

Arkansas PARCC Results for Students in Grades 3 through 8 and High School



ARKANSAS DEPARTMENT OF EDUCATION

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EXECUTIVE SUMMARY

This report provides information about Arkansas's 2015 administration of the PARCC (Partnership for Assessment of Readiness for College and Careers) state assessment. Statewide assessments have been part of Arkansas's fabric for many years, but last year marked the first administration of a new assessment that measures student progress on new and more challenging learning standards designed to prepare students for their future opportunities in the next grade, post-secondary education, or their careers.

We, along with other states, worked collaboratively to design an assessment that measures student progress in reading, writing, and mathematics. As a member of a multi-state consortium, Arkansas worked in partnership with educators across the country to develop high-quality assessments to inform teaching and learning, identify struggling schools, guide professional development, and provide families and students with information on strengths and challenges.

The PARCC assessments summarize student performance through one of five performance levels. They include: *Exceeded Expectations*, *Met Expectations*, *Approached Expectations*, *Partially Met Expectations*, or *Did Not Yet Meet Expectations*. The knowledge and skills students need to demonstrate at each of the performance levels were based on recommendations of educator panels representing each of the participating states in the Consortium. Arkansas teachers were strong participants on these panels. All states in the Consortium have adopted these same performance standards.

The results offer Arkansas a new baseline about our students' progress on our state standards and challenging learning expectations. The information offers us a starting point and a benchmark that will help us mark our progress toward meeting our shared commitment to provide every student in our state an opportunity to leave our schools ready to enter college or career. As these scores represent a new starting point with new standards, these results are not directly comparable to prior achievement results that measured progress on the prior standards.

To be clear, academic readiness in these areas does not provide a complete picture about our students. School communities must develop students' academic knowledge and skills in reading and mathematics but also in the arts and sciences. In addition, a comprehensive program develops students' abilities to persist through challenging assignments, work collaboratively, innovate, and problem solve. This is the work our school communities actively engage in every day to help Arkansas students grow.

Assessments serve only one purpose – to give us the information necessary to continuously improve teaching, and the PARCC results tell us that we have much work ahead of us. Although challenging, these results are not an evaluation of the collective efforts of teachers and leaders, nor do they signal what is possible for our students to accomplish. Arkansas and states across the country are working together to transition to advanced learning expectations. These expectations align with the demands of a global economy and respond to the feedback received from businesses and colleges about what students need to know in reading, writing, and mathematics. Today we offer a check on Arkansas's efforts to ensure that all students have the opportunity to learn. We are proud of the foundational work that has been accomplished and invite you to stay committed to our ongoing progress. The

PARCC consortium plans to release a state comparison report that will be released in Arkansas as soon as it is made available. Much of the narrative in the following pages was taken with permission from a report of PARCC data from Rhode Island.

STATE-LEVEL RESULTS

Overall Achievement

Results of the spring 2015 PARCC assessments revealed that, at the state level, approximately 35% of students across grades 3 through 10 met or exceeded expectations in English Language Arts/Literacy (ELA) while approximately 23% of students met or exceeded expectations in mathematics. There are grade-specific PARCC mathematics assessments in grades 3 through 8 and course-based mathematics assessments for Algebra I and Geometry and Algebra 2. Grade 11 ELA and Algebra 2 were optional for districts to administer; therefore, the percentages shown for these assessments are not reflective of the entire state population. It also is important to note that there were a number of middle-school students who were enrolled in Algebra I or Geometry and took those course-aligned assessments instead of the grade-specific mathematics assessments. Consequently, the eighth grade math results do not reflect the overall performance of Arkansas's eighth graders because approximately 17% of them took the PARCC Algebra I assessment rather than the PARCC Grade 8 Mathematics assessment.

INTRODUCTION

The Arkansas State Board of Education adopted the Common Core State Standards (CCSS) in English Language Arts/Literacy and mathematics in 2010. These learning standards provide a roadmap of what knowledge and skills students need to learn at each grade level. The adoption of these standards marked the beginning of a statewide curriculum and instruction transition across our schools and districts. During that same period, Arkansas joined a multi-state consortium called the Partnership for the Assessment of Readiness for College and Careers (PARCC) to build assessments that measure the CCSS. The assessments designed under this partnership form the foundation of Arkansas's state assessment program that is both state and federally required.

State assessments in mathematics and English Language Arts/Literacy provide information that helps us understand how Arkansas students are progressing on agreed upon learning standards as expressed by the Common Core State Standards (CCSS). The results provide one among many indicators about the health and vibrancy of our schools and their progress toward ensuring that all students are learning important skills and knowledge that will prepare them to be productive citizens, successful post-secondary learners, and employees in well-paying careers. However, the PARCC data are the only common measure in literacy and numeracy for all students in grades 3 through high school. As such, they provide an objective look into students' academic progress.

PARCC testing marked the first administration of these assessments and provides a baseline about our progress toward a full transition to these new learning standards. The information does not define a district, school, or, most importantly, a student. Rather, the information offers an objective check on student learning and should be placed within a set of other information that is known about his or her academic progress. Schools and districts have reviewed the data against the work that has been done to align curriculum and instructional practices to the CCSS. Decisions about curriculum adjustments, professional development, and learning opportunities will be informed, in part, by these data.

While not easy, the transition marks a necessary reset that will give families a genuine measure of student development.

Arkansas's results, similar to the other participating states, are not yet where we want them to be. Our shared goal must be to have the results reflect the collective promise to our students that they will leave high school prepared to be successful in college and career. However, last year offers a frank measure of our starting point against rigorous learning expectations. We are ready for the

challenge and invite you to review this report with a hopeful lens about the work ahead of us.

PARCC STATEWIDE ARKANSAS RESULTS

In the 2014-15 school year, 279,306 students in English Language Arts/Literacy and 271,150 students in mathematics received a valid score in the first administration of the PARCC assessments. As a result of tremendous efforts by schools across the state, approximately 91.5% of students took the assessment on computer platforms. The integration of technology and assessment is a reflection of our schools' use of technology to enhance instructional practices for students in classrooms. Further, the use of technology responds to the demands of post-secondary institutions and business that students are confident users of technology. While most schools and students successfully completed the assessments on computer, we know that some schools and students experienced some challenges during this first year of computer-based testing.

The first year's results in ELA/Literacy and Mathematics are presented in the tables below by the state's overall performance and by grade level. PARCC defines student performance across five levels. Levels four and five suggest that students are on track for their grade level.

