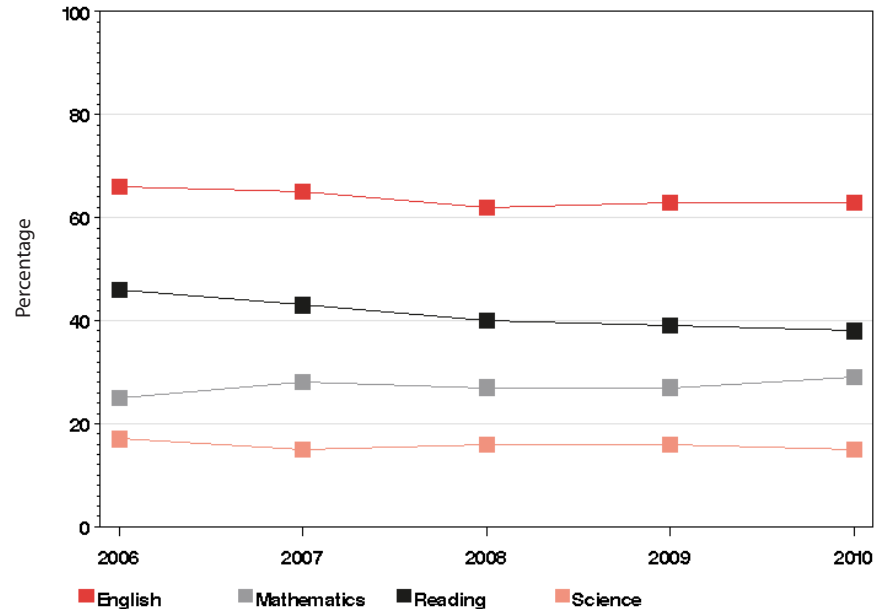
<sup>4</sup> Figures calculated based on public school EXPLORE participation.

# Percentage of Students Meeting PLAN College Readiness Benchmarks

Overall, the percentage of students meeting the PLAN College Readiness Benchmark in English, ranging from 66 percent in 2006 to 63 percent in 2010, is higher than the percentages of students meeting the Benchmarks in all other subjects.

For mathematics, 25 percent of students in 2006 and 29 percent in 2010 met the PLAN College Readiness Benchmark. For reading 46 percent of students in 2006 and 38 percent in 2010 met the PLAN College Readiness Benchmark. For science, 17 percent of students in 2006 and 15 in 2010 met the PLAN College Readiness Benchmark.

Percentage of Students Meeting  
PLAN College Readiness Benchmarks, 2006–2010<sup>5</sup>

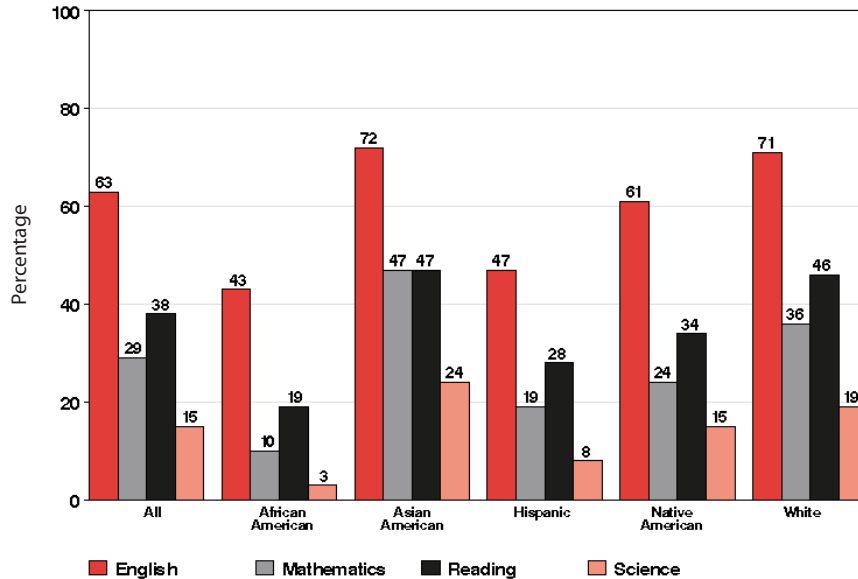


<sup>5</sup> Figures calculated based on public school PLAN participation.



# Percentage of Students Meeting PLAN College Readiness Benchmarks

Percentage of Students Meeting  
PLAN College Readiness Benchmarks,  
by Demographics, 2010<sup>6</sup>



In 2010, 29 percent of students reached the PLAN College Readiness Benchmark in mathematics while 38 percent of students reached the Benchmark in Literacy.

