



2015 Arkansas School *Performance Report*



ARKANSAS
DEPARTMENT
OF EDUCATION

UNDERSTANDING THIS REPORT

INDICATOR 1: STUDENT ACHIEVEMENT

Student achievement was measured on the Augmented Benchmark for grades 3-8 in reading/literacy and mathematics, grades 5 and 7 science, algebra I, geometry, biology and the grade 11 literacy exams through school year 2013-14. Benchmark achievement is shown by the percent of students scoring at each of four performance levels, as well as the percent of students scoring at or above Proficient. The standard for achievement in Arkansas is Proficient. A new statewide assessment, the Partnership for Assessment of Readiness for College and Careers (PARCC) test, was given to students in grades 3 through 12 during the 2014-15 school year. The PARCC test replaced the Arkansas Benchmark for grades 3-8 in reading/literacy and mathematics, algebra I and geometry exams. Grade 5 science, grade 7 science and biology were tested in 2014-15 as they were in previous years. The performance levels and brief descriptions for Benchmark and PARCC are shown below:

Benchmark Performance Levels:

Advanced students demonstrate superior performance well beyond proficient grade-level performance. They can apply Arkansas's established reading, writing, and mathematics skills to solve complex problems and complete demanding tasks on their own. They can make insightful connections between abstract and concrete ideas and provide well-supported explanations and arguments.

Proficient students demonstrate solid academic performance for the grade tested and are well prepared for the next level of schooling. They can use Arkansas established reading, writing, and mathematics skills and knowledge to solve problems and complete tasks on their own. Students can tie ideas together and explain the ways their ideas are connected.

Basic students show substantial skills in reading, writing, and mathematics; however, they only partially demonstrate the abilities to apply these skills. They demonstrate a need for some additional assistance, commitment, or study to reach the proficient level.

Below Basic students fail to show sufficient mastery of skills in reading, writing, and mathematics to attain the basic level.

PARCC Performance Levels:

Not Met Expectations or Level 1 - The student performance demonstrated at this level did not yet meet academic expectations for the knowledge, skills, and practices embodied by the standards assessed at their grade level or course.

Partially met expectations or Level 2 - The student performance demonstrated at this level partially met academic expectations for the knowledge, skills, and practices embodied by the standards assessed at their grade level or course.

PARCC Performance Levels (Continued)

Approached expectations or Level 3 - The student performance demonstrated at this level approached academic expectations for the knowledge, skills, and practices embodied by the standards assessed at their grade level or course.

Met expectations or Level 4 - The student performance demonstrated at this level met academic expectations for the knowledge, skills, and practices embodied by the standards assessed at their grade level or course.

Exceeded expectations or Level 5 - The student performance demonstrated at this level exceeded academic expectations for the knowledge, skills, and practices embodied by the standards assessed at their grade level or course.

RV stands for Restricted Value. RV is used when there are less than ten students in a subgroup. This ensures that information identifiable for individual students will not be made available.

NATIONAL TESTS

Information in the Achievement Section includes the National Assessment of Educational Progress (NAEP) in math and literacy for grades 4 and 8. The NAEP test is given every other year in Arkansas. A norm-referenced test was combined with state-mandated criterion-referenced testing to form the Augmented Benchmark Examinations. A norm-referenced test compares Arkansas' student performance with the performance of a sample of students from across the country. The results are reported by percentile ranging from a low of 1 to a high of 99. The 50th percentile represents the national average, or the point above which half of the national sample scored. This figure indicates the average performance. This Report Card shows norm-referenced test scores for grades one through nine on the Iowa Test of Basic Skills through school year 2013-14. In school year 2014-15 students were tested in grades one and two on the Iowa Test of Basic Skills. College admission tests include the American College Test (ACT) and SAT. The ACT shows the average scores of high school seniors. The ACT score ranges from 1 to 36. Most public colleges and universities in Arkansas require the ACT as part of their admissions process. The average scores are listed for mathematics, English, reading and science, as well as an overall composite score. Students have more than one opportunity to take the exam. The data reported here are the best test scores for the students in the graduating class. The Voluntary Universal ACT provides an opportunity for all students in grade eleven to take the ACT. Districts may use the National School Lunch Act (NSLA) funds to pay for the test. Some students attended the College and Career Readiness Planning Program (CCRPP). CCRPP was used to help students improve their ACT scores and become better prepared for college. The number of students taking the SAT college admission test and the SAT scores are listed.

Advanced Placement Classes

These figures indicate the number of students who are enrolled in Advanced Placement (AP) classes, the number of AP exams taken and the number of AP exams with scores of three, four or five. AP exams are given at the completion of an AP class. Students must score a three or better in order to be eligible to receive college credit for the course. The number of students taking AP only counts a student once even if they are taking multiple AP classes.

Number of Students Taking International Baccalaureate Courses

The International Baccalaureate Diploma Program is a challenging, high quality, two-year curriculum. It leads to a qualification that is widely recognized by the world's universities. Students completing this program can be awarded the full Diploma or Certificates of Merit in individual subjects.

College Going Rate

The College Going Rate is the percentage of high school graduates who enroll in college within 16 months after their high school graduation.

College Credit Accumulation Rate

The College Credit Accumulation Rate is the percentage of high school graduates who enroll in college within 16 months after their high school graduation and complete at least a year's worth of college credit applicable to a degree within two years of their enrollment in college.

INDICATOR 2: SCHOOL PERFORMANCE

This section contains information about how well your child's school met federal standards. Federal standards were established by the Elementary and Secondary Education Act (ESEA) of 1965. ESEA provided federal funds to reduce achievement gaps between economically disadvantaged students and middle class students. ESEA has been reauthorized seven times. In 2001, ESEA was reauthorized by the No Child Left Behind Act (NCLB). NCLB had Proficiency targets (the percent of students with test scores at the proficient or advanced level) that were the same for all schools based on state averages. Proficiency targets were set for math and literacy. NCLB targets increased by around eight percent per year. By 2014, the proficiency targets were 100 percent.

According to the United States Department of Education (ED), some components of NCLB identified unrealistic performance and proficiency targets. In September 2011, the ED announced an opportunity for states to seek a waiver from some specific requirements that were deemed unattainable under this reauthorization. After conversations with stakeholders in Arkansas, the decision was made to participate in the ESEA Flexibility initiative in an effort to help districts manage improvements in the schools, make systemic changes to enhance instruction and student achievement while preparing students for college and career readiness.