- **Level 1:** Did not yet meet expectations
- **Level 2:** Partially met expectations
- **Level 3:** Approached expectations
- **Level 4:** Met expectations
- **Level 5:** Exceeded expectations

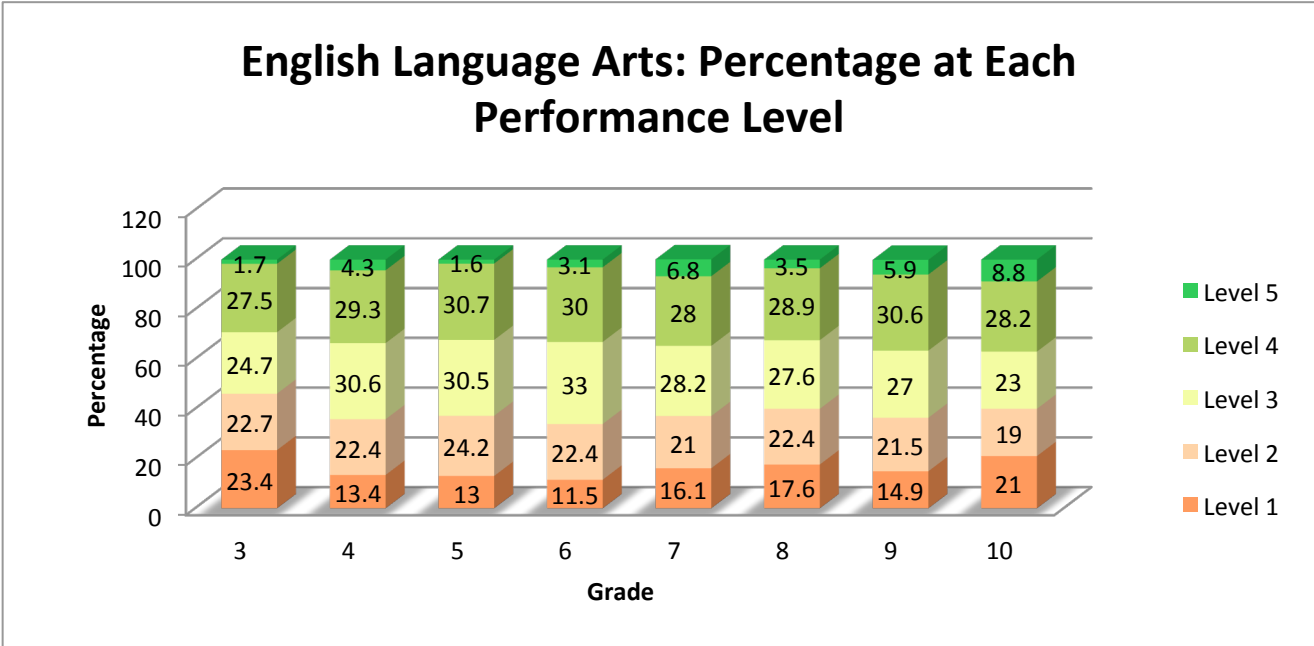
STATE-LEVEL ENGLISH LANGUAGE ARTS/LITERACY RESULTS

Table 1. PARCC Statewide ELA/Literacy Results by Grade and Performance Level

Grade	Number of Enrolled Students	% Level 1	% Level 2	% Level 3	% Level 4	% Level 5	Total % Levels 4 + 5
3	34,871	23.4	22.7	24.7	27.5	1.7	29.1
4	34,946	13.4	22.4	30.6	29.3	4.3	33.6
5	35,051	13.0	24.2	30.5	30.7	1.6	32.3
6	34,850	11.5	22.4	33.0	30.0	3.1	33.1
7	35,432	16.1	21.0	28.2	28.0	6.8	34.7
8	35,344	17.6	22.4	27.6	28.9	3.5	32.4
9	35,290	14.9	21.5	27.0	30.6	5.9	36.5
10	33,522	21.0	19.0	23.0	28.2	8.8	37.0
11	12,765	12.7	18.1	25.9	33.6	9.7	43.3

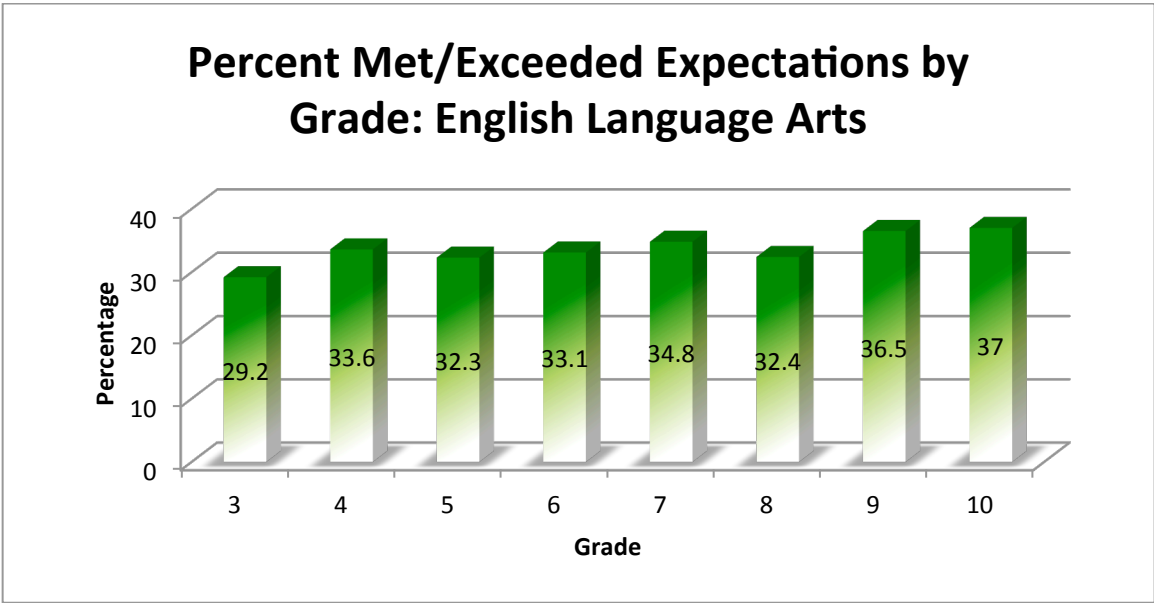
NOTE: Due to rounding, the five performance levels for each grade may not add up to 100%.

Figure 1. PARCC Arkansas ELA/Literacy Results: Performance-Levels by Grade.



NOTE: Due to rounding, the five performance levels for each grade may not add up to 100%.

Figure 2. PARCC Statewide ELA/Literacy Results: Students who Met (Level 4) or Exceeded (Level 5) Expectations



PARCC ENGLISH LANGUAGE ARTS/LITERACY SCALE SCORES

PARCC results are reported in a number of ways so that districts, schools, teachers, and parents can see how students performed on each assessment. In addition to capturing the percentage of students at each performance level, performance is described as a scale score. The PARCC assessments have scale scores that range from 650 to 850 for overall performance in mathematics and English Language Arts/Literacy. Scale scores are useful to capture changes in performance over time.