In 2010, 15 percent of students reached the PLAN College Readiness Benchmark in science.

For Asian American, equal percentages met the CCR Targets in mathematics and reading. This was the only subgroup for which the gap between reading and mathematics was not at least 9 percent.

<sup>6</sup> Figures calculated based on public school PLAN participation.

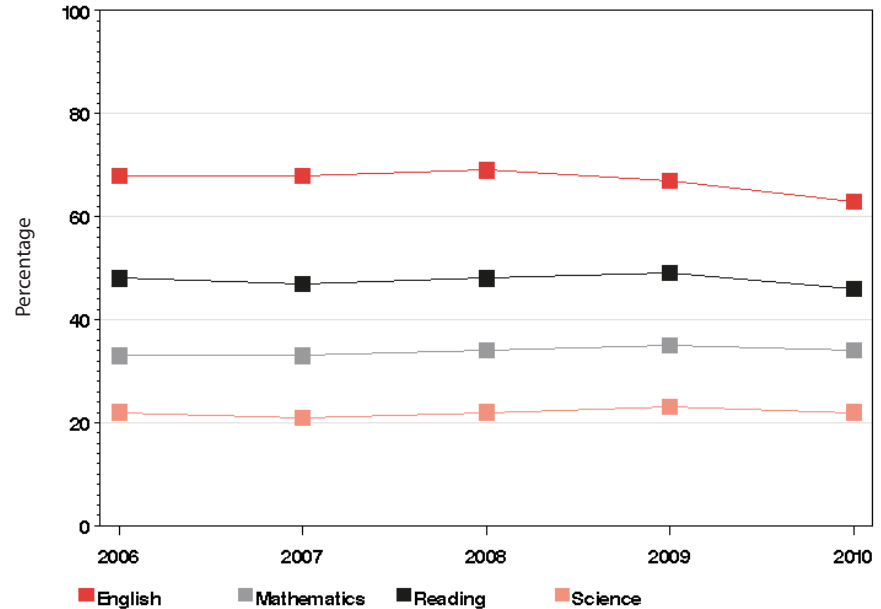
# Percentage of Students Meeting ACT College Readiness Benchmarks

From 2009 to 2010 there was a decline in the percentage of students meeting the ACT College Readiness Benchmarks in all subjects. There was also a larger number of students taking the ACT in 2010.

Overall, the percentage of students meeting the ACT College Readiness Benchmark in reading, ranging from 68 percent in 2006 to 63 percent in 2010, is higher than the percentages of students meeting the Benchmarks in other subjects.

For mathematics, 34 percent of students in 2006, and 34 percent in 2010 met the ACT College Readiness Benchmark. For reading 48 percent of students in 2006 and 46 percent in 2010 met the ACT College Readiness Benchmark. For science 22 percent of students in 2006 and 22 percent in 2010 met the ACT College Readiness Benchmark.

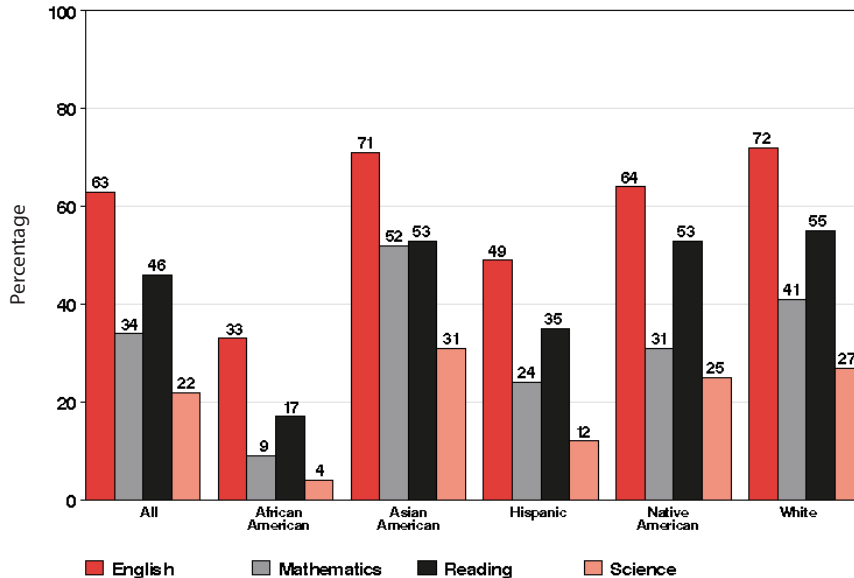
Percentage of Students Meeting the ACT College Readiness Benchmarks, 2006–2010<sup>7</sup>



<sup>7</sup> Figures calculated based on public school ACT participation.