ESEA Flexibility

On June 29, 2012, the Arkansas Department of Education was approved for ESEA Flexibility. Under the State's plan, Arkansas elected to set individualized Annual Measurable Objectives (AMOs) for each school, district, and the state based on 2011 performance (percent proficient) and growth. The 2010 graduation rate data was used to set graduation rate AMOs. AMOs are yearly targets that each school and district should meet or exceed. AMOs were calculated so that Schools, districts and the state would be held accountable for a 50 percent reduction in the proficiency or growth gap, and the graduation rate gap within six years. The proficiency gap is the percentage of students not scoring proficient. Growth measured whether or not a student's scores improved enough for the student to be on track to proficiency by grade 8. The growth gap was the percentage of students who met growth subtracted from one hundred. The graduation rate gap was the difference between the graduation rate and one hundred.

To increase the number of schools accountable for students at risk, the Targeted Achievement Gap Group (TAGG) was formed. The TAGG includes students in any or all of the following subgroups: economically disadvantaged, English Learners (EL), and Students with Disabilities (SWD). Under NCLB, a school's accountability status was not determined by the scores of student groups with less than 40 students. Under Flexibility, accountability status of Needs Improvement can be determined by the scores of a TAGG with as few as 25 students.

Under Flexibility, every Arkansas school has been identified as one of the following: Achieving, Exemplary, Needs Improvement, Needs Improvement Focus or Needs Improvement Priority. A description of each classification is stated below:

- To be classified as Achieving, the school and district are accountable for meeting performance AMOs or growth AMOs for both math and literacy for All Students and the TAGG. In addition, they must test at least 95 percent of their students. High schools must also meet graduation rate AMOs for All Students and the TAGG.
- An Exemplary school must meet AMOs for every ESEA subgroup in the school that has at least 25 students. Exemplary schools must not have large performance gaps between different subgroups of students. Exemplary schools are identified each year. The first year that Exemplary calculations were done used test results to calculate a three-year weighted average percentage of students proficient for math and literacy combined for 2009 through 2011. A school can also be identified as Exemplary based on high progress, high TAGG performance or high TAGG progress. Progress was determined by comparing the three-year weighted average percent proficient for 2008 through 2010 to the three-year weighted average percent proficient for 2009 through 2011.
- A Needs Improvement school tests less than 95 percent of its students or has proficiency and growth less than the AMOs for All Students or TAGG or has graduation rates less than the AMOs for All Students or TAGG.

- Needs Improvement Focus schools include ten percent of Title I schools with the largest achievement gaps between TAGG and non-TAGG students. Non-Title I schools with the same achievement gaps as the selected Title I schools are also included in the Needs Improvement Focus schools group. Focus school calculations were based on 2009 through 2011 data.
- Priority schools include five percent of the lowest performing Title I schools based on 2009 through 2011 data. Non-Title I schools with commensurate low performance are also included in the Needs Improvement Priority group.
- If a school meets its AMOs for two consecutive years and follows its improvement plans, it becomes eligible to exit the Needs Improvement Focus or Needs Improvement Priority school status.
- Flexibility will be in place through the 2012-13 and 2013-14 school years unless ESEA is reauthorized. States may be given Flexibility plan extensions after 2013-14.
- Arkansas's Flexibility eliminates unrealistic performance and proficiency targets while emphasizing success for all students. It sets new and ambitious but achievable annual targets toward specific goals for the State, districts, schools, and student groups. Its effectiveness will better prepare students for career and college readiness.

On August 6, 2015, the Arkansas ESEA flexibility request was renewed by the United States Department of Education. A pause in school and district status determination in 2015 was included in the flexibility request. Schools in 2015 retained the status that they had in 2014.

On December 10, 2015, ESEA was reauthorized by the Every Student Succeeds Act (ESSA). All ESEA flexibility requests are null and void as of August 1, 2016. States with priority and focus schools as identified under an approved ESEA flexibility request must continue to implement interventions applicable to such schools through the 2016-2017 school year.

School Rating for 2013-14 was based on up to four components: Weighted Performance Score, Improvement Score with ESEA Options, Four-Year Adjusted Cohort Graduation Rate (where applicable) and Gap Adjustments (where applicable).

School Rating for 2014-15 was based on up to four components: Weighted Performance Score, Growth Score, Four-Year Adjusted Cohort Graduation Rate (where applicable) and Gap Adjustments (where applicable). In addition to these components, schools may earn Challenge Points that are added to schools' overall score when applicable. More information about how this is calculated is shown at the end of the definitions below.

Next in this section is district compliance with the requirement to **provide textbooks or digital resources for all pupils**.

Parents should also pay close attention to district and school compliance with the standards for accreditation status. This **annual accreditation status** lets you know if your child's school is fully accredited by the State Board of Education. Accredited-Cited status is assigned for teacher licensure deficiencies, improper class sizes caused by population shifts, and failure to provide required reports. Probationary status can be assigned for failure to correct a cited violation by the given deadline, improper class sizes not caused by population shifts, failure to teach required courses or align courses with content standards, teacher licensure deficiencies, failure to employ the required staff, lack of required written policies, failure to file an Equity Compliance Report, and failure to provide the required guidance, health, media, special education, or gifted and talented programs.

The **attendance rate** indicates the average percentage of students attending school each day. The **dropout rate** is the percentage of students dropping out of school in Grades 7-12 from October 1 of one school year to September 30 of the next. One of the mandates of NCLB required that students who enter a GED program are considered as dropout students.

INDICATOR 3: RETENTION

This section includes the numbers and percentages of students retained for Grades 1-8. These are students that, for academic reasons, are returning to the same grade rather than advancing to the next.

INDICATOR 4: SAFE AND ORDERLY ENVIRONMENT

This information indicates whether the school's discipline policy has been distributed to parents and whether the school's staff has received discipline policy training. Another notation in this section indicates whether a school has adopted a parental involvement plan. The district's Alternative Learning Environment (ALE) compliance status indicates if the ALE is conducive to learning, and provides intervention services designed to address individual needs of students. The number shown for expulsions indicates the percentage of students who have been expelled from school during the school year. The next numbers indicate the percentage of school-related weapon or assault incidents involving students that occurred at the school.

INDICATOR 5: TEACHER QUALITY

The first number indicates the percentage of teachers at the school who have a valid Arkansas teaching license and teach in the area(s) for which they hold the license. When schools employ teachers for more than 30 days who are not fully qualified (licensed), the schools are required to request a waiver from the State Board of Education to continue to employ those teachers. The Percent of teachers teaching out of area represents the number of waivers divided by the number of certified (licensed) staff. This category also shows the percentage of teachers who have a bachelor's degree, a master's degree, or an advanced degree. Percent of (Core Academic) Classes Not Taught by Highly Qualified Teachers is divided into three sections. The first section has information for high poverty schools – the top 25 percent (having the most students receiving free and reduced-price lunches). The second section is for low poverty schools – the lowest 25 percent (having the fewest students receiving free and reduced-price lunches). The third section is an aggregate of all economic levels. Highly Qualified Teachers have at least a bachelor's degree, are licensed and demonstrate content knowledge in their subject area(s). The School Board Training section lists the School District Board of Directors and the hours of training and instruction they have received in school-related topics.