Table 2. PARCC Statewide ELA/Literacy Scale Scores

As indicated in Table 2, most students at all grade levels Approached Expectations in English Language Arts/Literacy.

2015 PARCC Achievement Results							
English Language Arts by Gender							
Test / Grade	# of Valid Scores	Performance Level					% Met or Exceeded Expectations
		% Did Not Yet Meet Expectations	% Partially Meet Expectations	% Approached Expectations	% Met Expectations	% Exceeded Expectations	
ELA Grade 03							
Male	17,824	27.1%	23.0%	24.2%	24.5%	1.2%	25.6%
Female	17,047	19.6%	22.4%	25.3%	30.6%	2.2%	32.8%
ELA Grade 04							
Male	17,882	16.4%	24.2%	30.8%	25.9%	2.7%	28.6%
Female	17,064	10.3%	20.5%	30.4%	32.9%	5.8%	38.7%
ELA Grade 05							
Male	17,718	16.0%	26.5%	29.6%	26.9%	0.9%	27.9%
Female	17,333	10.0%	21.7%	31.4%	34.5%	2.3%	36.9%
ELA Grade 06							

Note: RV = Restricted Value. Values are restricted when one or more categories has fewer than 10 students in order to protect student privacy.

2015 PARCC Achievement Results

English Language Arts by Free/Reduced Lunch Price

Test / Grade	# of Valid Scores	Performance Level					% Met or Exceeded Expectations
		% Did Not Yet Meet Expectations	% Partially Meet Expectations	% Approached Expectations	% Met Expectations	% Exceeded Expectations	
ELA Grade 03							
Not Free/Reduced Lunch Price	11,645	11.0%	16.6%	25.9%	43.0%	3.5%	46.5%
Free/Reduced Lunch Price	23,226	29.7%	25.8%	24.1%	19.7%	0.7%	20.4%
ELA Grade 04							
Not Free/Reduced Lunch Price	11,979	5.5%	13.2%	29.5%	43.0%	8.9%	51.8%
Free/Reduced Lunch Price	22,967	17.6%	27.2%	31.2%	22.2%	1.8%	24.0%
ELA Grade 05							
Not Free/Reduced Lunch Price	12,374	5.2%	14.8%	30.0%	46.6%	3.5%	50.0%
Free/Reduced Lunch Price	22,677	17.3%	29.3%	30.7%	22.0%	0.6%	22.7%
ELA Grade 06							

Not Free/Reduced Lunch Price	12,770	5.1%	13.4%	31.1%	44.4%	6.1%	50.5%
Free/Reduced Lunch Price	22,080	15.2%	27.6%	34.1%	21.8%	1.4%	23.1%
ELA Grade 07							
Not Free/Reduced Lunch Price	13,304	7.1%	13.5%	27.0%	39.5%	13.0%	52.5%
Free/Reduced Lunch Price	22,128	21.5%	25.5%	28.9%	21.0%	3.1%	24.1%
ELA Grade 08							
Not Free/Reduced Lunch Price	13,790	8.8%	15.5%	27.4%	41.7%	6.7%	48.4%
Free/Reduced Lunch Price	21,554	23.3%	26.8%	27.7%	20.8%	1.5%	22.2%
ELA Grade 09							
Not Free/Reduced Lunch Price	14,338	6.9%	14.1%	25.7%	42.4%	10.9%	53.3%
Free/Reduced Lunch Price	20,952	20.4%	26.6%	28.0%	22.5%	2.5%	25.0%
ELA Grade 10							
Not Free/Reduced Lunch Price	14,805	11.4%	14.6%	22.7%	36.6%	14.6%	51.2%
Free/Reduced Lunch Price	18,717	28.6%	22.4%	23.2%	21.5%	4.3%	25.8%
Note: RV = Restricted Value. Values are restricted when one or more categories has fewer than 10 students in order to protect student privacy.							

2015 PARCC Achievement Results							
English Language Arts by Race/Ethnicity							
Test / Grade	# of Valid Scores	Performance Level					% Met or Exceeded Expectations
		% Did Not Yet Meet Expectations	% Partially Meet Expectations	% Approached Expectations	% Met Expectations	% Exceeded Expectations	
ELA Grade 03							
Hispanic	4,459	29.5%	26.2%	24.5%	18.8%	0.9%	19.8%
Native American or Alaska Native	198	22.7%	26.8%	25.3%	RV	RV	25.3%
Asian	472	8.9%	14.8%	23.9%	44.7%	7.6%	52.3%
African American	6,958	35.7%	27.5%	20.9%	15.3%	0.5%	15.9%

Native Hawaiian or Pacific Islander	252	53.2%	25.0%	14.3%	RV	RV	7.5%
White	21,691	18.3%	20.6%	26.0%	33.0%	2.1%	35.1%
Two or more races	809	22.1%	21.6%	27.3%	27.7%	1.2%	28.9%
ELA Grade 04							
Hispanic	4,234	16.8%	26.5%	31.2%	23.6%	1.9%	25.5%
Native American or Alaska Native	214	13.1%	21.5%	31.8%	RV	RV	33.6%
Asian	555	6.1%	14.1%	27.4%	40.7%	11.7%	52.4%
African American	7,024	22.3%	31.1%	28.7%	16.7%	1.3%	18.0%
Native Hawaiian or Pacific Islander	234	31.2%	35.5%	22.2%	RV	RV	11.1%
White	21,902	10.0%	19.0%	31.2%	34.3%	5.5%	39.8%
Two or more races	760	11.2%	20.7%	31.3%	31.8%	5.0%	36.8%
ELA Grade 05							
Hispanic	4,199	14.8%	27.9%	32.3%	24.2%	0.8%	25.0%
Native American or Alaska Native	223	11.2%	26.0%	30.5%	RV	RV	32.3%
Asian	544	6.6%	11.6%	24.4%	49.4%	7.9%	57.4%
African American	6,948	22.5%	32.2%	27.9%	17.1%	0.3%	17.4%
Native Hawaiian or Pacific Islander	220	26.8%	37.3%	23.6%	RV	RV	12.3%
White	22,108	9.8%	21.3%	31.1%	35.8%	2.0%	37.8%
Two or more races	785	11.7%	20.0%	31.8%	34.0%	2.4%	36.4%
ELA Grade 06							
Hispanic	4,102	12.2%	24.5%	36.2%	25.4%	1.7%	27.1%
Native American or Alaska Native	227	10.1%	23.3%	35.7%	RV	RV	30.8%
Asian	522	3.8%	12.8%	24.9%	45.8%	12.6%	58.4%
African American	6,991	20.5%	31.9%	31.4%	15.5%	0.6%	16.2%
Native Hawaiian or Pacific Islander	228	27.6%	31.6%	26.3%	RV	RV	14.5%
White	22,075	8.6%	19.1%	33.0%	35.3%	3.9%	39.3%
Two or more races	690	9.1%	22.3%	35.2%	29.7%	3.6%	33.3%
ELA Grade 07							
Hispanic	4,057	17.6%	22.6%	30.3%	25.7%	3.9%	29.6%
Native American or Alaska Native	230	14.8%	20.9%	28.3%	29.6%	6.5%	36.1%
Asian	473	9.5%	9.9%	22.4%	35.1%	23.0%	58.1%
African American	7,205	28.5%	28.1%	25.3%	16.3%	1.7%	18.1%
Native Hawaiian or Pacific Islander	214	38.8%	20.6%	27.6%	RV	RV	13.1%

Note: RV = Restricted Value. Values are restricted when one or more categories has fewer than 10 students in order to protect student privacy.

