2014 A-F Letter Grade Accountability System

TECHNICAL MANUAL

Arizona Department of Education

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Introduction

This guide details Arizona's 2014 A-F Letter Grade Accountability System for educators, parents, and other stakeholders. The Arizona Department of Education's (ADE) mission is to serve Arizona's education community, ensuring every child has access to an excellent education. As a state, we are also committed to holding schools accountable to this goal using a fair accountability model that differentiates the performance of schools and Local Education Agencies (LEAs).

Through our A-F Letter Grade Accountability System, Arizona makes annual accountability determinations for schools and LEAs based on student academic outcomes and growth. The accountability system outlined here uses several metrics to measure student learning and growth in various types of Arizona public schools.

Historical Context

The passage of Proposition 301 by Arizona voters in November 2001 was the first step in Arizona holding schools accountable for the academic performance of their students. The ADE developed an accountability system to measure school performance based on student mastery of grade-level standards, as measured by the Arizona's Instrument to Measure Standards (AIMS) in mathematics and reading. This system, AZ LEARNS (now referred to as the AZLEARNS-Legacy), required that all public schools in Arizona receive an achievement profile under the state accountability system.

In 2010, the Arizona Legislature enacted Arizona Revised Statute §15-241 (A.R.S. §15-241) to create the **A-F Letter Grade Accountability System,** which was adopted in June 2011 by the State Board of Education[1]. The A-F Letter Grades are designed to place equal value on current year achievement and longitudinal academic growth, specifically the growth of all students as well as a school's lowest achieving students.

A.R.S. §15-241 requires that LEAs be held accountable under the A-F Letter Grade Accountability System, thus, receiving annual letter grades using the same calculation as individual schools. Arizona's Superintendent of Public Instruction, John Huppenthal, felt strongly that LEAs should be recognized for accomplishments in building their schools' capacity to provide high quality instruction to all students. In his former role as State Senator and sponsor of the original A-F Letter Grade legislation, Superintendent Huppenthal was also determined to hold LEAs accountable[1] when they failed to demonstrate success. Thus, in its

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[1]A.R.S. §15-241 requires that the ADE shall determine the criteria for each school and LEA classification using a research based methodology, which is defined as the systematic and objective application of statistical and quantitative research principles to determine a standard measurement of acceptable academic progress for each school and LEA.

implemented form, the A-F Letter Grade Accountability System also acknowledges the LEAs responsibility of ensuring the academic success of students within the schools they oversee.

The A-F Letter Grade Accountability System was first used as the sole accountability system in the 2011-2012 school year. It was also used during the 2012-2013 school year; the 2013-2014 school year is the third full year of implementation.

Overview of the A-F Letter Grade Accountability System

As outlined by A.R.S. §15-241, ADE determined the criteria for each school and LEA classification using a research-based methodology, which is defined as the systematic and objective application of statistical and quantitative research principles to determine a standard measurement of academic progress.

Adjusting for student mobility using the full academic year (FAY) indicator for students, the A-F Letter Grade accountability system includes the following:

1. Percentage of students having met or exceeded standards on the AIMS grade level assessment
2. Longitudinal indicators of relative student gain
3. Academic improvement of low performing cohorts
4. ELL language proficiency
5. Annual graduation rate and dropout rate for high schools only
6. Academic persistence of eligible students

State statute mandates that half of the letter grade determinations for schools and LEAs shall consist of academic progress. The growth measure used by the state examines the relative growth of all pupils enrolled at the school or LEA and the relative growth of 25 percent of pupils with the lowest academic performance measurement enrolled at the school or LEA.

In order to comply with statute and offer more sensitive measures of school accountability, ADE uses parallel models to evaluate the following types of schools:

1. Traditional schools
2. Alternative schools
3. Small schools
4. K-2 schools

All schools which did not receive an accountability determination under the A-F Letter Grade System received "Pending" letter grades in August.

Data Inclusion Criteria

AIMS, Stanford 10, and AZELLA data were used in the letter grade calculation after validation against the statewide Student Accountability Information System (also known as SAIS or the student detail data interchange). Using the student's SAIS identification as the unique identifier, integrity checks consider valid student enrollment and accurate student identification on test date relevant to the grade level and subject tested.

The following criteria outline specific details and descriptions of student data included in the calculation of the A-F Letter Grades for schools and LEAs.

> Full Academic Year (FAY) – Students were included in the composite and growth portions of the A-F Letter Grade models if they were enrolled within the first ten days of the school's calendar year and continuously enrolled until the first day of the testing window or test date. This includes fall test dates for students retesting on AIMS. FAY is recalculated for each test date or the first date of the testing window for all students.

> LEA FAY - Students were included in the composite and growth portions of the A-F Letter Grade models if they were enrolled within the first ten days of the LEA's calendar year and continuously enrolled in any school within that LEA until the first day of AIMS testing. Students who transfer mid-year between schools within the same LEA may be considered FAY at the district or charter holder level only.

> Alternative FAY – Students were included in the composite and growth portions of the Alternative A-F Letter Grade model if they were enrolled in a school on October 1, 2013 and continuously enrolled until the first day of the testing window or test date. This includes fall test dates for students retesting on AIMS.

> Arizona Online Instruction FAY – For students who attend a distance learning program, FAY students were defined as those who were continuously enrolled at any point in the fiscal year with at least 75% of the minutes required of a full-time student by A.R.S. §15-808; an AOI FAY student cannot enroll in another institution simultaneously. For students enrolled at an online school with alternative school status for accountability purposes, the AOI FAY definition applied (see Appendix A).

> English Language Learner (ELL) – Any student identified with an ELL need (e.g., with a less than proficient score on AZELLA in the current or prior fiscal year) and enrolled in an ELL program (e.g., SEI, Bilingual Waiver, ILLP, withdrawn by parent request after FY 2011) for one or more days in the current fiscal year.

The table below describes the grade-level and FAY requirements for each component of the A-F Letter Grade Accountability System.

Table 1. Accountability Data Inclusion

Component	FAY	Grades	Cohort (if applicable)
Growth All Students	✓	3-8, 10	2016
Growth Bottom 25	✓	3-8, 10	2016
AIMS Percent Passing	✓	3-8, 10-12	
AIMS A Percent Passing	✓	3-8, 10-12	
ELL Reclassification	✓	ALL	
ELL 95% tested		ALL	
ELL n-count		ALL	
4-year Graduation rate		12	2013
5-year Graduation rate (LEA)		12	2013
5-year Graduation rate (school)		12	2012
6-year Graduation rate		12	2011
7-year Graduation rate		12	2010
Dropout rate		7-12	
Falls Far Below reduction	✓	3 or 8	
Alternative schools 3-year pooled SGP	✓✓✓	3-8, 10	2016, 2015, 2014
Alternative schools AIMS improvement		ALL	
Percent tested		3-8, 10	2016
Stanford 10 On-target	✓	2	
Stanford 10 Percent passing	✓	2	
Persistence Rate		6-12	

Regardless of a student's special education status, the accountability system uses all verified AIMS data from students enrolled the full academic year. For students who take the AIMS A assessment and are enrolled the full academic year, these data are used in the percent passing and percent tested calculations, not the calculation of student growth percentiles.

Students with a performance level reported from the AIMS Reading and Mathematics assessments were included (i.e., performance greater than 0 on a scale of 0-4 with 4 equaling the "Exceeds the Standards" performance level) in the composite and growth portions of the model; students with an AIMS or AIMS A performance level greater than 0 were included in the composite score. The department does not include AIMS test records for students where no answer items are selected and no scale score or performance level is assigned. The following table indicates the only valid performance levels on AIMS or AIMS A at all grade levels and for all subjects.

Table 2. AIMS Performance Level

Perform Value	Achievement Level
0	None
1	Falls Far Below
2	Approaches
3	Meets
4	Exceeds

Data in the Growth Model

Valid student assessment results must meet four criteria for inclusion in the growth model:

> Only FAY students contribute student growth percentile data to the school's growth score calculation.

1. Student enrollment generates ADM in any Arizona public school (i.e., tuition payer code equal to 1 or FTE is greater than 0).

2. Student has a test record from the 2013-2014 school year.

3. Student also has a test record from the 2012-2013 school year in the same subject.

4. Each student test record assesses consecutive grades (i.e., 2013 Grade 4 Reading & 2014 Grade 5 Reading, etc.).

Only test records which can be matched to a valid student enrollment are included in the accountability system. Test records with unverifiable information such as missing SAIS ID numbers are excluded. To build the growth model, the ADE includes test records from students considered non-FAY at the time of testing. The growth model restricts the academic peer groups as much as possible to only students who are receiving a public education from an Arizona school which teaches grade level standards.

Timeline & Appeals

All data were initially extracted from the SAIS database on June 3, 2014 for use in preliminary letter grade determinations. After statewide integrity results were available on or around July 8, 2014, the data were extracted again from SAIS for use in final letter grade determinations. For data that were anticipated to be ready after this date, calculations for affected schools and LEAs were calculated during the "late receipt" period using the process described here.

From June 26, 2014 to July 3, 2014 (expedited), June 26, 2014 to August 1, 2014 (non-expedited), LEAs and schools were able to submit substantive appeals via Common Logon. Substantive appeals were reviewed by a panel of five volunteers from the field with decades of combined experience. These individuals worked in administrative and leadership roles at the district/charter holder level and represented the following:

- Charter schools
- Alternative schools
- Southern Arizona
- Northern Arizona
- Central Phoenix

Committee members evaluated each substantive appeal both individually and collectively for the expedited and non-expedited round of appeals. The non-expedited appeals contained an additional component: the schools/LEAs had the choice to come in and make their case to the committee. Once evaluations were complete for both expedited and non-expedited appeals, the committee voted to approve or reject the appeal based on a rubric approved by the Arizona State Board of Education (see Appendix B). For appeals that were approved, the committee's recommendation was used in the final letter grade for each respective school or LEA. For appeals that were denied, the calculation using the original finalized data determined the entity's letter grade.

95% Participation Rate & 1% Cap Requirement

In accordance with the U.S. Department of Education's approval of Arizona's request for flexibility from the Elementary and Secondary Education Act (ESEA), the 95% tested rule requires schools and LEAs to test 95% of students eligible to take AIMS and AIMS A. Schools testing fewer than 95% of their students have their maximum allowable letter grade limited according to the scale below:

Table 3. Percent tested letter grade caps

Percentage of Students Tested	Maximum Letter Grade Allowed	Eligible Points
95% or higher	A	200+
85-94%	B	139
75-84%	C	119
Less than 75%	D	99

The following equation describes the method used to determine the percentage of students tested on the AIMS and AIMS A assessments. Schools held accountable to the K-2 model utilize the Grade two Stanford 10 in assessing the percentage of students tested annually. For schools serving grades other than K-2 only, the percentage of students tested is based on Grade 3 through Grade 8 and Cohort 2016. For example, a school that serves Grades 6 through 12 would be held accountable for testing all students enrolled in Grades 6, 7, 8, and all students enrolled in the tested high school cohort (students

enrolled in their second year of high school). The majority of the students in the tested high school cohort are typically described as Grade 10 students; Cohort 2016 served as the tested high school cohort for fiscal year 2014.

$$Percent\ Tested = \frac{.50\ (Number\ of\ students\ tested\ in\ Reading + Number\ of\ students\ tested\ in\ Mathematics)}{.50\ (Number\ of\ student\ enrolled\ on\ Reading\ test\ date + Number\ of\ students\ enrolled\ on\ Mathematics\ test\ date)}$$

In addition to the 95% tested rule, federal mandates require that no more than 1% of an LEA's percentage of students passing the statewide assessment come from the state's alternative assessment for students with significant cognitive disabilities. If AIMS A data compose more than 1% of the LEAs percentage of students passing the statewide assessment and there is no approved waiver of the 1% cap for the LEA, the performance level of those students exceeding 1% are recoded as non-passing.