INDICATOR 6: CHOICE

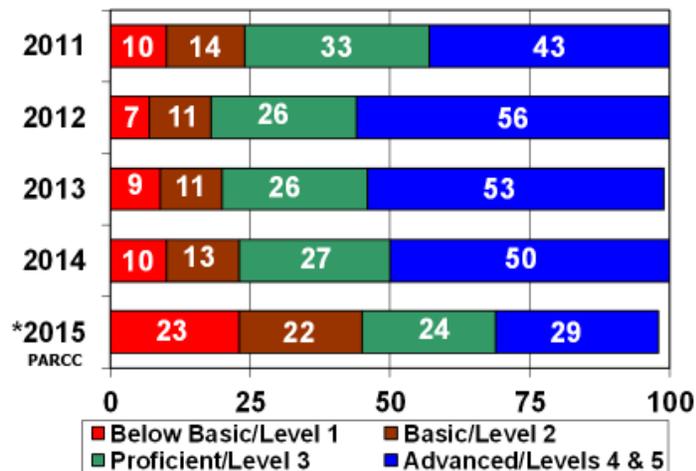
This number indicates the percentage of students who reside in another district, but are attending this school as part of the Arkansas Public School Choice Act.

INDICATOR 7: SCHOOL FUNDING

This section covers the money going into and out of your child's school, including average spent per student and average teacher salary for those holding a teaching license. The district's millage rate is the tax rate approved for the district by the voters in the last annual school election and is referred to on the chart as "Mills Voted." The total expenditures for the school and district reflect all the money that was spent for the year, including extracurricular expenses that are not part of the required curriculum. Capital expenditures are for land, buildings, vehicles and equipment that should last more than a year. Debt service expenditures are for payment of principal and interest on long-term debt. Also included in this section is the percentage of students at the school eligible to receive free and reduced-price meals.

Arkansas Benchmark/PARCC (Grade 3)

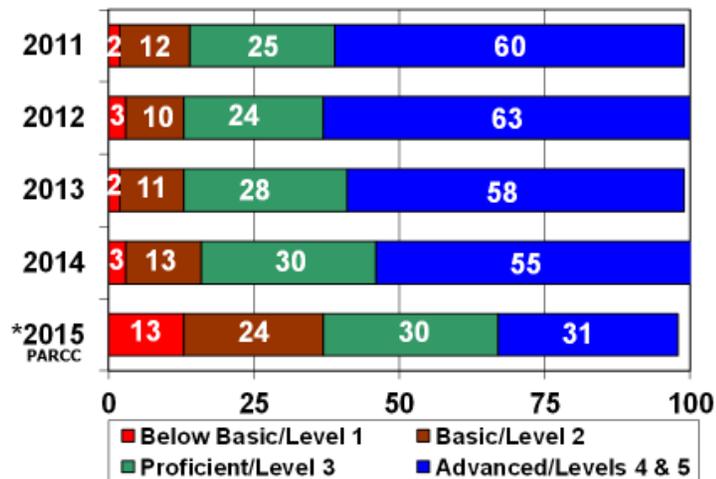
Literacy/ELA Combined Population



Students that scored PARCC Levels 4 & 5 are College and Career Ready

Arkansas Benchmark/PARCC (Grade 3)

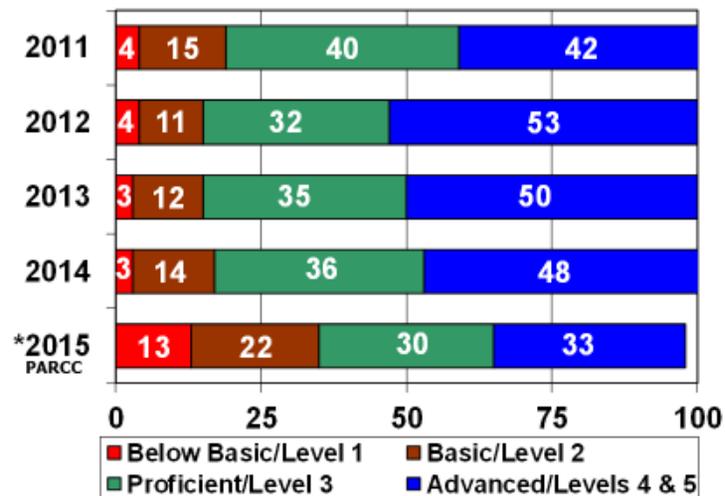
Mathematics Combined Population



Students that scored PARCC Levels 4 & 5 are College and Career Ready

Arkansas Benchmark/PARCC (Grade 4)

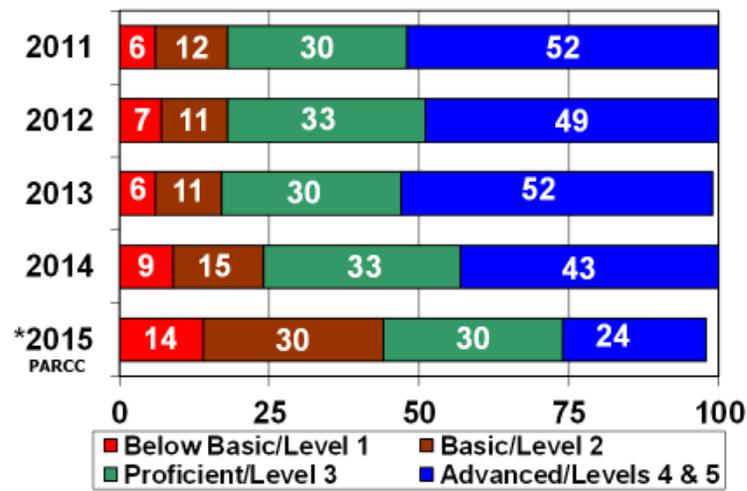
Literacy/ELA Combined Population



Students that scored PARCC Levels 4 & 5 are College and Career Ready

Arkansas Benchmark/PARCC (Grade 4)