STATE-LEVEL MATHEMATICS RESULTS

Table 3. PARCC Statewide Mathematics Results by Assessment and Performance Level

Assessment	Number of Enrolled Students	% Level 1	% Level 2	% Level 3	% Level 4	% Level 5	Total % Levels 4 + 5
3	34,931	13.7	24.0	30.9	28.5	2.9	31.4
4	34,987	14.5	30.5	30.7	23.3	1.0	24.2
5	35,103	14.1	31.5	30.8	22.1	1.5	23.6
6	34,874	12.9	29.3	33.0	23.4	1.4	24.8
7	35,247	10.6	31.5	36.3	20.7	0.9	24.8
8 ¹	28,980	25.1	30.6	27.2	16.8	0.3	17.1
Algebra I	34,428	10.6	29.4	31.7	27.8	0.6	28.4
Geometry	32,600	7.4	35.4	36.3	19.4	1.5	21.0
Algebra 2	10,611	28.9	32.4	23.9	14.6	0.2	14.9

NOTE: Due to rounding, the five performance levels for each grade/assessment may not add up to 100%.

PARCC MATHEMATICS SCALE SCORES

The Grade 8 Math results reflect only 83% of the students who took a PARCC math assessment. The balance of students in the eighth grade took a PARCC Algebra I or Geometry assessment.

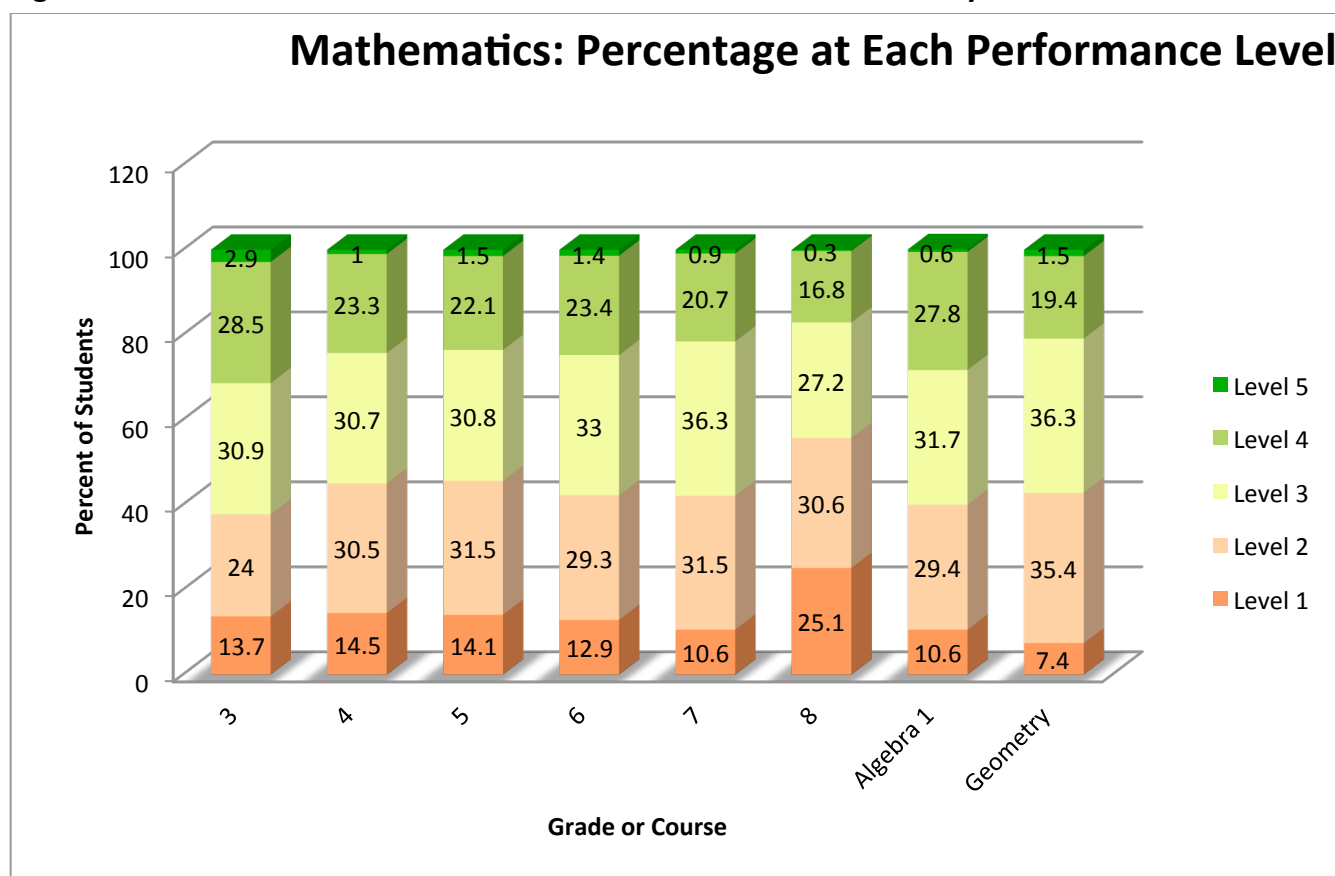
The table below represents the overall scale scores in mathematics for students in our state. A score of 750 or higher indicates that students met or exceeded expectations of what students are expected to learn at each grade or content area. See Appendix A for the scale score thresholds for each performance level. As indicated in Table 5, most students *Approached Expectations* in mathematics, with the exception of Grade 8 and Algebra II, where students *Partially Met Expectations*. It bears noting that the grade 8 data underestimates the overall mathematics performance of our eighth-graders since 17% of them took the Algebra I test.