Point Scale

All schools and LEAs, with the exception of alternative schools and LEAs consisting of only alternative schools, were assigned letter grades "A" through "D" using the point bands below. Although 15% of the elements used to letter grade traditional high school and elementary differ due to the addition of graduation rate, the State Board of Education made the decision to maintain the 2013 letter grading criteria for all traditional schools in 2014 as well. The total points earned by a school or LEA were compared to the classification scale as well as the test participation rate.

Table 4. A-F Letter Grade Point Scale

Letter Grade	Total Points
A	140 – 200
B	120 – 139
C	100 – 119
D	0 – 99

The alternative school letter grading scale was set for the first time in fiscal year 2014. This is in contrast to prior years when alternative school letter grades were based on a distribution of other alternative schools. Schools under the Alternative Model used the non-distribution based scale described in Table 5).

Table 5. A-F Alternative Letter Grade Point Scale

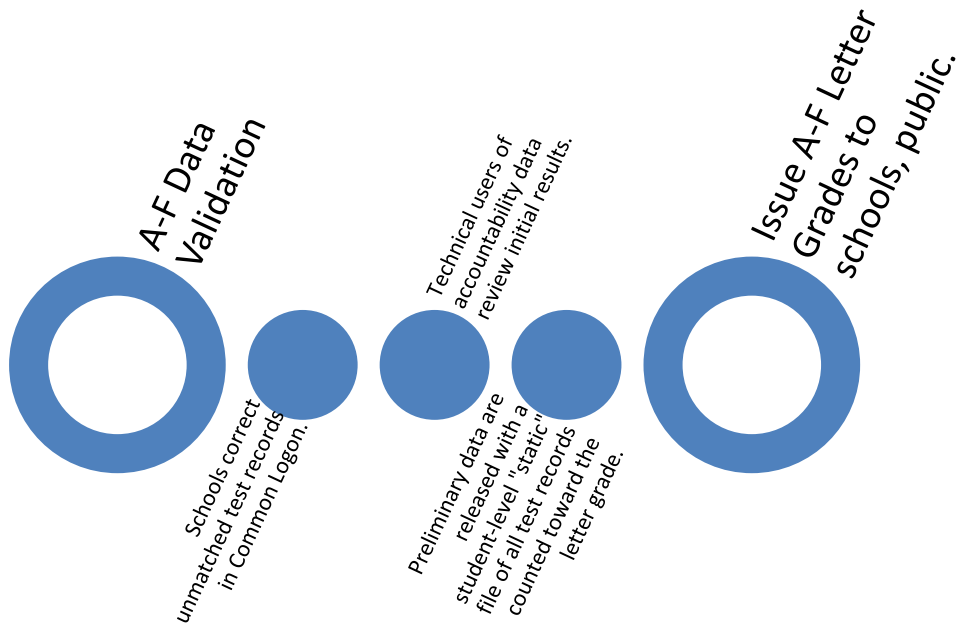| Letter Grade	Total Points
A-ALT	167+
B-ALT	132-166
C-ALT	97-131
D-ALT	Up to 96

The ADE School Improvement Division reviewed schools that received three years of consecutive "D" or "D-ALT" letter grades in order to verify the assignment of the "F" letter grade except in cases where a school successfully appealed the "F" letter grade via the A-F Substantive Appeals Committee. This committee evaluated all schools which submitted a substantive appeal of the assigned letter grade. Letter grades of "F" were assigned to schools based on three years of consecutive "D" or "D-ALT" letter grades after the results of the appeals process were finalized. Schools that received three years of consecutive "D" or "D-ALT" letter grades were not required to file an appeal; however, all schools which received the final "F" letter grade were reviewed by ADE School Improvement Division per statutory requirement. Schools were notified of their right to appeal upon initial issuance of the 2014 "D" or "D-ALT" letter grade.

Validation Process

The Department used a variety of methods to validate A-F letter grades at various points in the process. In order to test the software and programming used to generate SGP ranks for every eligible student in the state, the 2014 programming was tested against the 2013 results. The growth model used in the 2013 letter grades was evaluated and certified by Dr. Damien Betebenner at the request of the Department. The program used to generate 2014 SGP ranks for students matched the 2013 growth model results when applied to 2013 data. In 2014, two separate Directors of Research and Assessment from two different Arizona LEAs also reviewed and validated the SGP data assigned to their particular students prior to the aggregation for use in the A-F letter grade system. At the request of the Department, these individuals separately used a combination of statistical methods and assessment data to review the Department's initial calculation of SGP. While these individuals were not privy to the statewide data used to build the growth model, the Accountability unit provided scale scores used as well as the SGP data for their respective students. In addition to external review, another ADE psychometrician outside of the Accountability section duplicated the growth model results using the same software and datasets.

In order to ensure that students were accurately being included in or excluded from accountability determinations, several volunteers from LEAs reviewed their respective student data prior to the issuance of preliminary letter grades. These individuals verified enrollment data accurately captured FAY status based on alternative FAY, ELL FAY, district FAY, and traditional school FAY.

This specialized group of technical users also reviewed their respective "static" data files prior to any public release. Rather than emphasizing or reviewing points toward an A-F letter grade, the group was asked to review the file for any systemic missing data. That is, were all expected test records for all grade levels and subjects captured in the A-F data? ELL data (AZELLA results, enrollment, etc.) were reviewed by a small group of ELL practitioners with copious amounts of experience managing these types of data.

A-F Data Validation

Schools correct unmatched test records in Common Logon.

Technical users of accountability data review initial results.

Preliminary data are released with a student-level "static" file of all test records counted toward the letter grade.

Issue A-F Letter Grades to schools, public.

Figure 1. Validation process

Any and all concerns expressed by the technical users group were investigated and resolved by the Department prior to the release of preliminary data to all schools and districts in the state. Over a month prior to the August release of final letter grades to schools and the public, schools and districts received a student-level file which enumerated each test record and its inclusion (FAY status) in the growth, proficiency, and ELL components of the A-F letter grade. Schools were asked to review these data which underlie the total points for their accountability determinations in order to ensure the accuracy of the final letter grade which was issued based on any changes made or not made to the preliminary data.

A-F Letter Grade Models

Four distinct models composed Arizona's A-F Letter Grade Accountability System in 2014. Each model aims to fairly and accurately depict a school's accountability determination in a manner which complies with state statute, State Board Rule, as well as other accountability requirements. The 2014 letter grades for traditional high schools and elementary schools differed in the components used to arrive at the total points possible (see Figure2).

2014 Traditional Model
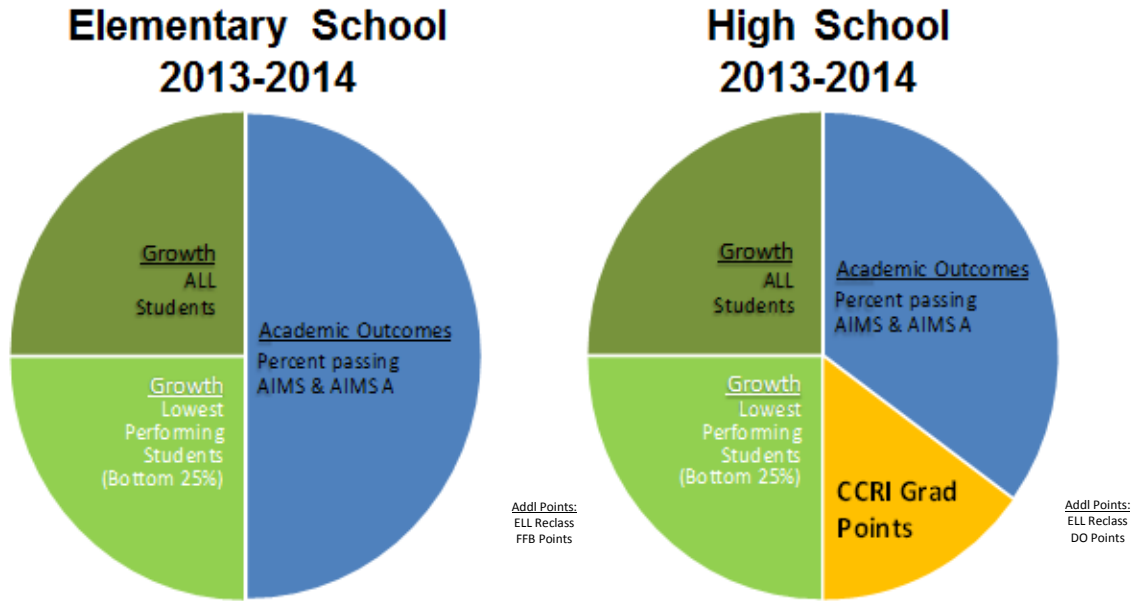
(Growth Score   +   Composite Score = Total Points)
(100 points possible + 100 points possible + 3 + 3 = 200+ points possible)

Figure 2. Components of the Traditional Model

Used by a majority of elementary and secondary high schools in the state, the traditional model consists of two components: a growth score and a composite score. The calculation of the traditional A-F Letter Grade also applies to the letter grades assigned for a LEA or charter holder; all LEAs in the state with multiple sites, regardless of unified or union status, received a letter grade based on the traditional calculation used for elementary schools. Both the growth score and percentage of students passing the AIMS and AIMS A assessments are weighted equally under the traditional calculation of the A-F Letter Grades for elementary schools. The high school composite score includes accountability for graduation rates of the 4-, 5-, 6-, and 7-year cohorts as well. The use of growth modeling described here also applies to the operationalization of SGP in the alternative model discussed later.

Growth Model

The purpose of the growth component is to recognize the academic growth a student has made in the past year, even if he/she has not yet reached grade-level proficiency. In June 2011, the Arizona State Board of Education approved for use in the A-F Letter Grades a student-level growth measure – Student Growth Percentiles (SGPs) – that describes each student's academic gains relative to their academic peers with the same achievement history. State statute mandates that the selected growth model measures even the lowest achieving students and the extent to which they grow academically from one year to the next.