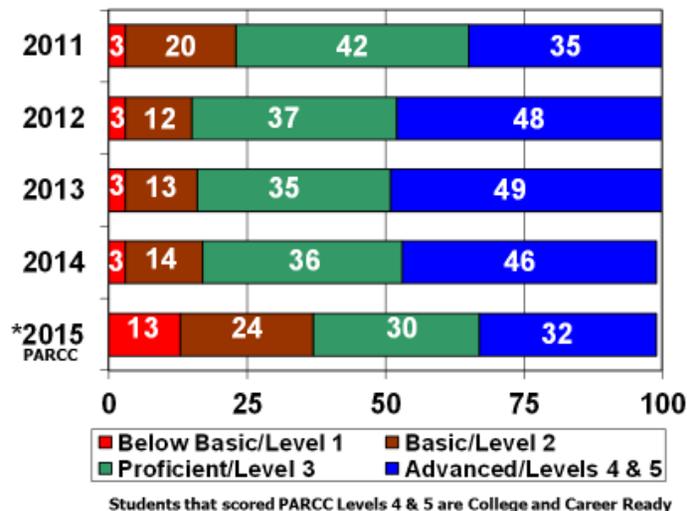
Mathematics Combined Population



Students that scored PARCC Levels 4 & 5 are College and Career Ready

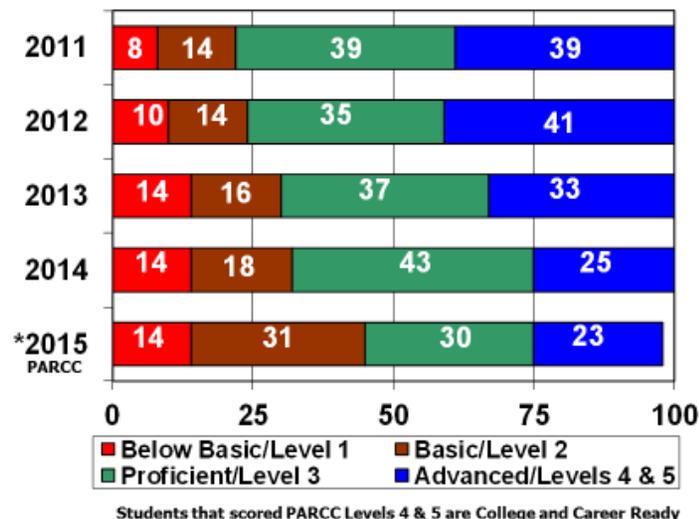
Arkansas Benchmark/PARCC (Grade 5)

Literacy/ELA Combined Population



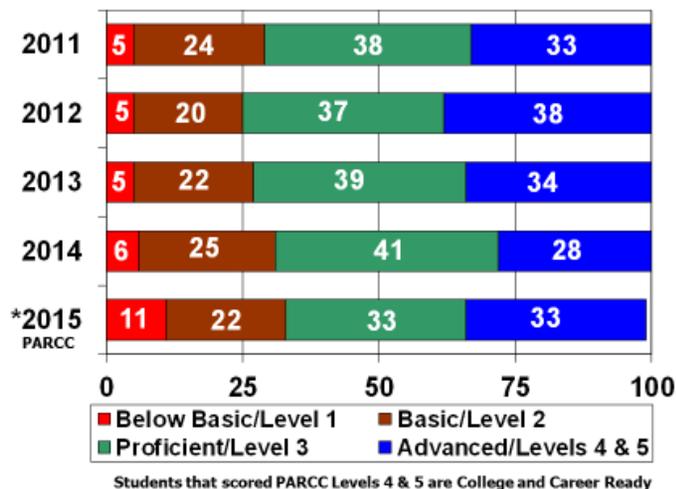
Arkansas Benchmark/PARCC (Grade 5)

Mathematics Combined Population



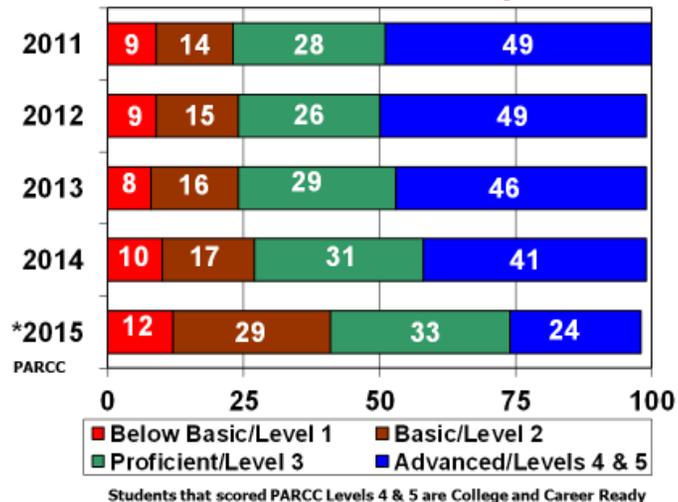
Arkansas Benchmark/PARCC (Grade 6)

Literacy/ELA Combined Population



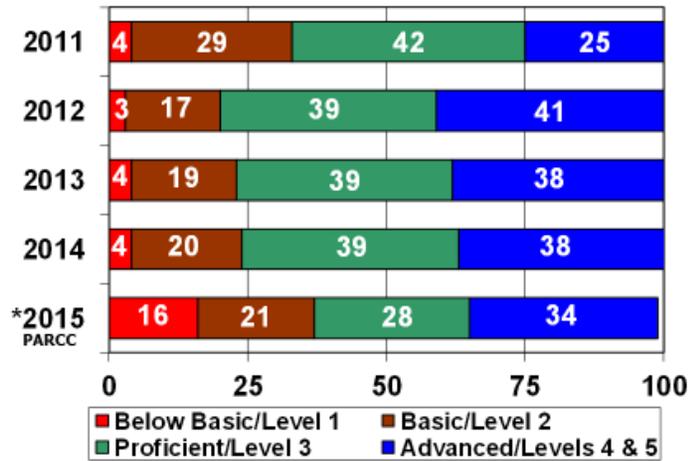
Arkansas Benchmark/PARCC (Grade 6)

Mathematics Combined Population



Arkansas Benchmark/PARCC (Grade 7)

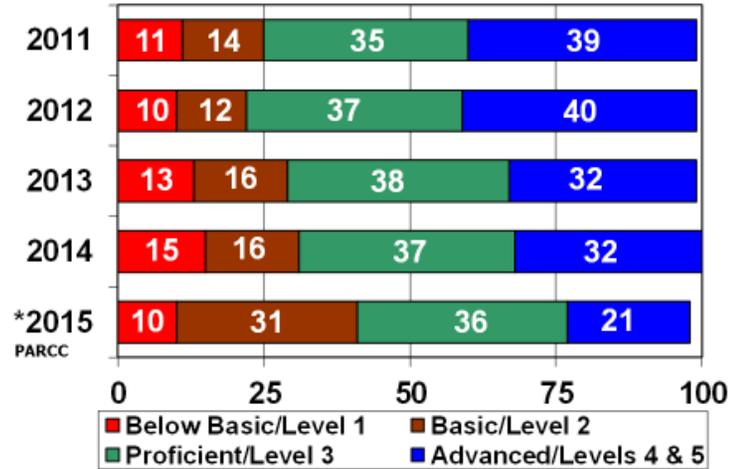
Literacy/ELA Combined Population



Students that scored PARCC Levels 4 & 5 are College and Career Ready

Arkansas Benchmark/PARCC (Grade 7)