# Percentage of Students Meeting ACT College Readiness Benchmarks

Percentage of Students Meeting the ACT College Readiness Benchmarks, by Demographics, 2010<sup>8</sup>



In 2010, 34 percent of students reached the ACT College Readiness Benchmark in mathematics. By subgroup, 9 percent of African American, 52 percent of Asian American, 24 percent of Hispanic, 31 percent of Native American, and 41 percent of White students achieved this goal.

In 2010, 46 percent of students reached the ACT College Readiness Benchmark in reading. By subgroup, 17 percent of African American, 53 percent of Asian American, 35 percent of Hispanic, 53 percent of Native American, and 55 percent of White students achieved this goal.

In 2010, 22 percent of students reached the ACT College Readiness Benchmark in science. By subgroup, 4 percent of African American, 31 percent of Asian American, 12 percent of Hispanic, 25 percent of Native American, and 27 percent of White students achieved this goal.

<sup>8</sup> Figures calculated based on public school ACT participation.

# NCEA College and Career Readiness Targets

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For literacy and mathematics, NCEA linked 2007-2008 EXPLORE and 2006-07 Grade 7 Benchmark Exam scores, for the same students, to identify the College and Career Readiness (CCR) Targets on the Arkansas Benchmark Exams. For science, NCEA linked 2008-09 EXPLORE and 2007-08 Grade 7 Benchmark Exam scores, for the same students to identify the CCR Target. Using these scores, NCEA identified the Grade 7 Benchmark literacy, mathematics, and science scores associated with a 50 percent chance that the student would score at or above the 8th-grade EXPLORE College Readiness Benchmarks.

NCEA identified scores on the Benchmark Exams for Grades 3-6 that were comparable to the Targets for the Grade 7 Benchmark Exam. NCEA based its calculation on the scores' locations in the statistical distribution relative to average scores in the appropriate grades.

Note: Content standards for state assessments may not cover the full range of College Readiness Standards measured by EXPLORE, PLAN, and the ACT. Therefore, performance trends observed on state assessments and EXPLORE, PLAN, and the ACT may not align.

# ACT College Readiness Benchmarks

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ACT has compiled an extensive database of course grade and test score data from a large number of first-year students and across a wide range of postsecondary institutions. These data provide an overall measure of what it takes to be successful in selected first-year college courses. Data from 98 institutions and over 90,000 students were used to establish the Benchmarks. The data were weighted so that they would be nationally representative of two and four-year postsecondary institutions nationwide.

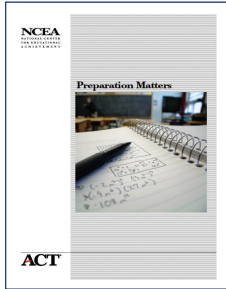
The College Readiness Benchmarks for EXPLORE and PLAN were developed using about 150,000 records of students who had taken EXPLORE, PLAN, and the ACT. First, ACT estimated the probabilities at each EXPLORE and PLAN test score point associated with meeting the appropriate Benchmark for the ACT. ACT then identified EXPLORE and PLAN scores on English, Reading, Mathematics, and Science that corresponded most closely to a 50 percent probability of success at meeting each of the four Benchmarks established for the ACT.<sup>9</sup>

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<sup>9</sup> Excerpt from: ACT. (2010). *What Are ACT's College Readiness Benchmarks?* Iowa City, IA: ACT, Inc.

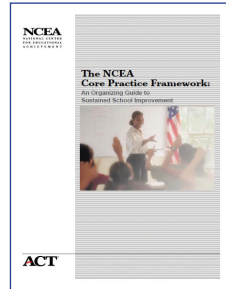
# Additional Resources

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## ***Preparation Matters***

This paper expands on NCEA's *Orange Juice or Orange Drink?* argument that putting students into courses with the right titles does not always lead to college readiness. Students may be placed in AP courses, but are they learning the content implied by the course title? And are students academically prepared for these courses? Course rigor and student academic preparation are at the forefront of education policy. This paper discusses the importance of rigorous courses and why preparing students in early education—not high school alone—is key to student success.



### ***The NCEA Core Practice Framework: An Organizing Guide to Sustained School Improvement***

What education must encompass has grown over the past several decades. The NCEA Core Practice Framework is designed to help educators and policymakers develop and support a coherent, comprehensive, and sustained approach to their improvement efforts. The Framework provides both *structure*—a way of categorizing those educational practices that distinguish higher performing schools from others—and *content*—a collection of information on the practices themselves. As such, it provides an organizing guide for all improvement decisions.

For more on NCEA's latest research and findings, please visit our online library at [www.nc4ea.org](http://www.nc4ea.org).



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