An SGP describes how a "typical" student's current-year test score is compared with the current-year test scores of those students with the exact same prior test scores—his/her academic peers. In this sense, an SGP is a "norm-referenced quantification" (Betebenner, 2011, p.3) of student academic growth. Comparison with academic peers is accomplished by employing quantile regression that relates the prior scores of each grade by subject cohort with their current-year scores. The result is the current-year score of each individual student in the state to be put in a matrix ranging from the 1st percentile to the 99th percentile as if each student were compared with his/her academic peers. Each student is compared to his/her actual and conceptual academic peers. In the event a student is without actual academic peers based on their individual data, the individual student is compared to his/her "conceptual" academic peers only. The use of this particular type of normed growth measure ensures that very low and/or high performing students can receive high growth scores relative to their peers with the same academic achievement history. The growth model includes only academic achievement data; Arizona's growth model does not control for student demographic information or No Child Left Behind subgroup membership.
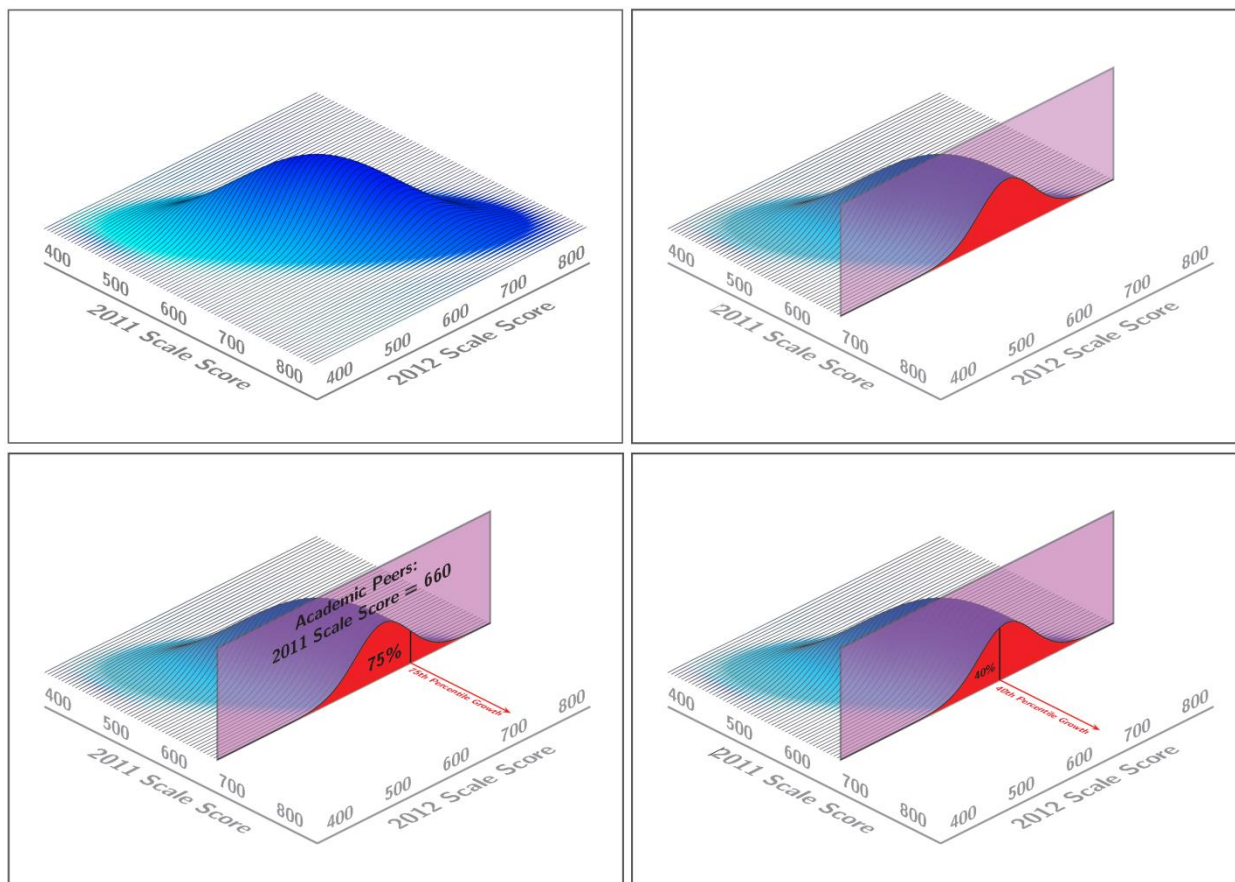
Figure 3. Conceptual illustration of the current year growth percentile based on prior and current year test performance (Betebenner, 2011)

In 2013, the Grade 2 and Grade 9 Stanford 10 norm-referenced assessment was used to calculate growth in Grades 3 and 10 when available. Growth from Grade 8 to Grade 9 was not assessed; this means that students in Grades 2 and 9 do not receive a SGP rank score. Grade 2 was the first time Arizona students were given a statewide standardized assessment; therefore, the Grade 3 AIMS is the first possible opportunity on which to assess growth for a student. Students who transfer from out of state and students who have never taken a statewide standardized assessment in Arizona will only receive a growth score after the administration of their second assessment. Students must have two consecutive year scores from two consecutive grade levels in order to receive a SGP rank score.

Both the growth of all FAY students and FAY students in the bottom 25% based on prior year scores comprise the school's growth score. Every FAY student for whom a student growth percentile (SGP) can be determined is considered in the growth of all students at a school. Students who retake the same grade level AIMS assessment for two consecutive years are not assigned a growth score; this includes Grade 11 and Grade 12 students who reassess on AIMS in order to graduate or increase their score. The growth model does not compute an SGP for any student who is missing a prior year assessment (AIMS or Stanford 10) even if a student has other test history; an assessment for the year prior is required. When available, up to three years of test history were used in the determination of a student's current

year SGP. The number of years was reduced from five years after considerable research indicated diminished returns by including more than three years and more than two assessment types. If the student assesses anywhere in the state using their unique SAIS identification number, these assessments can be linked longitudinally regardless of a new school of attendance. The growth model begins with all Arizona public school students, but academic peer groups are refined based on grade level, subject, and test history (see Figure3). Test history refers to the number of tests or data points available for each student as well as a comparison of scale scores – not performance levels.

Figure 4. Refining statewide data to establish academic peer groups

Students enrolled in Arizona public schools

Students in the same grade level

Students tested on same subject

Students with the same number of prior year tests

Students with the same academic performance history
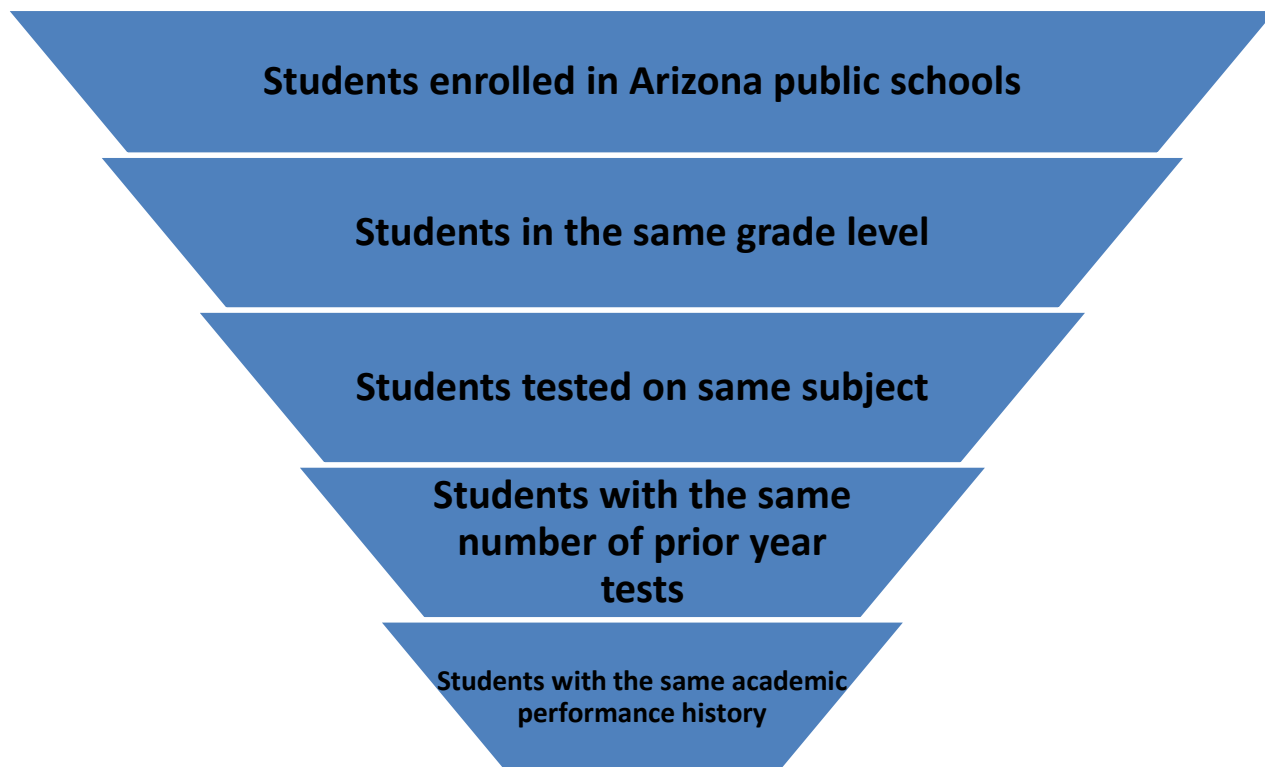
In order to calculate the school's growth score for all students, use the following equation:

$$\text{All Students Growth Score} = (\text{Median growth in Reading})(.50) + (\text{Median growth in Mathematics})(.50)$$

In order to calculate the growth score for the Bottom 25%, prior year test scores were used to identify students whose prior performance was in the bottom 25% of all students for the current year. In other words, for students enrolled at a school in fiscal year 2014, their 2013 performance was compared to peers in the 2013-2014 school year in order to identify the bottom quartile for the school's 2013 accountability determination. For these students, their 2014 growth scores were compiled and the medians for both Reading and Mathematics were averaged for the typical growth of the Bottom 25% subgroup. Because of the point scales used in each AIMS grade level assessment, all scale scores are transformed in order to rank the scores on a common scale compared to proficiency across grade levels.

For AIMS scale scores, the following equation describes the adjusted difference scores used to rank order students in Grades 4-8 where prior year pass score is based on Table 6, and AIMS numeric performance levels are described in Table 4 below.

$$\text{Adjusted Difference Score} = (\text{Prior year scale score} - \text{Prior year pass score}) + (\text{Prior year AIMS Performance Level})(1000)$$

Table 6. AIMS Mathematics and Reading grade level pass scores

Grade	Reading Pass Score	Mathematics Pass Score
3	431	347
4	450	366
5	468	381
6	478	398
7	489	411

After all students in grades 4-8 have an adjusted difference score, the adjusted difference scores were rank ordered. Students whose adjusted difference scores equaled or fell below the 25th percentile qualified for the bottom 25% subgroup; more than 25% of students may make up the bottom quartile subgroup if multiple students share a score which equals or falls below the 25th percentile.

For grades 3 and 10, the prior year Stanford 10 percentile rank scores are rank ordered and the 25% lowest normal curve equivalent scores are also identified for the bottom 25%. Therefore, an elementary school serving grades K-8 will have a portion of their bottom 25% subgroup composed of students in grades 4-8; however, about one-fourth of the grade 3 students will be considered as being in the bottom quartile because of the separate comparison group necessitated by the Stanford 10. For a high school or LEA serving only grades 9-12, only students whose prior year test score is from the Stanford 10 would be considered as eligible for membership in the Bottom 25% subgroup in grade 10. For a K-12 school or LEA, the bottom 25% subgroup would be composed of 25% of the students in grade 3, 25% of the students in grades 4-8, and 25% of the students in grade 10 because of the parallel processes used to identify the lowest quartile within AIMS and Stanford 10 at grades 2 and 9.

Bottom 25% membership is based on Reading or Mathematics separately. That is, a student may have scored in the bottom 25% of students based on either their AIMS Reading, AIMS Mathematics, or both assessments.

$$\text{Bottom 25\% Growth Score} = (\text{BQ students Median SGP Reading})(.50) + (\text{BQ students median SGP Mathematics})(.50)$$

For a total growth score, the median growth of all students and the growth of the bottom 25% are averaged to represent half of the total points in the A-F letter grade. One additional point is added to the total growth score because the growth percentile is on a scale of 1 to 99 only; this additional point allows all schools the opportunity for up to 100 growth points.

Total Growth Points   =   1+   (All Students Growth Score)(.50)   +   (Bottom 25% Growth Score)(.50)

In the event a school has no BOTTOM 25% on which a growth score can be calculated, the growth score of ALL STUDENTS is used as the sole growth score. A school may not have a BOTTOM 25% growth score if less than 4 students make up the ALL STUDENTS subgroup or students with all qualifying growth scores are non-FAY.

In summation, a growth percentile is derived for every student in the state with a prior year and current year test score using all test history available for each student. Only those students enrolled the full academic year are used in the growth score for a school or LEA; however, all valid test scores are used to compose the growth model for the population of Arizona students in tested grades. After the growth model is established and each student is assigned a growth score, the following steps are used to determine a school and/or LEA's growth score.