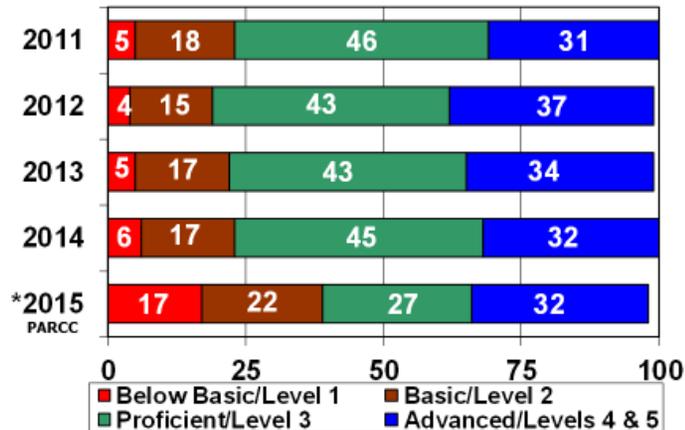
Mathematics Combined Population



Students that scored PARCC Levels 4 & 5 are College and Career Ready

Arkansas Benchmark/PARCC (Grade 8)

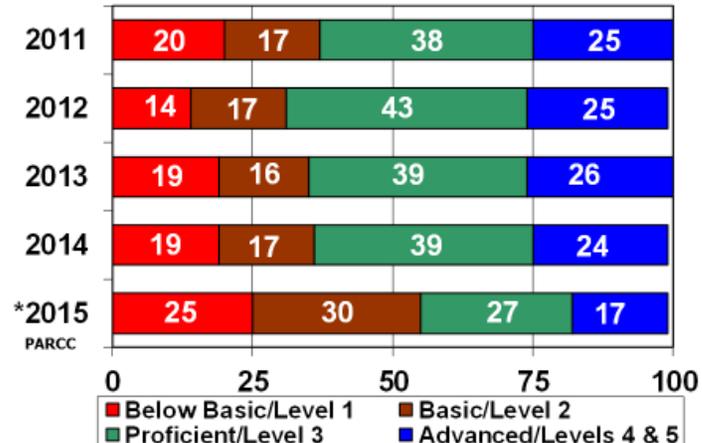
Literacy/ELA Combined Population



Students that scored PARCC Levels 4 & 5 are College and Career Ready

Arkansas Benchmark/PARCC (Grade 8)