Table 4. PARCC Statewide Mathematics Scale Scores

Grade	Mathematics Scale Score (Range: 650-850)	Performance Level
3	734	<i>Approached Expectations</i>
4	730	<i>Approached Expectations</i>
5	729	<i>Approached Expectations</i>
6	730	<i>Approached Expectations</i>
7	730	<i>Approached Expectations</i>
8	720	<i>Partially Met Expectations</i>
Algebra I	733	<i>Approached Expectations</i>
Geometry	730	<i>Approached Expectations</i>
Algebra II	717	<i>Partially Met Expectations</i>

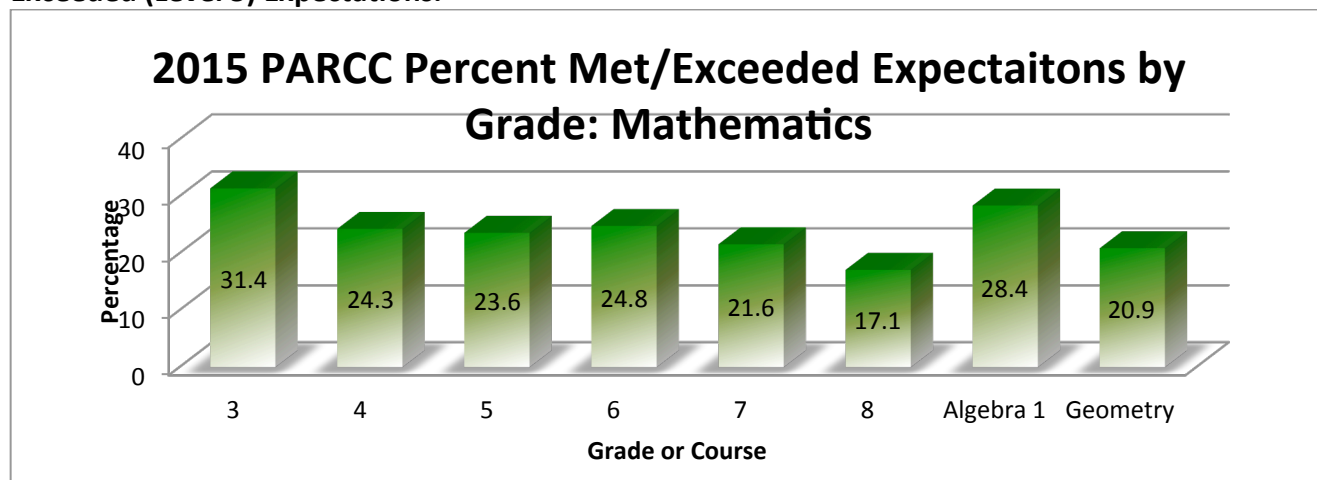
¹ Data presented represent only those students who took the PARCC Grade 8 Mathematics Assessment (which is 83% of all 8th graders).

Figure 3. PARCC Statewide Mathematics Results: Performance-Levels by Grade.



NOTE: Due to rounding, the five performance levels for each grade may not add up to 100%.

Figure 4. PARCC Statewide Mathematics Results: Students in Grades 3-8 who Met (Level 4) or Exceeded (Level 5) Expectations.



NOTE: Grade 8 percentages only include students who took the PARCC Grade 8 Mathematics Assessment and State Average percentages only include Level 4 and Level 5 averages for all grade-specific math assessments combined.

Course sequencing is especially important in mathematics. Mathematical understanding develops cumulatively, requiring that students master certain concepts and skills in order to successfully engage in learning the next level of concepts and skills.

Beginning in middle school some students begin to enroll in accelerated mathematics courses. During the 2014-2015 school year small numbers of 6th and 7th grade students completed Algebra I and small numbers of 7th and 8th grade students completed Geometry. In addition, about 17% of 8th grade students completed Algebra I and about 16% of 9th grade students complete Geometry.

The following tables outline performance by gender, socioeconomic status and race. We will use this data to start a baseline for looking at trends in the coming years based on the new assessments.

2015 PARCC Achievement Results							
Math by Gender							
Test / Grade	# of Valid Scores	Performance Level					% Met or Exceeded Expectations
		% Did Not Yet Meet Expectations	% Partially Meet Expectations	% Approached Expectations	% Met Expectations	% Exceeded Expectations	
Math Grade 03							
Male	17,857	15.2%	24.0%	29.7%	28.0%	3.1%	31.1%
Female	17,074	12.1%	24.0%	32.1%	29.1%	2.7%	31.8%
Math Grade 04							
Male	17,910	16.4%	30.7%	29.1%	22.8%	1.0%	23.8%
Female	17,077	12.5%	30.3%	32.4%	23.8%	0.9%	24.7%
Math Grade 05							
Male	17,750	16.3%	31.9%	29.2%	21.1%	1.6%	22.6%
Female	17,353	11.8%	31.1%	32.5%	23.2%	1.4%	24.6%
Math Grade 06							
Male	17,957	15.0%	29.6%	31.5%	22.4%	1.5%	23.9%
Female	16,917	10.7%	29.0%	34.5%	24.5%	1.2%	25.8%
Math Grade 07							
Male	17,857	12.2%	32.1%	34.4%	20.2%	1.1%	21.2%
Female	17,390	8.8%	30.9%	38.2%	21.3%	0.7%	22.0%
Math Grade 08							
Male	15,117	28.6%	31.0%	25.0%	15.2%	0.3%	15.5%
Female	13,863	21.4%	30.3%	29.6%	18.6%	0.2%	18.8%
Algebra I							
Male	17,412	12.7%	31.1%	29.7%	25.7%	0.8%	26.5%
Female	17,016	8.5%	27.5%	33.7%	29.8%	0.5%	30.3%

Geometry							
Male	16,278	8.2%	35.8%	34.9%	19.3%	1.9%	21.2%
Female	16,322	6.6%	35.0%	37.7%	19.6%	1.2%	20.8%
Note: RV = Restricted Value. Values are restricted when one or more categories has fewer than 10 students in order to protect student privacy.							
2015 PARCC Achievement Results							
Math by Free/Reduced Lunch Price							
Test / Grade	# of Valid Scores	Performance Level					% Met or Exceeded Expectations
		% Did Not Yet Meet Expectations	% Partially Meet Expectations	% Approached Expectations	% Met Expectations	% Exceeded Expectations	
Math Grade 03							
Not Free/Reduced Lunch Price	11,647	5.5%	15.4%	30.7%	42.4%	6.0%	48.4%
Free/Reduced Lunch Price	23,284	17.8%	28.3%	31.0%	21.6%	1.3%	22.9%
Math Grade 04							
Not Free/Reduced Lunch Price	11,981	6.3%	20.0%	33.5%	38.0%	2.3%	40.2%
Free/Reduced Lunch Price	23,006	18.8%	35.9%	29.3%	15.6%	0.3%	15.9%
Math Grade 05							
Not Free/Reduced Lunch Price	12,373	6.2%	21.5%	33.9%	35.0%	3.3%	38.3%
Free/Reduced Lunch Price	22,730	18.3%	37.0%	29.1%	15.1%	0.5%	15.6%
Math Grade 06							
Not Free/Reduced Lunch Price	12,762	5.3%	19.8%	34.7%	37.2%	3.0%	40.2%
Free/Reduced Lunch Price	22,112	17.3%	34.8%	32.0%	15.5%	0.4%	16.0%
Math Grade 07							
Not Free/Reduced Lunch Price	13,140	4.7%	20.3%	38.8%	34.4%	1.9%	36.2%
Free/Reduced Lunch Price	22,107	14.0%	38.2%	34.8%	12.6%	0.3%	12.9%
Math Grade 08							
Not Free/Reduced Lunch Price	9,764	15.0%	25.7%	32.5%	26.4%	0.4%	26.9%
Free/Reduced	19,216	30.3%	33.1%	24.5%	11.9%	0.2%	12.1%