1. Calculate growth score for all students.
   a) Determine median growth percentile in Reading across all grades for all FAY students.
   b) Determine median growth percentile in Mathematics across all grades for all FAY students.
   c) Average median growth for Reading and Mathematics for all FAY students.
2. Calculate growth score for Bottom 25% subgroup.
   a) Determine median growth percentile in Reading across all grades for all FAY students in the Bottom 25% subgroup.
   b) Determine median growth percentile in Mathematics across all grades for all FAY students in the Bottom 25% subgroup.
   c) Average median growth for Reading and Mathematics for all FAY students in the Bottom 25% subgroup.
3. Average growth scores for all students and Bottom 25% subgroup.
4. Add one additional point to total growth score.

Composite Score
The composite score is composed of several measures that represent academic achievement; however, the primary component (see Table 7) is the percentage of students passing AIMS and AIMS A in Grades 3-8 and high school. The Stanford 10 in Grades 2 and 9 are not considered in any aspect of the composite score. Assessment results for students enrolled in Grade 9 who take the high school AIMS or AIMS A are not included in the composite score since the high school AIMS or AIMS A measures proficiency after mastery of the second year of high school standards.

Table 7. Components of the composite score

Component	Points Possible	Applicable Grades	Eligibility	Description
AIMS & AIMS A proficiency	0 – 100	3-8, 10-12	All Schools	Percentage of students who Meet or Exceed standards
CCRI Graduation Rate Points	0-30	Cohort 2010 through Cohort 2013	High schools only	4-, 5-, 6-, and 7-year graduation rates
ELL Additional Points	0 or 3	K-12	All schools	23% of FAY ELL students reclassified proficient
FFB Rate Reduction Additional Points	0 or 3	Grade 3 Reading, Grade 8 Math	All elementary schools	Reduction of annual falls far below rate
Dropout Rate Reduction Additional Points	0 or 3	9-12	High schools only	Average annual reduction of dropout rate
Graduation Rate Additional Points	0 or 3	12	LEAs serving up to Grade 12	Average annual increase of 5-year graduation rate

High schools were eligible for up to 106 composite points because of ELL additional points and dropout rate reduction; schools serving only elementary grades were eligible for up to 106 composite points including ELL additional points and Falls Far Below reduction. However, elementary schools and high schools within the traditional school model were held to the same point scale (see Table 3).

AIMS & AIMS A proficiency

All FAY students who tested on AIMS and AIMS A Reading and Mathematics subject tests were included in order to determine total points for the percentage of students proficient. Students whose achievement level was "Meets" or "Exceeds" standards within each subject and grade level were counted as passing. Only Reading and Mathematics results were used in 2014 A-F Letter Grade accountability; AIMS Science and Writing results were not included in any component of the 2014 A-F Letter Grade calculation.

The percentage of students passing AIMS and AIMS A is calculated across grades for each subject. A school or LEA may earn up to 100 points for the percentage of students passing AIMS and AIMS A. The equation below characterizes the points awarded for the percentage of students passing Reading and Mathematics school wide.

$$
\text{Percent Passing Points} = 100 \times \frac{\text{(No. of FAY students passing AIMS or AIMS A Mathematics + No. of FAY students passing AIMS or AIMS A Reading)}}{\text{(No. of FAY students tested on AIMS or AIMS A Mathematics + No. of FAY students tested on AIMS or AIMS A Reading)}}
$$

While Grades 3-8 were considered in the calculation of passing rates at the elementary school level, high school students who retook the AIMS assessment may also have had their scores included in the school's percent passing calculation. For those students enrolled in Grades 11-12 who take an AIMS assessment twice in the same fiscal year, only the better score is retained. High school students who retest in the fall but not spring would also have their fall score included in the calculation of a school's percentage of students passing the AIMS. Students may be considered FAY for a fall AIMS test date; students must still meet the FAY requirements based on the type of school in which they are enrolled (e.g., first 10 days, October 1, or minimum minutes) up until the fall test date. The accountability determination excludes all non-FAY students who test on either Fall or Spring test dates.

Table 8. Example: Student-level assessment

Grade	Public SAIS ID	Subject	Type	Perform	FAY
3	00000001	Reading	AIMS	1	1
3	00000001	Math	AIMS	2	1
4	00000002	Reading	AIMS A	3	1
4	00000002	Math	AIMS A	4	1
4	00000003	Reading	AIMS	4	1
4	00000003	Math	AIMS	4	1
5	00000004	Reading	AIMS	3	1
5	00000004	Math	AIMS	3	1
6	00000005	Reading	AIMS	3	1
6	00000005	Math	AIMS	2	1
7	00000006	Reading	AIMS A	4	1
7	00000006	Math	AIMS A	3	1
7	00000007	Reading	AIMS	1	1
7	00000007	Math	AIMS	1	1
7	00000008	Reading	AIMS	2	1
7	00000008	Math	AIMS	2	1
8	00000009	Reading	AIMS A	4	1
8	00000009	Math	AIMS A	4	1
8	00000010	Reading	AIMS	3	1
8	00000010	Math	AIMS	3	1
8	00000011	Reading	AIMS	3	1
8	00000011	Math	AIMS	1	1
12	00000012	Math	AIMS	2	1
12	00000012	Math	AIMS	4	1

Students who re-test on AIMS (i.e., Grade 12 students) in the same fiscal year on one or both subjects will only retain the better score.

Table 9. Example: School-level percent passing points calculation

$$\text{Percent Passing Points} \quad = \quad 100 \quad * \quad \frac{7+8}{11+12} \quad = 61$$

Again, all Grade 11 and 12 students who retake the AIMS Reading and Mathematics tests will have their highest, single score in that fiscal year included in the percent passing calculation. Students in Grades 3-8 are not permitted to retake the same assessment in one fiscal year. High school students who choose to retake an assessment and are considered FAY for that test date will have their current year performance included regardless of whether they previously scored proficient.

The 2013-2014 AIMS scale score ranges and associated performance bands differ by subject and grade level (see Appendix C).

College & Career Readiness Index – Graduation Rate

In Spring 2013, the State Board of Education approved Arizona's CCRI which allotted 30 out of 200 points for a graduation component (see Table 10). The postsecondary indicators unrelated to graduation rate were not implemented in the 2013-2014 school year. The CCRI Graduation requirements apply to schools only – not LEAs. In the event a school is missing an integral cohort for a CCRI graduation rate score, the school would be eligible for the graduation rate additional points allotted to LEAs.

Table 10. CCRI Graduation Rate Accountability

College & Career Readiness Index			
Cohort	**Weight**	**Item**	**Points possible**
2013	**10%**	Annual 4-year grad rate	20
2012	**5%**	Annual 5-year grad rate	10
2011		Annual 6-year grad rate	2
2010		Annual 7-year grad rate	1
TOTAL POINTS (Cannot exceed 30)			Up to 30

Additional Points

ELL Reclassification

The use of ELL reclassification additional points are meant to recognize the progress schools make with their students' English language acquisition in addition to grade-level standards in Mathematics and Reading.

A school/LEA can earn three additional points for ELL reclassification above and beyond the possible 100 points from the AIMS percent passing if the school/LEA meets three criteria. The criteria were based on guidance from the Family Educational Rights and Privacy Act (FERPA), state law and ELL impact data. First, a school/LEA must have **at least 10 ELL students** enrolled in an ELL program for one or more days during the current fiscal year**.** An ELL student is any student with an ELL need in the current or prior fiscal year who is enrolled in an ELL program for one or more days in the current fiscal year. ELL need is defined as any student with a less than proficient score on AZELLA in the current or prior fiscal year. ELL program enrollment is defined as any student enrolled in an ELL program (e.g., SEI, Bilingual Waiver, ILLP, or those students whose parents withdrew them from ELL services in FY 2011, 2012, 2013, or 2014) for one or more days in the current fiscal year. In order to receive the 3 ELL Points toward their A-F Letter Grade, schools must have met three criteria:

1. Minimum *N*-count of 10
2. Test at least 95% of FAY and Non-FAY ELL students, and

3. Reclassify at least 23% of FAY ELL students.

The following is a detailed description of the ELL criteria for school year 2013-2014.

Criterion 1: ELL *N*-count

ELL *N*-count was evaluated based on all students who had an ELL need based on a qualifying AZELLA transaction. Students with an ELL need fall into three categories: students with an ELL program enrollment for 1 or more days in FY 2014, students withdrawn from ELL services by parent request in FY 2011, 2012, 2013, or 2014, and students withdrawn from ELL services due to SPED criteria in FY 2014.

Criterion 2: 95% tested

Students included in this calculation include students with an ELL need in the current or prior FY regardless of ELL program participation (e.g., SEI, Bilingual Waiver, ILLP, Withdrawn by parent request in FY 2011 or later, and those students not designated to any of these groups/categories). Fluent English proficient (FEP) students as well as students with an ELL service program withdrawal code of 'Withdrawn due to SPED criteria' and not re-enrolled in an ELL program, are NOT included in the 95% tested criterion. The following equation describes the AZELLA 95% tested criterion which was used in calculating 2014 A-F Letter Grades ELL Points:

$$\text{Percentage of ELL students tested} = 100 * \frac{\text{No. of ELL students tested on the Spring 2014 AZELLA}}{\text{No. of students with an ELL need enrolled on the first day of the spring AZELLA, including parent withdrawals}}$$

Criterion 3: Reclassification rate

Included in this calculation are students who meet the definition of full academic year (FAY) and have an ELL need. The following equation describes the 23% reclassification rate criterion which was used in calculating 2014 A-F Letter Grades ELL Points:

$$\text{Percentage of students reclassified} = 100 * \frac{\text{No. of FAY ELL students with an Overall Proficiency Level of } \textbf{Proficient} \text{ on the Spring 2014 AZELLA}}{\text{No. of FAY ELL students with an Overall Proficiency Level on the Spring 2014 AZELLA}}$$

Graduation Rate – 3 Additional Points (LEAs and schools ineligible for CCRI)

To promote high graduation rates for all students enrolled in Arizona LEAs, the accountability system recognizes whether the majority of students in the LEA matriculate within five years of entering high

school. LEAs (and schools ineligible for CCRI) can receive three additional points for either growing their five-year graduation rate or for maintaining a high five-year graduation rate.

All LEAs with a total of at least 15 students enrolled in the last three graduating cohort years were eligible for graduation rate additional points. The fiscal year 2014 criteria for receiving graduation rate additional points mirror the criteria used in 2013 and 2012. LEAs received 3 points added to the composite score by meeting any one of the criteria described in Table 9.

Table 11. Graduation Rate Additional Points Criteria

Graduation Rate Criteria	Target	Points Earned
Average of 5-Year Grad Rate for 3 years	≥ 90%	3
Current Year 5-Year Grad Rate ≥ 74%	1% average annual increase	3
Current Year 5-Year Grad Rate < 74%	2% average annual increase	3

Because the graduation rate criteria evaluate the number of students who graduate within five years of entering high school, this metric includes those students who graduate within four years as well. FAY status is not considered in the calculation of graduation rate. The graduation rate was determined by adjusting the cohort for student mobility as seen below:

$$\text{Single Year Graduation Rate} = \frac{\textbf{No. in cohort who graduated within 5 years}}{\textbf{Original cohort + Transfers in - (Transfers out + Students Deceased)}}$$

To calculate the LEA's average of the five-year graduation rate over three years, students who graduated in each cohort year were summed and divided by the total number of students over three years. For the three additional points possible for LEAs, the five-year graduates were members of Cohort 2013; all graduation codes for Cohort 2013 entered into SAIS by July 1, 2014 were used in the graduation rate calculation. Cohort 2013 was also used in the four-year graduation rate by evaluating all students in the cohort who graduated by August 31, 2013. In fiscal year 2013, the 2012 cohort had been used for the same calculation; therefore, the cohort year was advanced in fiscal year 2014 in order to be consistent with prior years and to ensure LEAs were not held accountable for the exact same group of students on the exact same measure for two consecutive years.