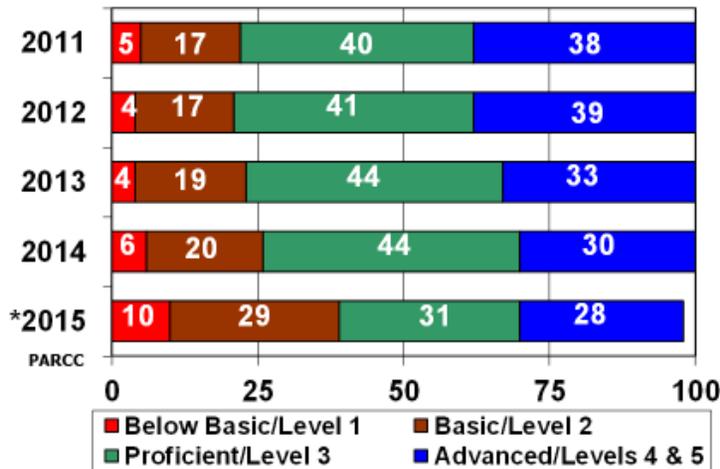
Mathematics Combined Population



Students that scored PARCC Levels 4 & 5 are College and Career Ready

Benchmark/PARCC Algebra 1

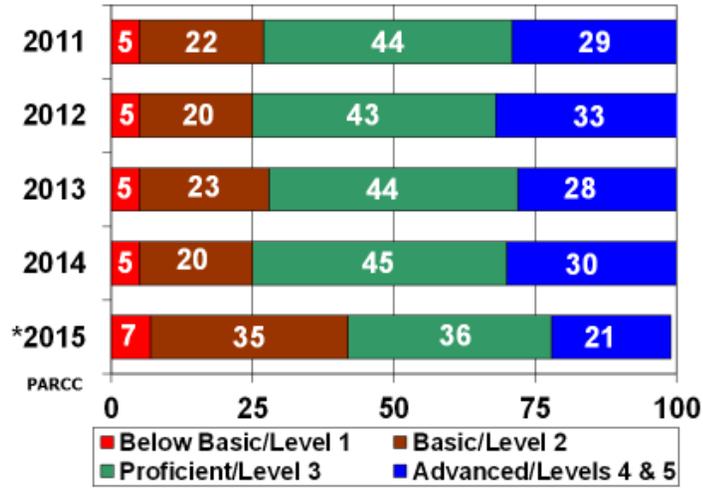
Spring (May) Combined Population



Students that scored PARCC Levels 4 & 5 are College and Career Ready

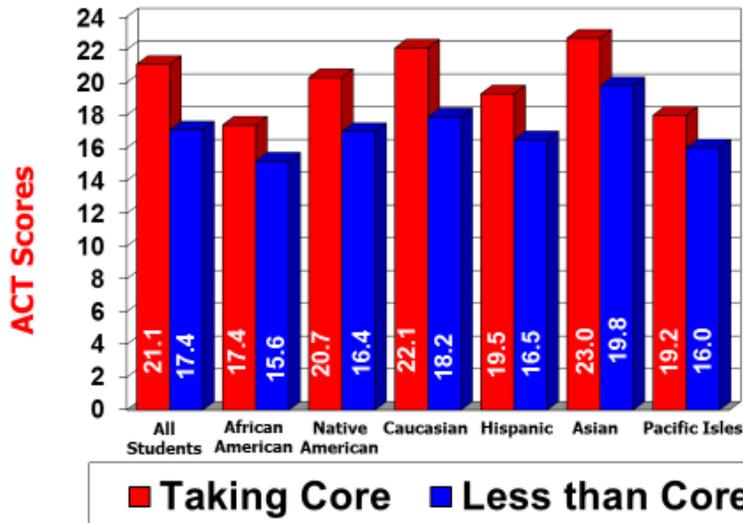
Benchmark/PARCC Geometry

Spring (April) Combined Population

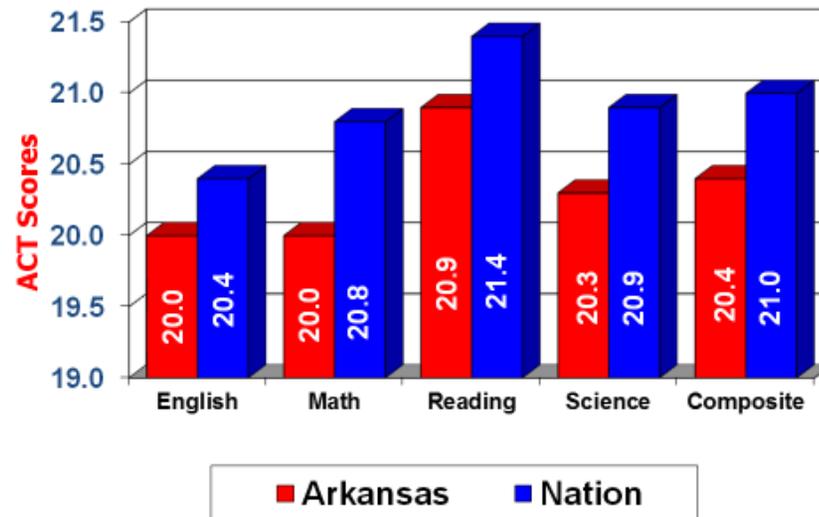


Students that scored PARCC Levels 4 & 5 are College and Career Ready

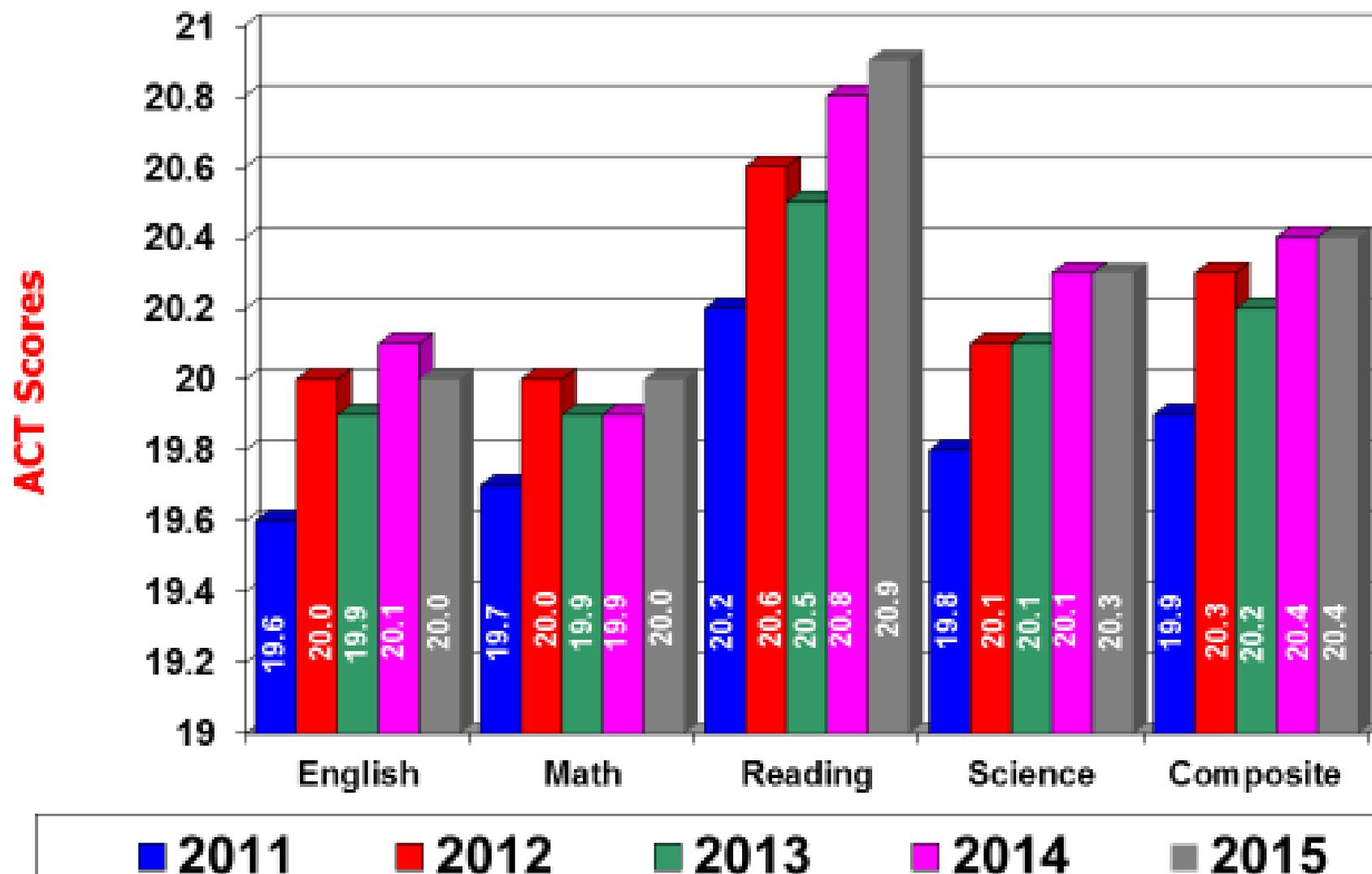
2015 Arkansas ACT Students Taking Core Compared With Taking Less Than Core



2015 National ACT Score Comparisons



Arkansas ACT Scores Five Year Trend



Model for Calculation of Overall School Scores for Determination of School Letter Grades

The 2015 A – F School Rating formula includes up to four components: *Weighted Performance Score*, *Growth Score*, Four-Year Adjusted Cohort Graduation Rate (where applicable)¹ and *Gap Adjustments* (where applicable). In addition to these components, schools may earn Challenge Points that are added to schools' overall score when applicable. The components of the Rating and the determination of Challenge points are explained in this appendix.

School Performance Component—the Weighted Performance Score	12
Test Scores and Students Included in the <i>Weighted Performance Score</i>	12
Student Performance Levels and Points Earned	12
School Improvement or Growth Score	12
Value-Added Scores for Student Growth.....	13
VAS for School Growth.....	14
Four-Year Adjusted Cohort Graduation Rate.....	14
Adjustments for Achievement Gaps and Graduation Gaps	14
Achievement Gap Adjustment	14
Graduation Rate Gap Adjustment.....	15
Challenge Points.....	15
Overall Score Calculation	15
Applying Cut Scores to the Overall Score to Determine Letter Grades.....	16

¹ Throughout this document, the term “graduation rate” refers to schools’ Four-Year Adjusted Cohort Graduation Rate as calculated by the Arkansas Department of Education.