Lunch Price							
Algebra I							
Not Free/Reduced Lunch Price	13,994	5.4%	19.9%	31.9%	41.6%	1.3%	42.9%
Free/Reduced Lunch Price	20,434	14.2%	35.9%	31.5%	18.2%	0.2%	18.4%
Geometry							
Not Free/Reduced Lunch Price	14,391	3.9%	25.1%	38.6%	29.4%	3.0%	32.4%
Free/Reduced Lunch Price	18,209	10.1%	43.4%	34.5%	11.5%	0.4%	11.9%
Note: RV = Restricted Value. Values are restricted when one or more categories has fewer than 10 students in order to protect student privacy.							

2015 PARCC Achievement Results							
Math by Race/Ethnicity							
Test / Grade	# of Valid Scores	Performance Level					% Met or Exceeded Expectations
		% Did Not Yet Meet Expectations	% Partially Meet Expectations	% Approached Expectations	% Met Expectations	% Exceeded Expectations	
Math Grade 03							
Hispanic	4,509	14.2%	29.3%	31.6%	23.5%	1.4%	24.9%
Native American or Alaska Native	199	13.1%	25.1%	33.7%	RV	RV	28.1%
Asian	480	4.8%	10.8%	24.0%	44.2%	16.3%	60.4%
African American	6,955	24.8%	31.3%	28.7%	14.6%	0.6%	15.2%
Native Hawaiian or Pacific Islander	262	37.0%	29.0%	21.4%	RV	RV	12.6%
White	21,686	9.9%	20.8%	31.6%	34.0%	3.7%	37.6%
Two or more races	808	14.5%	23.9%	32.2%	26.5%	3.0%	29.5%
Math Grade 04							
Hispanic	4,266	15.9%	34.5%	31.5%	17.8%	0.3%	18.1%
Native American or Alaska Native	214	12.6%	33.2%	31.3%	RV	RV	22.9%
Asian	568	5.6%	14.8%	28.2%	43.5%	7.9%	51.4%
African American	7,024	26.0%	39.3%	25.2%	9.3%	0.2%	9.5%

Native Hawaiian or Pacific Islander	238	30.7%	44.5%	18.1%	RV	RV	6.7%
White	21,897	10.8%	27.2%	32.5%	28.5%	1.1%	29.6%
Two or more races	757	11.8%	29.7%	33.0%	24.0%	1.5%	25.5%
Math Grade 05							
Hispanic	4,242	14.1%	36.3%	31.2%	17.8%	0.6%	18.4%
Native American or Alaska Native	225	12.0%	36.9%	26.2%	RV	RV	24.9%
Asian	552	4.2%	13.8%	26.4%	44.4%	11.2%	55.6%
African American	6,945	24.9%	40.4%	25.1%	9.2%	0.3%	9.5%
Native Hawaiian or Pacific Islander	231	34.6%	35.9%	20.8%	RV	RV	8.7%
White	22,099	10.8%	28.2%	32.7%	26.5%	1.8%	28.3%
Two or more races	785	11.5%	29.7%	33.6%	23.3%	1.9%	25.2%
Math Grade 06							
Hispanic	4,138	12.8%	34.3%	34.3%	18.3%	0.4%	18.7%
Native American or Alaska Native	227	14.5%	25.6%	34.4%	RV	RV	25.6%
Asian	530	4.2%	13.2%	28.3%	44.7%	9.6%	54.3%
African American	6,980	25.6%	39.8%	25.9%	8.5%	0.2%	8.7%
Native Hawaiian or Pacific Islander	234	26.5%	42.7%	21.4%	RV	RV	9.4%
White	22,059	9.1%	25.3%	35.2%	28.7%	1.8%	30.5%
Two or more races	691	10.0%	31.7%	32.6%	RV	RV	25.8%
Math Grade 07							
Hispanic	4,096	11.3%	35.1%	37.6%	15.8%	0.3%	16.1%
Native American or Alaska Native	227	11.9%	26.4%	41.9%	RV	RV	19.8%
Asian	440	5.9%	15.9%	33.6%	38.9%	5.7%	44.5%
African American	7,147	20.3%	46.0%	26.9%	RV	RV	6.7%
Native Hawaiian or Pacific Islander	223	25.6%	46.2%	20.6%	RV	RV	7.6%
White	22,471	7.3%	26.6%	39.1%	25.9%	1.2%	27.0%
Two or more races	616	10.7%	28.1%	37.5%	21.9%	1.8%	23.7%
Math Grade 08							
Hispanic	3,342	24.1%	32.4%	29.3%	RV	RV	14.3%
Native American or Alaska Native	201	18.4%	33.3%	27.9%	RV	RV	20.4%
Asian	315	15.9%	26.0%	25.1%	RV	RV	33.0%
African American	6,282	40.7%	34.1%	18.8%	RV	RV	6.4%
Native Hawaiian or	203	43.3%	34.5%	17.2%	RV	RV	4.9%

[illegible]

PARCC RESULTS IN CONTEXT

Although it is not possible to compare Arkansas's performance on PARCC directly with performance on the previous assessment, it is helpful to examine our data against other external measures of college and career readiness such as the ACT. Ninety-three percent of Arkansas students graduating in 2015 took the ACT. The average composite score was 20.4; which is 0.6 below the national average of 21.0. By this measure, 21% of Arkansas's most recent graduating class that participated in the ACT met all four college and career ready benchmarks.

Results on the National Assessment of Educational Progress (NAEP)² provide context for understanding student performance in the subject areas of Mathematics and Reading. Because NAEP has long been considered the gold standard in standardized assessment, it often serves as a benchmark against which other testing programs, particularly state assessments, can be compared.