Specifically, for 2014, the cohort calculation of the three year average is described below:

$$\text{Three year average of 5-year graduates} = \frac{\textbf{No. of 2013 cohort grads + No. of 2012 cohort grads + No. of 2011 cohort grads}}{\textbf{(2013 original cohort + Transfers in - Transfers out) + (2012 original cohort + Transfers in - Transfers out) + (2011 original cohort + Transfers in - Transfers out)}}$$

To award the LEA three additional points based on the average annual increase in the five-year graduation rate, two questions had to be answered:

1. What is the Cohort 2013 graduation rate as of July 1, 2014?
2. Does the average annual change exceed 1 or 2%?

The baseline year defaults to 2006; this is the baseline for most schools and LEAs in the state. For schools and LEAs that opened after 2006 or did not serve a graduating class in 2006, the first year the school served a graduating class was used. In order to calculate the average annual change in the graduation rate in 2014, the following equation was used:

For a LEA that uses 2006 as a baseline, the following information is an example of the data used to evaluate the graduation rate points based on the average annual change:

1. Fiscal year 2006, grad rate = 87%
2. Fiscal year 2007, grad rate = 91%
3. Fiscal year 2008, grad rate = 91%
4. Fiscal year 2009, grad rate = 92%
5. Fiscal year 2010, grad rate = 94%
6. Fiscal year 2011, grad rate = 93%
7. Fiscal year 2012, grad rate = 93%
8. Fiscal year 2013, grad rate = 94%

$$\text{Average annual change} = \frac{\text{(FY2013 5-year grad rate} - \text{FY2012 5-year grad rate)} + \text{(FY2012 5-year grad rate} - \text{FY2011 5-year grad rate)} + \dots + \text{(FY2007 5-year grad rate} - \text{FY2006 year 5-year grad rate)}}{2013 - 2006}$$

This information yields an average annual change of 1%. In this example, the LEA is required to maintain an average annual change of at least 1%. The LEA would be eligible to receive the graduation rate additional points based on the data described above.

Dropout Rate Reduction Additional Points

The use of the dropout rate reduction additional points in the A-F Letter Grade Accountability System compares to the use of graduation rate additional points in that it evaluates an average annual change in order to incentivize high schools for positive student outcomes. The dropout rate is a measure of how many students drop out of a school during the 2013-2014 school year. The 2014 criteria for receiving dropout rate additional points also mirror the criteria from 2012 and 2013. Both high schools and LEAs can earn 3 points, above and beyond the possible 100 from the AIMS percent passing by meeting one of the three criteria described in Table 12.

Table 12. Dropout rate reduction additional points criteria

Dropout Rate Criteria	Target	Points possible
3-Year Average Dropout Rate	≤ 6%	3
Current Year Dropout Rate ≤ 9%	1% average annual decrease	3
Current Year Dropout Rate > 9%	2% average annual decrease	3

To calculate a high school or LEA's average dropout rate over three years, students who were withdrawn from the high school at any grade and were never re-enrolled in a known school were counted as dropouts. For 2014, all exit codes for students enrolled in high school grades entered into SAIS by July 1, 2013 were used in the dropout rate calculation. The single year rate is calculated by dividing the total number of students enrolled within the fiscal year into the number of students who withdrew without a qualifying withdrawal code. Specifically, for 2013, the dropout rate average over three years is described by the following equation:

$$\text{Three-year Dropout Rate} = \frac{\text{\# students who dropped out in 2014, 2013, or 2012}}{\text{\# students enrolled during the 2014, 2013, or 2012 school year}}$$

Similar to the calculation of graduation rate additional points, the baseline year defaults to 2006 and the 2006 dropout rate unless the school was not open in 2006, in which case the rate of the first year in operation is used. To receive points based on the annual average change in the dropout rate, a school or LEA must decrease their dropout rate by 1 to 2% depending on their current year rate. To award a school three additional points based on the average annual decrease in the dropout rate, two questions had to be answered:

1. What is the dropout rate for fiscal year 2014 as of July 1, 2014?
2. Does the average annual reduction exceed the 1 or 2% requirement?

In order to calculate the average annual change in the dropout rate, the following equation was used:

$$\text{Average annual change} = \frac{\text{(FY2014 dropout rate – FY 2013 dropout rate) + (FY2013 dropout rate – FY2012 dropout rate) +…+ (FY2007 dropout rate – FY2006 dropout rate)}}{2014 - 2006}$$

For a school that uses 2006 as a baseline, the following information is an example of the data used to evaluate the dropout rate points based on the average annual change:

- Fiscal year 2006, school-wide dropout rate = 2%
- Fiscal year 2007, school-wide dropout rate = 11%
- Fiscal year 2008, school-wide dropout rate = 2%
- Fiscal year 2009, school-wide dropout rate = 3%
- Fiscal year 2010, school-wide dropout rate = 3%
- Fiscal year 2011, school-wide dropout rate = 2%

- Fiscal year 2012, school-wide dropout rate = 1%
- Fiscal year 2013, school-wide dropout rate = 2%
- Fiscal year 2014, school-wide dropout rate = 0%

This information yields an average annual change of -0.25%. In this example, the school is required to maintain an average annual change of at least -1%. The school would NOT be eligible to receive the dropout rate reduction additional points based on the data described above.

Falls Far Below Reduction Additional Points

In fiscal year 2013, the Arizona State Board of Education approved additional points in order to recognize schools that maintain a low "falls far below" (FFB) rate in two particular grades and subjects, Grade 3 Reading and Grade 8 Mathematics. Only schools that were not eligible for dropout and graduation rate points were eligible to receive FFB points. That is, any school or LEA that serves Grades K-8 in addition to 9-12 would only be eligible to receive graduation and dropout rate points; all schools and LEAs serving any configuration that includes Grade 3 or Grade 8 and does not include Grades 9-12 were eligible for FFB points.

In order to receive three additional points, schools and LEAs must have met any one of the following criteria:

Table 13. Criteria to receive three additional points for FBB reduction

Grade 3 Reading Criteria	Target	Points Earned
3-Year Average FFB Rate	≤ 3%	3
Current Year FFB Rate ≤ 5%	1% annual decrease	3
Current Year FFB Rate > 5%	2% annual decrease	3
Grade 8 Math Criteria	Target	Points Earned
3-Year Average FFB Rate	≤ 25%	3
Current Year FFB Rate ≤ 30%	1% annual decrease	3
Current Year FFB Rate > 30%	2% annual decrease	3

To calculate the average percentage of students falling in the FFB category over the last three years, the following equation was used:

$$\text{Three-year FFB Rate} = \frac{\text{No. of FAY Grade 3 AIMS Reading where performance level =1 or No. of FAY Grade 8 AIMS Mathematics where performance level =1 in 2014, 2013, or 2012}}{\text{No. of FAY Grade 3 AIMS Reading where performance level > 0 or No. of FAY Grade 8 AIMS Mathematics where performance level > 0 in 2014, 2013, or 2012}}$$

To award a school three additional points based on the annual decrease in the FFB rate, three questions had to be answered:

1. What is the subject/grade specific FFB rate for fiscal year 2014 as of July 2, 2014?
2. What is the subject/grade specific FFB rate for the prior fiscal year?
3. Does the annual reduction exceed the 1 or 2% requirement?

To calculate the annual change in the FFB rate, the single year rate is calculated for both the current and prior year separately using the equation above. Then the following equation measured the difference in annual change.

Annual change =   Current year FFB rate – Prior year FFB rate

Schools that served both grades could receive points based on either their Grade 3 Reading FFB rate or their Grade 8 Mathematics FFB rate but not both. Each subject's FFB rate was calculated separately and schools would be awarded only 0 or 3 points.

To reiterate, only schools serving up to Grade 3 and/or Grade 8 and evaluated under the traditional model were eligible for FFB points. Elementary schools within a unified high school district may be eligible for FFB points; however, the LEA would be evaluated on graduation and dropout rate requirements only.

Small Schools (Three year pooled data)

Consistent with fiscal year 2013, all schools with less than 30 test records from FAY students required the use of pooled data; schools with greater than 30 test records from FAY students were evaluated on current year data alone using the traditional model previously described.

The 2013 model used to evaluate small schools mirrors the traditional model. Every aspect of the traditional model is pooled over a three year period in order to increase the number of observations for stability in the descriptive statistics used within the small schools model. That is, a small school's letter grade was dependent on student performance in 2013, 2012 and 2011. The pooling method also changed from 2012 to 2013. For 2013, the pooled data included only FAY students in each of the years regardless of whether there was current year enrollment. Specifically, test data from FAY students in 2011, test data from FAY students in 2012, and test data from FAY students in 2013 contributed data to the school or LEA's letter grade determination. For all three years, small schools accountability only included FAY students regardless of whether the students enrolled in 2011 and 2012 remained enrolled in 2013 (See Figure 4).
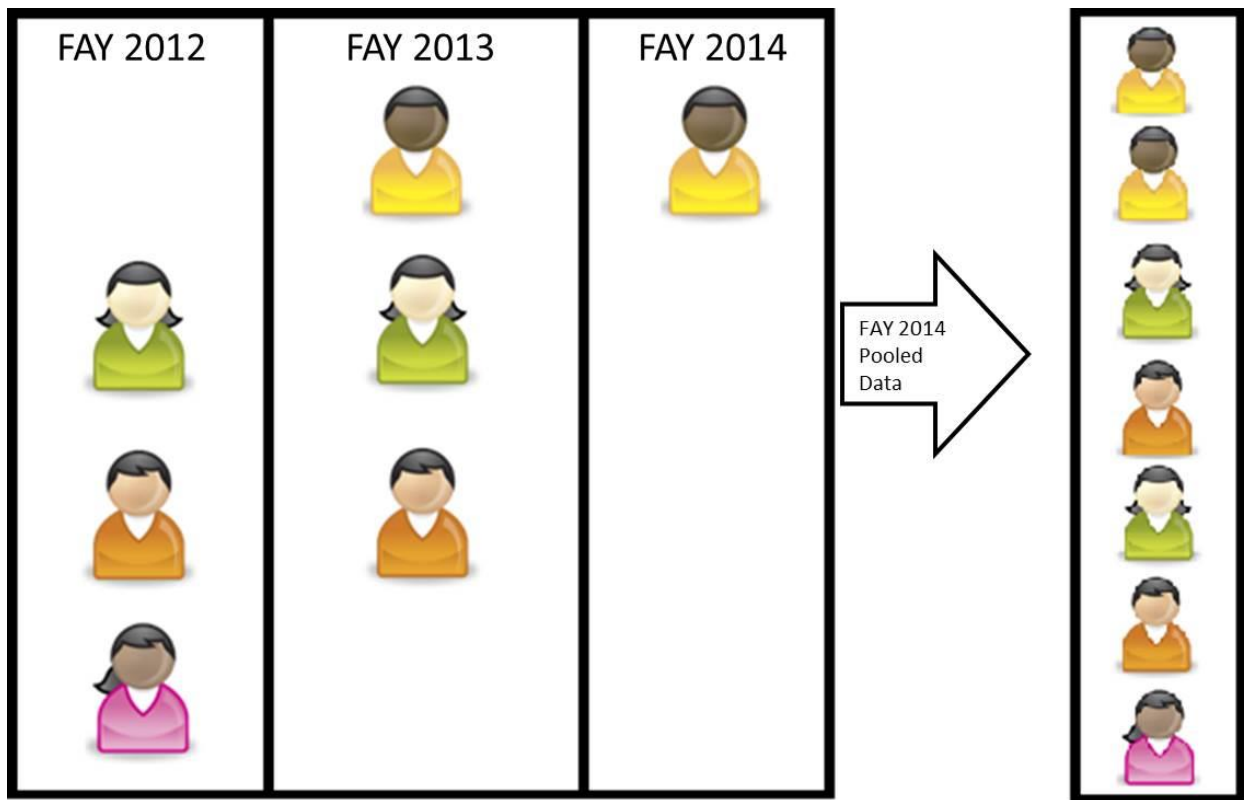
Figure 5. Data used in small schools pooling method

In the calculation of the percentage of students passing, if a school or LEA had less than 30 test records from FAY students over the last three years, that school would be considered extremely small and "Not Rated" in the A-F Letter Grade Accountability System. For schools with less than 30 FAY test records in Mathematics and Reading in a single year but more than 30 for three years, the calculation of percent passing is described below:

$$\text{3–Year Pooled Percent Passing} = 100 * \frac{\text{2014 FAY \# Passing AIMS \& AIMS A + 2013 FAY \# Passing AIMS \& AIMS A + 2012 FAY \# Passing AIMS \& AIMS A}}{\text{2014 FAY \# Tested AIMS \& AIMS A + 2013 FAY \# Tested AIMS \& AIMS A + 2012 FAY \# Tested AIMS \& AIMS A}}$$

In order to assess measures such as growth of all students and growth of the bottom 25%, the SGP data from all three years were merged. The median growth for Mathematics and Reading for both all students and the bottom 25% were calculated by combining the unique SGP for each FAY student for the three fiscal years.