School Performance Component—the Weighted Performance Score

Schools earn points toward the performance portion of their overall score through the *Weighted Performance Score*. Points are earned based on the number of students at each performance level. Schools earn the following points or credit based on student performance levels:

- Partial credit for students scoring at the lower performance levels,
- Full credit for students scoring at the performance level that represents meeting grade level expectations, and
- Bonus credit for students scoring at the performance level that represents exceeding grade level expectations.

Bonus credit is earned for the number of students exceeding grade level standards that is greater than the number of students at the lowest performance level (did not meet standards). For the number of students at the exceeding standards performance level that is less than or equal to the number at the lowest performance level, the school earns a full credit for each student at the exceeding standards performance level.

Test Scores and Students Included in the *Weighted Performance Score*

Grades 3 through 8 and high school required state assessments in Math and ELA are used in the *Weighted Performance Score*. For 2015 these assessments included the PARCC Math (Gr. 3 – 8) exams, PARCC Algebra 1 and Geometry End of Course exams, PARCC ELA (Gr. 3 – 10) exams, and the NCSC Math and ELA exams (Grades 3 – 8, & 11). Highly mobile students are excluded from the *Weighted Performance Score*.

Student Performance Levels and Points Earned

The PARCC Exams and the NCSC Exams have two different sets of performance levels to represent student level of achievement relative to grade level standards. The following table indicates the performance levels for each exam and the points earned for those levels.

PARCC Performance Levels	Points Earned	NCSC Performance Levels	Points Earned
PL 1	0.00	PL 1 where Scale Score = 1200 (raw score of 0)	0.00
PL 2	0.50	PL 1 where Scale Score > 1200	0.50
PL 3	0.75	PL 2	0.75
PL 4	1.00	PL 3	1.00
PL 5 for the # of PL 5 students <= # of PL 1 students	1.00	PL 4 for the # of PL 4 students <= # of PL 1 students where Scale Score = 1200	1.00
PL 5 for the # of PL 5 students > # of PL 1 students	1.25	PL 4 for the # of PL 4 students > # of PL 1 students where Scale Score = 1200	1.25

To get the total Weighted Performance Score (WPS) add all points earned for students in math and ELA, divide by the number of nonmobile students with test scores in math and ELA, and multiple by 100 to determine the total points earned. The WPS equation is below. N represents the number of nonmobile students in math and ELA at that performance level).

$$WPS = \frac{(0 * N_{PL1}) + (0.50 * N_{PL2}) + (0.75 * N_{PL3}) + (1.00 * N_{PL4}) + (1.00 * N_{PL5(\#PL5 \leq \#PL1)}) + (1.25 * N_{PL5(\#PL5 > \#PL1)})}{\text{Number of NonMobile Student Test Scores in Math and ELA}} * 100$$

School Improvement or Growth Score

The transition between Arkansas's Benchmark, EOC, and Alternate Portfolio Exams to the PARCC and NCSC exams limits the options for the school improvement component of the Rating in 2015. Direct comparisons of schools' prior performance (% proficient on Arkansas standards) to current performance (% meeting college and career ready grade level standards) are not appropriate. Also, the transition in assessments meant that baseline data were not available to set improvement targets for 2015. Despite these limitations, stakeholders indicated a high value for including a growth or improvement component in the A-F school rating. Options for calculating growth during transitions in assessments are available using several statistical methods.

Stakeholders were consulted through a series of meetings over several years to learn about and evaluate the use of a student-level growth model during the transition from Arkansas Benchmark Exams to the new exams that assess students' college and career readiness. Simply stated, a student growth model describes the change in student achievement over time. A student growth model becomes *value-added* when students' growth is attributed to a particular entity such as a classroom, a program, or a school, for example.

Two value-added methods were modeled and presented to stakeholders: the Student Growth Percentile (SGP) and a longitudinal student growth Value-Added Model (VAM). There are many different VAMs. The VAM referenced here simply uses a students' score history (as many years of prior achievement as are available) to predict how that student will perform. The student's actual performance is compared to his/her predicted performance. The difference is considered *value-added*.

Both models may be used across different tests because both models assess and describe student growth in a relative manner, rather than in a criterion-referenced manner (growth toward a particular standard). In addition, both models provide student level growth values that can be aggregated to various levels to communicate about typical student growth in classroom, grade, or school, for example.

These models differ in how students' relative growth is measured and described by resulting the growth score. Scores from these two models answer slightly different questions about student growth.

- SGP answers the question—How much did this particular student grow compared to other students who performed like this student in prior years (students with similar score histories)?
- The longitudinal growth VAM answers the question—How much did this student grow compared to how much we thought the student would grow based on what we know about this student's performance in prior years (the student's score history)?

The results of both models correlate very highly, meaning they lead to similar conclusions about student growth, thus leaving the choice of one model over the other to other considerations. The VAM was selected based on policy considerations such as which question about student growth is meaningful to students, parents, teachers, and other stakeholders. Another consideration was the flexibility to easily accommodate additional data about the student and other factors or entities that impact the student in the event that VAM is used for TESS, LEADS, and school accountability.

Value-Added Scores for Student Growth

VAM scores for schools growth are based on student level growth. VAM assesses “student growth” relative to the student's *individual score history and the student's expectation of growth (predicted score)*. It reflects the difference between the observed performance and the performance expected (predicted) for each student in a group of students. The computation of the students' Value-Added Scores (VAS) which is the difference score (residual) is carried out in two steps.

In the first step, a longitudinal individual growth model is run to produce a predicted score for each student. The individual growth model uses as many years of prior scores for each student to maximize the precision of the prediction (best estimate) and accounts for students having different starting points (random intercepts). In VAM, each student's prior score history acts as the control/ conditioning factor for the expectation of growth for the individual student.

In the second step the student's predicted score in 2015 is subtracted from his/her actual score for 2015 to generate the student's value-added score (Actual – Predicted = VAS). Values of VAS indicate the degree to which students did not meet, met, or exceeded expected growth in performance.

- If the student has a VAS with a positive value the student's performance exceeded expectations for the year. The student had higher than expected growth. The greater the value above zero, the more the student exceeded expectations.

- If the student has a VAS value of zero the student’s performance met expected performance. The student grew at least as much as expected.
- If the student has a VAS with a negative value the student did not meet expectations for growth in performance for the year meaning the student did not grow as much as expected in achievement. The lower the value of the VAS, the larger the degree to which the student did not grow as much as expected.