Historically, the majority of Arkansas students have performed below the Proficient achievement level in NAEP, at both grades and subject areas, as shown in the tables below. In past years, we saw a substantial difference between the percentage of students identified as below proficient on NAEP and Arkansas's previous testing program, the Arkansas Benchmark and End of Course Assessments. The PARCC assessments, although aligned to a different set of learning expectations than NAEP, has rigorous expectations for what students should know and be able to do. As such, the differences in students identified as "proficient" or "meeting expectations" become much more in alignment.

Table 5. Arkansas's NAEP and PARCC Reading Results: Percentage at or above Proficient.

Grade	2005	2007	2009	2011	2013	2015
Grade 4 NAEP	30	29*	29	30	32	32
Grade 4 PARCC	-	-	-	-	-	33.6
Grade 8 NAEP	26*	25*	27*	28*	30*	27*
Grade 8 PARCC	-	-	-	-	-	37

Key

* Significantly different ($p < .05$) from the national average.

Table 6. Arkansas's NAEP and PARCC Mathematics Results: Percentage at or above Proficient.

Grade	2005	2007	2009	2011	2013	2015
Grade 4 NAEP	34	37	36	37	39	32*
Grade 4 PARCC	-	-	-	-	-	24.3
Grade 8 NAEP	22*	24*	27*	29*	28*	25*

Key

* Significantly different ($p < .05$) from national public score.

NOTE: Grade 8 PARCC data is not displayed in Table 11 because more than one-fourth (26%) of eighth graders took the PARCC Algebra I assessment rather than the PARCC Grade 8 Mathematics assessment.

We can also review Arkansas's performance within the PARCC Consortium. In the tables below you will see Arkansas statewide data compared to other PARCC states.

² The National Assessment of Education Progress (NAEP) is a federal program that is administered in the states every two years. Because NAEP assesses a representative sample of students in each state, comparisons on performance between administration years must account for statistical significance ($p < .05$). For more information about NAEP, please go to www.nationsreportcard.gov

PRELIMINARY STATE COMPARISONS

	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11
PARCC	38	42	40	39	42	42	40	37	39
Arkansas	29.2	33.6	32.3	33.1	34.8	32.4	36.5	37.0	43.0*
Colorado	38.2	41.7	40.5	39.1	41.0	40.9	37.8	37.4	39.9
District of Columbia	-	-	-	-	-	-	-	25.0	-
Illinois	34.0	37.0	37.0	33.0	37.0	38.0	-	-	-
Louisiana	37.0	39.0	33.0	38.0	35.0	40.0	-	-	-
Maryland	-	-	-	-	-	-	-	39.7	-
Massachusetts**	54.0	57.0	63.0	60.0	60.0	64.0	39.0	-	39.0
Mississippi***	-	-	-	-	-	-	-	49.4	-
New Jersey	44.0	51.0	52.0	49.0	52.0	52.0	40.0	37.0	41.0
New Mexico	24.9	23.7	23.8	21.9	21.1	22.8	26.8	31.2	44.6
Ohio	-	37.0	37.0	36.0	40.0	40.0	45.0	58.0	-
Rhode Island	37.4	37.6	37.6	34.8	38.3	35.1	32.8	31.4	-

Table 8. MATHEMATICS: Percent of Students at Performance Levels 4 and 5 by State.

	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Algebra 1	Geometry	Algebra 2
PARCC	38	32	32	32	29	27	31	27	21
Arkansas	31.4	24.3	23.6	24.8	21.6	17.1	28.4	20.9	15.0*
Colorado	36.7	30.2	30.1	31.7	27.4	18.9	20.4	24.0	27.8
District of Columbia	-	-	-	-	-	-	-	10.0	-
Illinois	36.0	28.0	27.0	26.0	27.0	31.0	-	-	-
Louisiana	37.0	33.0	28.0	26.0	22.0	32.0	-	-	-
Maryland	-	-	-	-	-	-	31.2	-	20.2
Massachusetts**	55.0	47.0	55.0	53.0	45.0	53.0	80.0 - Grade 8 22.0 - H.S.	36.0	13.0
Mississippi***	-	-	-	-	-	-	27.4	-	-
New Jersey	45.0	41.0	41.0	41.0	37.0	24.0	36.0	22.0	24.0
New Mexico	25.2	18.5	20.4	18.5	15	9.1	17.4	12.6	17.7
Ohio	39.0	36.0	36.0	35.0	31.0	26.0	36.0	58.0	-
Rhode Island	36.3	26.8	26.7	25.9	25.4	11.9	25.5	13.7	-

- Indicates the state did not give the assessment or there is no data available at this time.

*ELA11 and Algebra 2 were optional for schools to administer in Arkansas.

**While more than half of Massachusetts school districts that serve students in grades 3-8 gave PARCC in the spring, far fewer districts volunteered to use the PARCC high school tests, because the 10th grade MCAS is still a graduation requirement. In addition, some eighth grade students took Algebra I tests instead of eighth grade PARCC math tests.

*** Mississippi plans to release results for grades 3-8 on December 17

Table 7. ENGLISH LANGUAGE ARTS: Percent of Students at Performance Levels 4 and 5 by State.

NOTE: See Appendix A for overview of PARCC performance levels.

APPENDICES

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APPENDIX A

Clarifying Information

“Minimum Cell Size” Reporting Policy

ADE Policy on minimum cell size for reporting data stipulates that if the number of students is less than 10 then data must be suppressed to ensure confidentiality of individual student results. Throughout this report, cells with a dash (-) indicate that the number of students included in calculations was less than 10.

PARCC Performance Levels

Based on the summative assessments given in spring 2015, educators and experts were convened to determine what score each student must earn on the assessment in order to achieve a particular performance level. Performance levels help determine whether a student is on-track with grade-level expectations.

To review the specific **ELA/Literacy** descriptors, go to:

<http://parconline.org/assessments/test-design/ela-literacy/ela-performance-level-descriptors>

To review the specific **Mathematics** descriptors, go to:

<http://parconline.org/assessments/test-design/mathematics/math-performance-level-descriptors>

PARCC uses five performance levels that delineate the knowledge, skills, and practices students are able to demonstrate:

- **Level 1: *Did not yet meet expectations***
- **Level 2: *Partially met expectations***
- **Level 3: *Approached expectations***
- **Level 4: *Met expectations.***
- **Level 5: *Exceeded expectations***

A student performing at Level 4 or Level 5 met or exceeded grade-level expectations and demonstrated a strong grasp of grade-level standards and readiness for the next step in a his/her educational development. Scores on the PARCC assessments will range from 650 to 850, with a 700 representing the threshold of Level 2, 725 representing the threshold of Level 3, and 750 representing the threshold of Level 4. The threshold score for Level 5 will vary slightly by assessment and will be approximately 800.