SGP was not recalculated for each prior year student based on the 2014 statewide growth model; instead, each FAY student's SGP from each fiscal year was used. A school must have had at least one data point for growth over the last three years; this means that small schools may have used 2014, 2013, and 2012 data in the calculation of percent passing but may have had only one SGP rank in

Mathematics and Reading from a current or prior fiscal year. Schools with no SGP data do not qualify to receive an A-F label. After data were pooled for three years, the overall values for a small school's composite and growth scores were summed using the same methods described in the traditional model. The final letter grade determination depended on the total points (see Table 4) and percent tested (see Table 3).
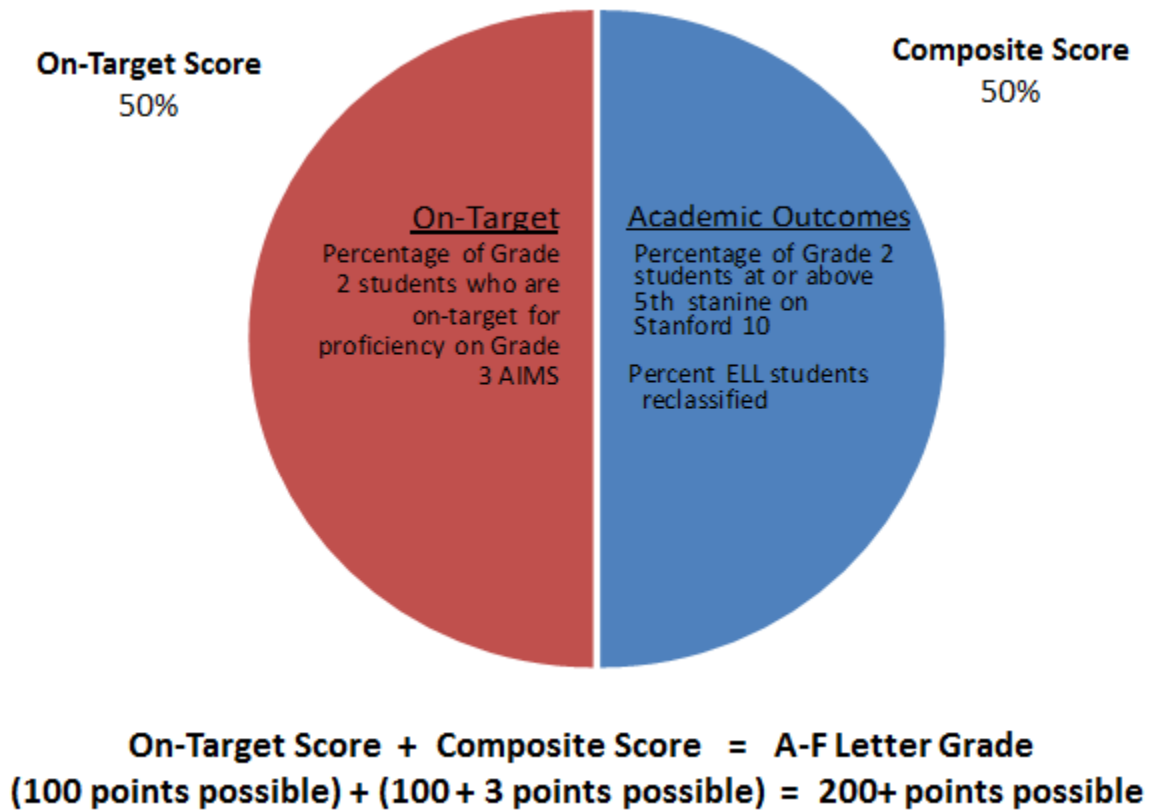
2014 K-2 School Model

On-Target Score
50%

Composite Score
50%

On-Target
Percentage of Grade 2 students who are on-target for proficiency on Grade 3 AIMS

Academic Outcomes
Percentage of Grade 2 students at or above 5th stanine on Stanford 10

Percent ELL students reclassified

On-Target Score + Composite Score = A-F Letter Grade
(100 points possible) + (100 + 3 points possible) = 200+ points possible

Figure 6. K-2 Model

To evaluate a school that serves only up to Grade 2, data from the Grade 2 norm-referenced test were used to determine a final letter grade. All Grade 2 students across the state test on the Stanford 10 Norm-Referenced Test. Additionally, all English language learners who completed the AZELLA also contributed data regardless of enrolled grade; as such, schools that serve Grades K-2 were eligible for ELL additional reclassification points described in the Traditional Model. Two elements, the on-target score and the composite score, comprise the K-2 model.

On-Target Score

In K-2 schools, students in Grade 2 are the only students assessed using a standardized assessment, the Stanford 10 Norm-Referenced test. Without previous year test scores, student growth percentiles cannot be calculated for these Grade 2 students. The On-Target score was included in the K-2 model as a proxy for student growth.

The On-Target Score is a measure indicating the degree to which students in Grade 2 are on track to grade-level proficiency on AIMS Reading and Mathematics in Grade 3. To identify the score a Grade 2 student would need in order to meet proficiency on the Grade 3 AIMS test, a regression model was used to predict Grade 3 AIMS scores from Grade 2 Stanford 10 scores in 2010. Only students with valid test scores in both 2010 and 2011 were included in the predictive model. The regression analysis provided an intercept and slope that was used to identify the minimum value on the Grade 2 Stanford 10 that predicted an AIMS scale score identified as proficient in Grade 3; mathematics and reading subject tests yielded separate on-target scores from the regression analyses (see Table 12). The regression analysis was conducted only in fiscal year 11 – the same on-target scores have been used since.

Table 14. On-target scale scores (SS) used for Stanford 10 to AIMS

Subject	On-Target Score
Mathematics	577
Reading	580

The following equation determined the number of on-target points a K-2 school would receive for the percentage of students on-target for Grade 3 proficiency in Mathematics and Reading based on the Grade 2 Stanford 10.

$$\text{On-Target Points} = 100 \times \frac{\text{No. of FAY students' Math SS} \geq 577 + \text{No. of FAY students' Readings SS} \geq 580}{\text{No. of FAY students' Math SS} \geq 0 + \text{No. of FAY students' Readings SS} \geq 0}$$

Composite Score

Rather than mastery or proficiency levels associated with criterion-referenced tests such as the AIMS assessment, the Stanford 10 Norm-Referenced Test orders test takers into nine stanines; the 5th stanine serves as the median in the population (see Figure 6). As a proxy for "passing" the assessment, students whose performance level is in the 5th stanine or greater are considered in the numerator of percentage of students "passing" Stanford 10; however, this is the percentage of students who meet or exceed the median performance band. The application of the bottom 25% subgroup does not apply to the K-2 model.
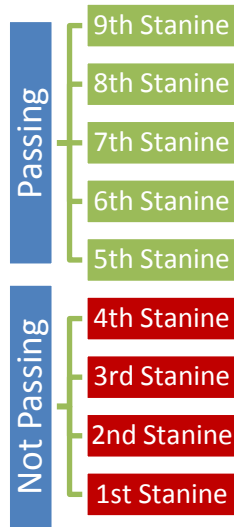
Figure 7. "Passing" Stanford 10 Norm-Referenced Test

The following equation determined the number of points a K-2 school would receive based on the percentage of students at or above the 5th stanine on the Stanford 10.

$$\text{Points for students} \geq 5^{th} \text{ Stanine} = 100 \times \frac{\text{No. of FAY students at or above } 5^{th} \text{ Stanine on Stanford 10 Reading } + \text{No. of FAY students at or above } 5^{th} \text{ Stanine on Stanford 10 Mathematics}}{\text{No. of FAY students at or above } 1^{st} \text{ Stanine on Stanford 10 Reading } + \text{No. of FAY students at or above } 1^{st} \text{ Stanine on Stanford 10 Mathematics}}$$

ELL additional points apply to all models; therefore, any school meeting the *n*-count criterion is eligible to receive 3 additional points. In the K-2 model, the composite score is a sum of two elements only:

1. Points for number of students at or above 5th stanine
2. Additional 3 points for meeting ELL additional reclassification criteria

Points generated from the composite score as well as the on-target score are summed and applied to the traditional point scale (see Table 3).
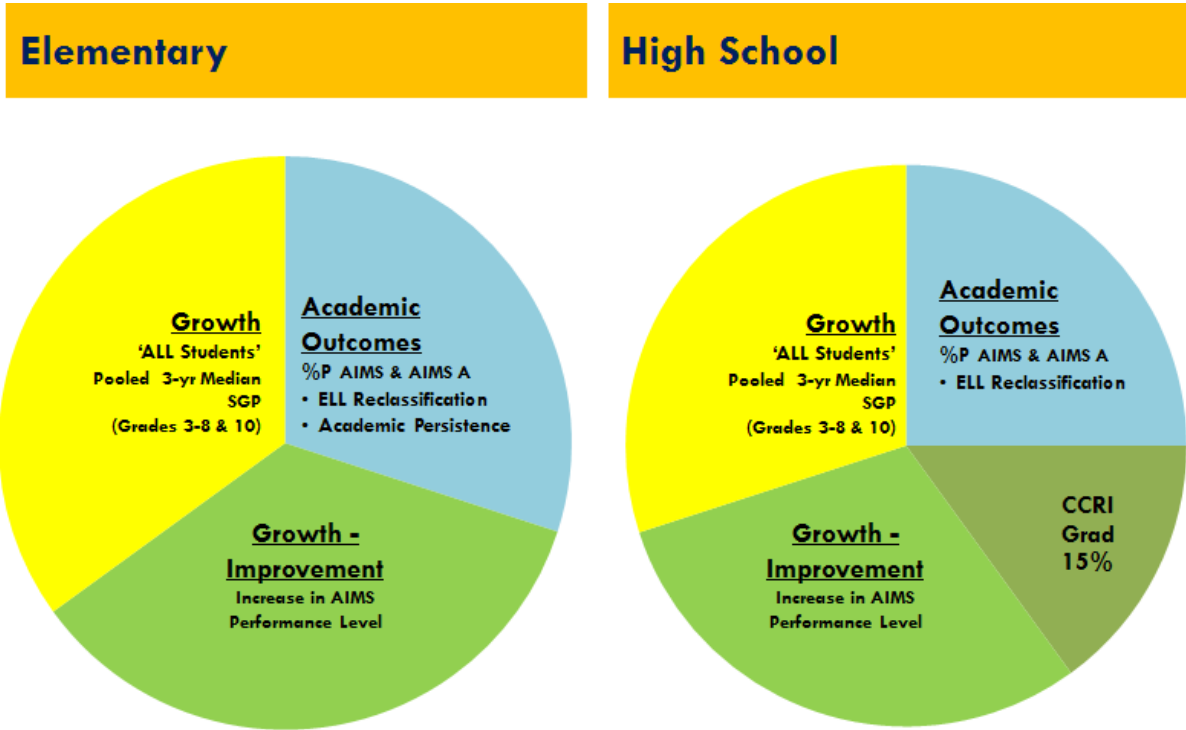
Elementary Schools and High Schools (no CCRI):

(140 points possible) + (60 + 3 + 3* + 3 points possible) = 200+ points possible

High Schools CCRI:

(120 points possible) + (50 + 30 + 3 points possible) = 200+ points possible

Figure 8. 2014 Alternative School Model

Due to their unique nature, schools identified as alternative schools in the 2013-2014 school year used slightly different measures for determining letter grades. On Monday, February 24, 2014, the Arizona State Board of Education approved modifications to the Alternative School definition which required schools to demonstrate their intent and purpose to serve a qualifying population.