VAS for School Growth

Student VAS are averaged for each school to provide a school-level VAS. School VAS indicate, on average, the extent to which students in the school grew compared to how much we thought they would grow based on how they had achieved in the past.

- School VAS answers the question—On average, did students in this school meet, exceed, or not meet expected growth?

School VAS scores in math and ELA are averaged to produce a value that describes the average student growth for the school across both subjects. Before school VAS can be included in the A-F school rating the values must be transformed to a scale that will work within the total point scale for the rating system. The VAS were transformed using the equation below.

$$\text{School Growth Score} = (\text{school VAS} * 35) + 80.85$$

School growth scores are capped so that the minimum school growth score is 70 and the maximum school growth score is 95. This transformation places schools whose students are meeting expected growth on average (VAS ~ 0) at 80.85. Thus, for this transition year, only schools with less than expected average growth values score a C value for this component.

Four-Year Adjusted Cohort Graduation Rate

Schools with at least 25 expected graduates may earn points for their graduation rate. The All Students four-year adjusted cohort graduation rate is added to the Overall School Score for schools with at least 25 expected graduates. These rates are calculated by the ADE. The graduation rate used in accountability determinations usually lags one year behind the year of the test scores used in the accountability determinations.

Adjustments for Achievement Gaps and Graduation Gaps

A school’s numeric scores in Weighted Performance and Graduation Rate are adjusted for the size of a school’s performance and/or graduation rate gap between TAGG and non-TAGG subgroups within each school. This adjustment can result in schools earning a bonus if the gap is relatively small, a penalty if the gap is relatively large, or no change if the gap is average.

Note: Schools that do not have a TAGG or non-TAGG group of 25 or more students (i.e., do not have a within-school achievement gap) are given a zero for Gap Adjustment.

- A school’s achievement gap is the difference between the percentage of TAGG and non-TAGG students meeting or exceeding standards in math plus literacy.
- A school’s graduation rate gap is the difference between the TAGG and non-TAGG graduation rates.

Achievement Gap Adjustment

The achievement gap is measured at the school level using the percentage of students meeting or exceeding grade level standards (Levels 4 and 5 for PARCC; Levels 3 and 4 for NCSC).

$$\text{Achievement gap} = \text{NonTAGG \% Meeting or Exceeding} - \text{TAGG \% Meeting or Exceeding}$$

All schools with at least 25 tested students in each category (non-TAGG and TAGG) are then ordered on the size of each school’s gap, from those with the largest percentage point gap to those with the smallest. Schools with the largest gaps earn a penalty. Schools with the smallest gaps earn a bonus. Schools with typical gap sizes receive a zero or no adjustment.

Gap Adjustments are determined by dividing the ordered list of all schools with achievement gaps into five groups or quintiles with equal numbers of schools in each group. Based on this classification, *Gap Adjustments* for achievement are assigned. The table below provides the gap sizes and gap adjustments for 2015.

	Largest Gap	Larger Gap	Average Gap	Smaller Gap	Smallest Gap
Gap Adjustment	-6	-3	0	+3	+6
Achievement Gap Range	30.64% or greater	24.43-30.63%	19.79-24.42%	14.88-19.78%	Less than 14.88%

Round the school achievement gap to the nearest hundredth before comparing the values in the table.

Graduation Rate Gap Adjustment

The graduation rate gap is measured at the school level using the difference in graduation rates between a school's non-TAGG and TAGG student populations.

$$\text{Graduation Rate Gap} = \text{NonTAGG Graduation Rate} - \text{TAGG Graduation Rate}$$

All schools with at least 25 expected graduates in each category (non-TAGG and TAGG) are then ordered on the size of each school's gap, from those with the largest percentage point gap to those with the smallest. Schools with the largest gaps earn a penalty. Schools with the smallest gaps earn a bonus. Schools with typical gap sizes receive a zero or no adjustment.

Schools with graduation rates but with too few non-TAGG or TAGG students (< 25) to be eligible for a penalty or bonus are given a score of 0. *Gap Adjustments* for graduation rate are determined by dividing the ordered list of all schools with graduation rate gaps into five groups or quintiles with equal numbers of schools in each group. Based on this classification, *Gap Adjustments for graduation rate* are assigned. The table below provides the gap sizes and gap adjustments.

	Largest Gap	Larger Gap	Average Gap	Smaller Gap	Smallest Gap
Gap Adjustment	-6	-3	0	+3	+6
Graduation Gap Range	16.21% or greater	10.75-16.20%	6.90-10.74%	3.66-6.89%	Less than 3.66%

Round the school graduation gap to the nearest hundredth before comparing the values in the table.

Challenge Points

Schools earn extra points for current year performance when the performance of students in the school exceeds the expected performance considering the schools' level of challenge. A simple statistical analysis of covariance is used to determine schools' performance (% meeting or exceeding grade level standards) adjusting for schools' level of challenge based on the schools' poverty rate as measured by the percentage of students economically disadvantaged. The challenge points are calculated separately for math and ELA. The points are based on the difference between expected current year school performance considering the school's level of challenge and the actual current year school performance. If the difference is positive the school outperformed expectations and earns Challenge Points.

- Schools receive 3 Challenge Points for math and/or ELA if the school has a positive difference that is in the top quartile among all schools.
- Schools receive 2 Challenge Points for math and/or ELA if the school has a positive difference that is in the third quartile among all schools.

Challenge points provide schools with an opportunity to earn extra points for outperforming expectations.

Overall Score Calculation

A school's overall score is calculated by applying the gap adjustment to Weighted Performance and/or Graduation Rate and summing over all the components as indicated below. Schools without graduation rates receive a multiplier to put all schools' overall scores on a scale of 300 possible points.

Schools with graduation rate:

$$\text{Overall school score} = (\text{Weighted Perf.} + \text{Gap Adj.}) + (\text{Improvement}) + (\text{Grad Rate} + \text{Gap Adj.}) + (\text{Challenge Points in Math \&or ELA})$$

Schools without graduation rate:

$$\text{Overall school score} = (1.5)(\text{Weighted Perf.} + \text{Gap Adj.}) + (1.5)(\text{Improvement}) + (\text{Challenge Points in Math \&or ELA})$$

For schools without a graduation rate, both components of the overall score will be multiplied by 1.5 which puts the Overall School Score for these schools on the same possible points scale as schools with a graduation rate.

Applying Cut Scores to the Overall Score to Determine Letter Grades

Schools' final scores are calculated by summing its scores on each component. The sum of these scores is capped at 300 possible points. Letter grades will be assigned as follows:

A = 270 – 300 points

B = 240 – 269 points

C = 210 – 239 points

D = 180 – 209 points

F = Less Than 180 points