A variety of stakeholders, nominated by the states, participated in panels during summer 2015 to review the assessments. To determine what range of scores best matches each performance level,

panelists used performance level descriptors for English language arts/literacy and mathematics that indicate what a typical student at each level should know based on his/her command of grade-level standards. They used the performance level descriptors and actual assessment results and compared them to empirical studies to make their judgments. Each group went through at least three rounds of review per assessment to develop the "threshold scores," also known as "cut scores," for each performance level.

Two research studies helped determine the percentage of students likely to be college- and career-ready and the percentage of students likely to be on track for the next academic level at earlier grades: a postsecondary faculty judgment study; a benchmark study of the SAT, ACT, NAEP, TIMSS; and PISA assessments.

State education chiefs from PARCC member states met in late August/early September to adopt common, performance-level threshold scores based on these recommendations.

For additional information about the PARCC Performance levels, go to:

[Setting Performance Levels for the PARCC Assessment](#)

APPENDIX B

PARCC Performance Level Descriptors (PLDs)

PARCC Performance Level Descriptors

Performance level descriptors (PLDs) outline the knowledge, skills, and practices that students performing at any given level should be able to demonstrate in each content area at each grade level to signal that they are academically prepared to engage successfully in further studies in each content area, the next grade's material and, later, at the high school-level for students to demonstrate that they are college and career ready.

English Language Arts/Literacy (ELA/Literacy) PLDs: Grades 3-10

Performance-level descriptors (PLDs) describe what student performance looks like at four levels: partial command of the content; moderate command; strong command; and distinguished command. In English language arts/literacy, the performance levels at each grade level are written for the two assessment claims of reading and writing.

Reading Claim

For the reading claim, the performance levels at each grade level are differentiated by three factors:

1. Text complexity
2. The range of accuracy in expressing reading comprehension demonstrated in student responses; and
3. The quality of evidence cited from sources read

This is an innovative departure from how ELA/literacy performance level descriptors have been written in the past, but reflective of the Common Core's emphasis on a student's ability to find text-based evidence for generalizations, conclusions, or inferences drawn.

Writing Claim

For the writing claim, PLDs are written for the two sub-claims:

1. Written expression
2. Knowledge of language and conventions.

Factors differentiating the performance levels for writing include how consistently and fully students develop ideas, including when drawing evidence from one or more sources, how well they organize their writing, and their command of grammar and language usage. Below are links to each grade level descriptor:

- [PARCC Grade 3 Performance Level Descriptors](#)
- [PARCC Grade 4 Performance Level Descriptors](#)
- [PARCC Grade 5 Performance Level Descriptors](#)
- [PARCC Grade 6 Performance Level Descriptors](#)

- [PARCC Grade 7 Performance Level Descriptors](#)
- [PARCC Grade 8 Performance Level Descriptors](#)
- [PARCC Grade 9 Performance Level Descriptors](#)
- [PARCC Grade 10 Performance Level Descriptors](#)
- [PARCC Grade 11 Performance Level Descriptors](#)

Mathematics PLDs: Grades 3-10

Performance-level descriptors (PLDs) describe what student performance looks like at four levels: partial command of the content; adequate command; strong command; and distinguished command.

In mathematics, the performance levels at each grade level are written for each of four assessment sub-claims:

- Major content
- Additional and supporting content
- Reasoning
- Modeling

The performance levels within each claim area are differentiated by a number of factors consistent with the Common Core's inclusion of standards for both mathematical content and mathematical practices.

Performance-Level Descriptors by Grade Band:

- [PARCC Mathematics Performance Level Descriptors: Grades 3-5](#)
- [PARCC Mathematics Performance Level Descriptors: Grades 6-8](#)
- [PARCC Mathematics Performance Level Descriptors: High School](#)

APPENDIX C

PARCC Accommodations and Accessibility Features

It is important to ensure that performance in the classroom and on the assessment is influenced as little as possible by a student's disability or linguistic/cultural characteristics that are unrelated to the content being assessed. In order for this to happen, some students with disabilities and English language learners need additional support in order to show what they know on the PARCC tests. PARCC offers two categories of supports to assist students in accessing the test: accommodations and accessibility features.

Accommodations are adjustments to the testing situation, test format, or the administration of the test that create equitable access for students with disabilities and English language learners.

An accommodation removes or decreases a barrier that is making a task difficult; it does *not* change the task itself.

Accessibility Features are tools that are either built into the computer-based tests or provided by test administrators. Accessibility features are intended for a wide range of students and are available to any students who need them to take the PARCC assessments. Although any student taking the PARCC assessments can use accessibility features, not every student needs to use these features. Educators, parents, and students should put as much thought into determining the need for an accessibility feature as they would an accommodation. All supports provided to a student on a test or in the classroom should, first and foremost, address student's specific access issues.

Of the total student population assessed with PARCC exams in 2015, 6.3% were students with disabilities who used accommodations to access the exams. Of the same population, 3.7% were English Learners who used accommodations. The percentage of students requiring specific accommodations varied because accommodations are based on student need. When reviewing data on accommodations and other test supports it is important to remember that it is not how widely the accommodation is used that is important but that the accommodations that are used are well suited and appropriate for the student using them. For example, use of braille tests is an accommodation that is only needed by students with visual impairments to access the tests. Less than 1% of students required the use of a Braille test. In contrast, the extended time accommodation may be needed by variety of students with disabilities and English Learners who need extra time to complete the test. In Arkansas, 58.3% of students with disabilities and English Learners used extended time to complete the test.

The following tables provide data on student usage of select PARCC accommodations and accessibility features.

ACCOMMODATION-LEVEL FEATURES (PERCENT OF EACH POPULATION RECEIVING ACCOMMODATIONS)

FEATURE	STUDENTS WITH AN IEP OR 504	ENGLISH LEARNERS
EXTENDED TIME	38.2	21.9
BRAILLE	0.1	--
LARGE PRINT	0.5	--
TEXT-TO-SPEECH FOR ELA	18.7	1.2
WORD-TO-WORD DICTIONARY	--	17.7
TRANSLATED DIRECTIONS	--	1.1

ACCESSIBILITY FEATURES (PERCENT OF EACH POPULATION RECEIVING FEATURE)

FEATURE	STUDENTS WITH AN IEP OR 504	ENGLISH LEARNERS
ANSWER MASKING	8.6	19.9
COLOR CONTRAST	4.5	7.0

ACCESSIBILITY FEATURES (NUMBER OF STUDENTS RECEIVING THE FEATURE)

FEATURE	STUDENTS WITH AN IEP OR 504	ENGLISH LEARNERS	NEITHER (GENERAL EDUCATION)
TEXT-TO-SPEECH FOR MATH	14,986	9,916	67,024