The following criteria are required to obtain alternative school status:

1) A district school has adopted a mission statement that clearly identifies its purpose is to serve a specific student population that will benefit from an alternative school setting or a charter school that expressly states in its charter that its purpose is to serve a specific student population that will benefit from an alternative school setting.

2) The educational program and related student support services of the school must align with the mission and charter (if applicable) of the school.

3) Schools offering secondary instruction for academic credit used to fulfill the Arizona State Board of Education graduation requirements (in part or in full) must offer a high school diploma of graduation.

4) The school will receive current year state assessment scores for its students.
5) The school must intend to serve students in one or more of the defined categories that reflect an alternative school setting necessary for these students.
6) All new and converted schools shall be audited for student enrollment verification prior to confirmation of alternative status. All other alternative schools will be subject to an audit of enrollment counts as deemed necessary by ADE and/or the Arizona State Board for Charter Schools (ASBCS).

The following are requirements schools will have to meet to be considered for Alternative status:

1) Complete the online application and upload a mission statement.
   a. All existing alternative schools shall recertify each fiscal year.
2) Indicate total enrollment of students as of October 1 of current school year **and** the number of students by **category** based on their *initial* enrollment (List students only once in the defined categories). It is the expectation that 70% of the student population will meet the defined State Board adopted definition of students in need of an alternative school setting.

The approved definition recognizes the following student groups:

- Students who have a documented history of disruptive behavior issues.

- Students who have dropped out of school and are now returning.

- Students in poor academic standing as demonstrated by being at least one year behind on grade level performance or academic credits.

- Students who are primary caregivers or are financially responsible for dependents and, therefore, may require a flexible school schedule.

- Students who are adjudicated.

- Students who are wards of the state and are in need of an alternative school setting.

In addition, schools specifically designed to serve over-age, under-credited students who have dropped out of high school and who, by definition, cannot graduate within the standard number of years may be considered a Credit Recovery School. This status must be indicated on the application. Credit Recovery Alternative schools are exempt from the Title I Focus school criterion of graduation rate for traditional schools. These schools will be held accountable to the alternative schools low achieving subgroup criteria used to determine Focus status.

Approximately 150 schools received alternative status in 2014 by completing application materials prior to the April 1, 2014 deadline. Schools that designate their alternative status agree to be evaluated on growth as determined by SGP and AIMS improvement as well as the percentage of students passing AIMS and AIMS A.

Growth – Pooled 3-year SGP

In fiscal year 2014, 30% of an alternative school's letter grade was composed of the average of Mathematics and Reading median SGP of all students over a three year period. Identical to the pooling method used for the small schools' growth of 'all students' measure, this allows alternative schools accountability based on growth of the tested cohort of high school students who may make up a smaller portion of the school's population. A school had to have at least one data point in the growth measure (over a three year period) to be letter graded. A school can lack grade 10 students with current year SGP entirely and still receive a letter grade based on the SGP of FAY students enrolled in the two previous fiscal years (see Figure 7). By pooling three years of SGP data for all alternative schools, more observations are used in the calculation of growth points based on SGP of all students. However, if a school has no students with SGP in that three year period, the school would receive a "not rated" label.
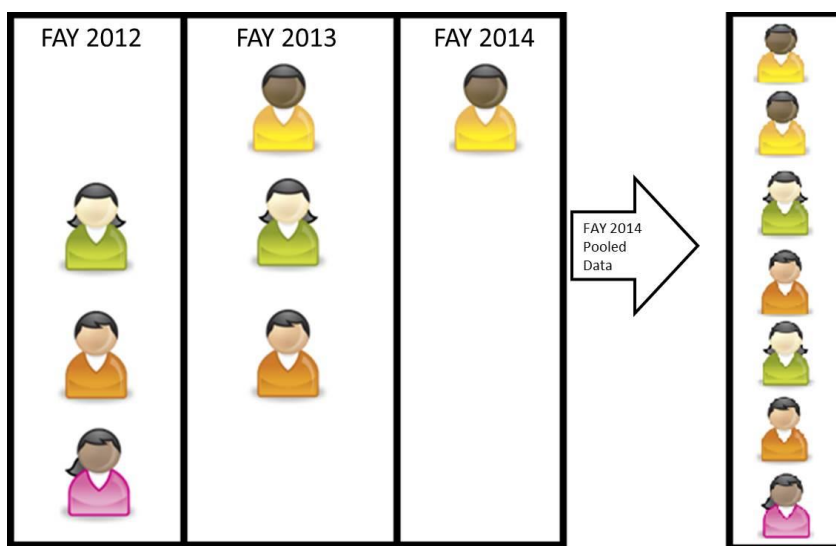
Figure 9. Pooled data from alternative school missing students with SGP in 2014

Growth – AIMS Improvement

The alternative school improvement measure represents the percentage of students who showed an increase in AIMS performance level from one test administration to another. Regardless of subject or grade, the AIMS test orders performance levels from "Falls Far Below Standards" (FFB), "Approaches Standards", "Meets Standards" to "Exceeds Standards" with FFB as the lowest performance level and "Exceeds" as the highest performance level. To be eligible to be included in the calculation, a student must have had valid test records in the two most recent test administrations on the same subject. For high school students, the two test administrations had to come from either of the following two options:

- ✓ Spring 2013 & Fall 2013 (FY 2014)
- ✓ Fall 2014 & Spring 2014 (FY 2014)

Elementary and middle school students must have tested in Spring 2012 and Spring 2013 for consideration in the AIMS improvement measure; elementary and middle school students cannot retest in the fall. Unlike SGP, which considers FAY students only, improvement includes FAY and non-FAY students.

Table 15. Eligibility for Alternative School Improvement Measure

Grade level	Fiscal Year 2013	Fiscal Year 2014		Eligible for Improvement
	Spring 2013	Fall 2013	Spring 2014	
K-2	N/A	N/A	N/A	No
3-8	X	N/A	X	Yes
9	N/A	N/A	N/A	No
10-12	X	X	XX	Yes

For each alternative school student with consecutive test administrations, it was determined if the performance level of the later test was greater than the performance level of the initial test (see Table 5). If the performance level of the second test administration was greater than the performance level of the initial test, the school that administered the second test received credit for the improvement. If the performance level remained the same or decreased from the first test administration to the second test administration, the student would count as eligible for improvement but not improved at the school where the second test was administered.

The process of identifying improvement eligibility and aggregating to the appropriate school was done separately by subject. The following equation determined the percentage of students who improved on the AIMS across two consecutive test administrations in both Mathematics and Reading.

$$
\text{Percent Improved} = 100 \times \frac{
\begin{array}{c}
\text{(No. of students where (Test 2 Perform – Test 1 Perform)} \geq 1\text{) in Reading} \\
\text{+ (No. of students where (Test 2 Perform – Test 1 Perform)} \geq 1\text{) in} \\
\text{Mathematics}
\end{array}
}{
\begin{array}{c}
\text{(No. of students tested on Spring 2013 AND Fall 2013 +} \\
\text{No of students tested on Fall 2013 AND Spring 2014 +} \\
\text{No. of students Grades 4-8 tested on Spring 2013 AND Spring 2014) in} \\
\text{Reading + (No. of students tested on Spring 2013AND Fall 2013 +} \\
\text{No of students tested on Fall 2013 AND Spring 2014 +} \\
\text{No. of students Grades 4-8 tested on Spring 2013 AND Spring 2014) in} \\
\text{Mathematics}
\end{array}
}
$$

AIMS Improvement represents 30% of an alternative school's accountability determination. When no students at the school were eligible for improvement, the growth score was made up entirely by the pooled SGP measure.

Academic Outcomes

The alternative schools model weighted the percentage of students passing AIMS and AIMS A at 30% of an alternative school's accountability determination. In this model, the percentage of students passing AIMS and AIMS A uses business rules identical to the calculation within the traditional model. Because of the number of high school students who may retest on AIMS at alternative schools, it is important to

note that only the better score is retained for a high school student who tests in both Fall and Spring of the same fiscal year. More specifically, a student can only contribute one test score per subject per fiscal year. For students retesting on the AIMS after their initial Spring Grade 10 test, there is no requirement for students to test again in either subject.

When an alternative school had less than 30 current year test records in AIMS and AIMS A Mathematics and Reading from FAY students across all grade levels, three years of AIMS and AIMS A data were pooled. Using the pooling method described previously, Mathematics and Reading test records from FAY students enrolled at the school in 2014, FAY students enrolled at the school in 2013, and FAY students enrolled at the school in 2012 were used to calculate the percentage of students passing AIMS. This process allowed small, alternative schools accountability based on the weights and priorities outlined specifically for alternative schools. Schools with less than 30 FAY test records in both Mathematics and Reading over three years received a "Not Rated" label.

CCRI for Alternative Schools

Although both the traditional and alternative schools' CCRI account for up to 30 points in a high school's total score, the metrics within the alternative schools' CCRI corresponds to the unique enrollment characteristics of the students they serve. Since alternative schools receive many students who require high school enrollment and instruction beyond the standard four-year criteria, these schools receive points from graduation rates based on a "best of" or "rolling" method (see Table 15). All cohorts considered in the traditional schools' CCRI are also accounted for in alternative schools; however, the majority of points derive from the best cohort graduation rate as well as the school's academic persistence rate.

Table 16. Calculating a high school's CCRI Grad Component score

Alternative CCRI Grad Component	Rate	Points Possible	Points
4-year cohort	.32	1	0.32
5-year cohort	.44	1	0.44
6-year cohort	.55	1	0.55
7-year cohort	.58	20 (assigned to highest rate)	11.6
Growth to Graduation (persistence)	.73	10	7.3
		Total (Cannot exceed 30)	20 (rounded points)

Like fiscal year 2013, alternative school letter grades for fiscal year 2014 account for the academic persistence of each school's students. An academically persistent student is one who exited an Arizona public school with a qualifying end of year code in fiscal year 2013 and who returned to any public school in fiscal year 2014. This measure includes retained students and excludes students who were Grade 12 completers or graduates in the former school year. Students who re-enroll in high school remain eligible to become graduates; therefore, the persistence measure reflects the number of students who remain committed to high school graduation.

Additional Points for Alternative Schools

Only ELL additional reclassification points apply to alternative schools given they meet the *n*-count criteria in each respective category. While the ELL reclassification requirements are identical for traditional and alternative schools, CCRI graduation rate accountability applied to alternative schools beginning in fiscal year 2014. Therefore, the three additional graduation rate points were not available to alternative schools in fiscal year 2014. Alternative schools are not eligible for dropout rate reduction points.

To identify whether an alternative school student was academically persistent, enrollment records for school years 2013 and 2014 were drawn together for each student. The school where the student was identified in 2013 was held responsible for the student's re-enrollment. If an eligible student, non-completer or graduate in 2013, enrolled in a school in 2013 and re-enrolled in any school in Arizona in 2014, the student counted as persistent. The following equation describes the calculation of an alternative school's persistence rate.

$$\text{Persistence Rate} = \frac{\text{(No. of students enrolled in 2013 and re-enrolled in 2014)} - \text{No. of students coded as Graduates or Completers in 2013}}{\text{No. of students enrolled in 2013} - \text{No. of students coded as Graduates or Completers in 2013}}$$

For 2014 accountability, alternative schools were evaluated on the re-enrollment of the students who attended their school in 2013. Alternative schools received three additional points added to their total composite score when the persistence rate was greater than or equal to 70%. The 70% threshold applied to all alternative schools in order to receive persistence points. Schools that had no enrollment in 2012 were not eligible for persistence points.

Weighting and Grading Scale

The major components of the alternative schools model, growth and percent passing AIMS and AIMS A, were multiplied by their respective weights as outlined by the A-F Alternative Model (see Table 16). For schools qualifying for CCRI points, the growth of 'All Students' in addition to one growth point and the growth as indicated by percent improved on AIMS were summed up with a cap of 100 of maximum. This capped sum is then multiplied by 1.20 in order to weight total growth at 60% of the letter grade determination. The percentage of students passing AIMS and AIMS A was multiplied by .50 (up to a possible 50 points) in order to weight AIMS proficiency by 25%. The CCRI score of up to 30 points (15%) were added directly to the sum of the three major components. For schools not qualifying for CCRI points, the weights are 1.4 (70%) and .6 (30%) respectively.

Schools' CCRI points qualification is determined by: (1) if a school has a total number of cohorts across 4, 5, 6 and 7 years that is equal to or greater than 20, and (2) if the school is missing only 1 or 2 years of graduation rates. When both criteria are met, the missing rates will be replaced by the mean of the not missing years' rates. Schools will use the 60%/25% split calculation. Otherwise, schools will use the 70%/30% split calculation.

The sum of all components, including three additional ELL points, were used to label alternative schools' based on the criterion point scale established for fiscal year 2014 (see Table 17). Unlike prior years, alternative school letter grades were not based on a distribution scale.

Table 17. Example: Calculating an alternative high school's total score (CCRI)

Component	Value	Points Possible	Points
Total Growth			
Growth – All students SGP	40	120	85
Growth – AIMS improvement	30		
+ 1 additional points	71		
Academic Outcomes			
Percent passing AIMS & AIMS A	55	50	28
CCRI Graduation Rate	25	30	25
ELL Reclassification	0	3	0
TOTAL POINTS			**138**

Table 18. Example: Calculating an alternative high school's total score (no CCRI)

Component	Value	Points Possible	Points
Total Growth			
Growth – All students SGP	42	140	105
Growth – AIMS improvement	32		
+ 1 additional points	75		
Academic Outcomes			
Percent passing AIMS & AIMS A	55	60	33
Persistence	0	3	0
ELL Reclassification	0	3	0
Graduation Points	0	3	0
TOTAL POINTS			**138**

Alternative schools' letter grades differ from traditional letter grades in that the labels assigned to schools carry an "ALT" designation, and letter grades are assigned on a scale range which completely differs from traditional schools. In prior years, alternative labels were assigned by identifying thresholds based on point distribution, the total points earned by each school with non-missing growth and academic outcome point values (total points) were averaged across schools, and this average anchored the middle of the C-ALT letter grade range.

LEA Letter Grades

All LEAs, i.e., districts and charter holders, were evaluated using the metrics outlined in the Traditional Model. Student-level data were aggregated to the LEA level where LEA FAY status applied. Student performance and growth were attributed to the LEA in the same manner described in the Traditional Model. This process applied to LEAs that contained both alternative and traditional schools. That is,

alternative school data was used in the traditional model and measures such as AIMS improvement were not considered at the LEA level. Letter grades for LEAs with only one school were not recalculated; instead, the letter grade of the school was automatically assigned to the LEA.

The criteria for additional points eligibility applied to LEAs as well. For instance, any LEA that served high school grades, such as a high school district or K-12 charter holder, was eligible for dropout points – not FFB points. All LEAs used the A-F Point Scale outlined in Table 3 unless the LEA was composed entirely of alternative schools. LEAs were not evaluated on the CCRI graduation component regardless of union or unified configuration.

When all schools under an LEA hold alternative school status, the LEA letter grade is based on the average total points of all their schools. In order to evaluate an LEA composed of multiple alternative schools and no traditional schools, each "ALT" letter grade received by each school within the LEA was assigned grade points (see Table 14).

Table 19. Grade values for "alternative only LEAs"

School Grade	Value	LEA Grade
A-ALT	4	A
B-ALT	3	B
C-ALT	2	C
D-ALT	1	D

Using traditional rounding rules, the rounded grade point average dictated the final letter grade for the alternative-only LEAs (see Table 15).

Appendix A

Arizona Online Instruction Schools FAY Minute Requirement

75% of Annual Hours/Minutes for Full-Time Student		
Grade Span	Hours	Minutes
KG	260	15,600
1-3	534	32,040
4-6	667	40,050
7-8	801	48,060
9-12	675	40,500

Appendix B

Appeals Documents

A-F LETTER GRADE APPEALS COMMITTEE
DISCUSSION, FINDINGS, AND CONCLUSION
OF
A-F LETTER GRADE SUBSTANTIVE APPEAL

Pursuant to A.R.S. § 15-241(N & O)[2], the A-F Letter Grade Appeal Committee ("Committee") reviewed the appeal to modify the Arizona Department of Education's (ADE) determination of school performance letter grade. The Committee submits the following findings and conclusions.

I. REVIEW

The Committee reviewed the following documents[3]:

☐ Written narrative (required)

☐ Longitudinal data related to school performance

☐ Longitudinal data related to student performance

☐ Official documentation in support of appeal

☐ Documentation relevant to school improvement plan

☐ Other: _____

The Committee also considered the following:

☐ Evidence of implementation of School Improvement Plan

☐ Appellant testimony

☐ Witness testimony on Appellant's behalf

☐ Other: _____

☐ None of the above. Reason: _____

Appellant-School claims to be mitigating factors:

_____

_____

_____

---

[2] A.R.S. § 15-241(N) states that "the department of education shall establish an appeals process, to be approved by the state board of education, for a school to appeal data used to determine the achievement profile of the school. The criteria established shall be based on mitigating factors and may include a visit to the school site by the department of education."

[3] Evidence under review should be attached to these findings in accordance with the Family Education Rights and Privacy Act. 20 U.S.C. § 1232g; 34 C.F.R. Part 99.

A. Applicable Mitigating Factors and Circumstances
To determine whether a mitigating factor is present, the selected sub-category must be agreed upon by a majority of the committee.

☐ *Environmental Issues or Events*

☐ *Adverse Testing Conditions*

☐ *School or Community Emergency*

☐ *School Tragedy*

☐ *Other:* _____

B. Was this event:

☐ Unrelated to school/student performance

☐ Outside the school's control

☐ Timing reasonably related to student performance

☐ Substantial cause of overall school performance

C. Did the school take reasonable steps to minimize the situation's impact on assessment outcomes?

☐ Yes

☐ No

☐ The opportunity did not exist for the school/LEA to minimize impact on students.

If yes, then what steps were taken?

_____

_____

_____

_____

_____

_____

II. CONCLUSION

A. Overall Performance Determination
All other things equal, the mitigating factor outlined above:

☐ Was completely irrelevant to the school's originally assigned letter grade.

☐ Was completely irrelevant to the school's originally assigned letter grade AND accountability determination is consistent with prior year performance.

☐ Slightly impacted performance but was not enough to impact the assigned letter grade.

☐ Negatively impacted the school's overall performance causing a lower letter grade than would be otherwise anticipated.

B. Final Appeal Decision

☐ **GRANTED**(additional explanation if provided):

_____

_____

The Committee adopts one of the following courses of action:

☐ Adjust the assigned A-F letter grade from _____ to _____.

☐ **DENIED** (additional explanation if provided):

_____

_____

_____

C. **Conclusion:** ROLL-CALL VOTE

Committee Member	GRANT	DENY
Member 1 (Chair)		
Member 2		
Member 3		
Member 4		
Member 5		
Member 6		
The committee adopted the conclusion by a vote of _____ to_____.		

ADE representatives present:

_____   _____
Name   Title

_____   _____
Name   Title
Additional Notes:

A-F LETTER GRADE SUBSTANTIVE APPEALS
EVIDENCE OF SUBSTANCE CONSIDERATION

Pursuant to A.R.S. § 15-241(N), the A-F Letter Grade Appeal Committee evaluates substantive appeals to modify the Arizona Department of Education's determination of a school performance letter grade. The Committee fully reviews substantive appeals (that are complete, correctly, and timely submitted). Substantive reasons for appeal involve events or circumstances outside an entity's control that adversely affect student performance on a test date; consequently, the data used for the assigned letter grade may not be a reflection of instruction but the event itself.

	This appeal was presented to the A-F Appeals Committee as a NON-SUBSTANTIVE APPEAL for the reason that:
	The basis for the appeal lacks any reference to a specific event which impacted student performance.
	The primary basis for the appeal specifically challenges SBE approved accountability formulae which may result in different inclusion/exclusion outcomes for certain data.
	The appeal identifies only individual student data or cites individual student characteristics in the reason for the school's letter grade assignment.
	ADE provided a process for the school/LEA to review and modify data used in the accountability determination.
	The appeal challenges Arizona standards to which all students are held regardless of subgroup membership.
	Narrative and/or evidence not submitted.

ADE Representatives

_____

_____

Carrie O'Brien, Esq.   Yovhane Metcalfe, Ph.D.
Director of Legal Services   Chief Accountability Officer

Appendix C

AIMS Scale Scores and Performance Levels
Spring 2012 - Spring 2014

Grade	Performance Level	Reading Scale Scores	Writing Scale Scores	Mathematics Scale Scores	Science Scale Scores
3rd	Falls Far Below	200-378	Suspended	100-302	
	Approaches	379-430		303-346	
	Meets	431-515		347-405	
	Exceeds	516-640		406-540	
4th	Falls Far Below	220-401	Suspended	120-330	200-461
	Approaches	402-449		331-365	462-499
	Meets	450-535		366-415	500-546
	Exceeds	536-660		416-560	547-800
5th	Falls Far Below	240-423	300-438	140-347	
	Approaches	424-467	439-493	348-380	
	Meets	468-555	494-600	381-435	
	Exceeds	556-675	601-700	436-580	
6th	Falls Far Below	250-432	300-448	160-365	
	Approaches	433-477	449-492	366-397	
	Meets	478-570	493-580	398-445	
	Exceeds	571-690	581-700	446-600	
7th	Falls Far Below	260-442	300-449	180-381	
	Approaches	443-488	450-494	382-410	
	Meets	489-586	495-594	411-459	
	Exceeds	587-720	595-700	460-620	
8th	Falls Far Below	270-451	Suspended	200-408	200-472
	Approaches	452-498		409-425	473-499
	Meets	499-601		426-474	500-531
	Exceeds	602-800		475-640	532-800
HS	Falls Far Below	500-626	300-432	300-470	200-474
	Approaches	627-673	433-479	471-486	475-499
	Meets	674-772	480-586	487-536	500-536
	Exceeds	773-900	587-700	537-700	537-800

Arizona Department of Education