For more information, please contact:

Research & Evaluation Section
(602) 542-5151
achieve@azed.gov
Contents
Introduction .......................................................................................................................... 7
Historical Context ................................................................................................................ 7
Overview of the A-F Letter Grade Accountability System .................................................... 9
Data Inclusion Criteria ........................................................................................................ 10
Timeline & Appeals............................................................................................................... 11
95% Participation Rate & 1% Cap Requirement .................................................................... 12
Point Scale.......................................................................................................................... 13
A-F Letter Grade Models ..................................................................................................... 14
  2013 Traditional Model ................................................................................................... 14
    Growth Model .............................................................................................................. 14
    Composite Score ......................................................................................................... 18
  2013 Small Schools Model ............................................................................................... 28
  2013 K-2 School Model .................................................................................................. 30
  2013 Alternative School Model ....................................................................................... 33
    Growth – Pooled 3-year SGP ...................................................................................... 34
    Growth – AIMS Improvement .................................................................................... 35
    Academic Outcomes ................................................................................................... 36
    Weighting and Grading Scale ..................................................................................... 37
LEA Letter Grades .............................................................................................................. 40
Appendix A ......................................................................................................................... 41
Appendix B ........................................................................................................................ 42
Appendix C ........................................................................................................................ 44
Tables

Table 1. Accountability Data Inclusion ................................................................. 11
Table 2. Percent tested letter grade caps............................................................... 12
Table 3. A-F Letter Grade Point Scale ................................................................. 13
Table 4. AIMS Mathematics and Reading grade level pass scores ....................... 17
Table 5. AIMS numeric performance (all grades and subjects) ............................. 17
Table 6. Components of the composite score ...................................................... 19
Table 7. Example: Student-level assessment ....................................................... 21
Table 8. Example: School-level percent passing points calculation ...................... 21
Table 9. Graduation Rate Additional Points Criteria ........................................... 23
Table 10. Dropout rate reduction additional points criteria .................................. 25
Table 11. Criteria to receive three additional points for FBB reduction .................. 27
Table 12. On-target scale scores (SS) used for Stanford 10 to AIMS .................... 31
Table 13. Criteria for alternative school graduation rate additional points ............. 36
Table 14. Example: Calculating an alternative school's total score ....................... 38
Table 15. Grade values for "alternative only LEAs" ............................................ 40
Figures

Figure 1. Components of the Traditional Model .......................................................... 14
Figure 2. Conceptual illustration of the current year growth percentile based on prior and current year test performance (Betebenner, 2011) .............................................................. 15
Figure 3. Small schools model .................................................................................. 28
Figure 4. Data used in small schools pooling method ............................................... 29
Figure 5. K-2 Model .................................................................................................. 30
Figure 6. "Passing" Stanford 10 Norm-Referenced Test ............................................. 32
Figure 7. Pooled data from alternative school missing students with SGP in 2013 .......... 34
Figure 8. Alternative schools' distribution-based scale .............................................. 39
Figure 9. Steps in determining alternative schools' letter grades .............................. 39
Introduction

This guide describes Arizona’s 2013 A-F Letter Grade Accountability System for educators, parents, and other interested 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 our 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 comprehensively 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. 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.

The revisions to the statute included an addition to the statewide accountability system. LEAs were to 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

---

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.
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 when they failed to demonstrate success. Thus, in its 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.
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

State statute mandates that half of the letter grade determinations for schools and LEAs shall consist of academic progress. The academic progress measurement consists of 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
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 dates claimed by the school.

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 A performance level greater than 0 were included in the composite score. 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, 2012 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**

<table>
<thead>
<tr>
<th>Component</th>
<th>FAY</th>
<th>Grades</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth All Students</td>
<td>✓</td>
<td>3-8, 10</td>
</tr>
<tr>
<td>Growth Bottom 25</td>
<td>✓</td>
<td>3-8, 10</td>
</tr>
<tr>
<td>AIMS Percent Passing</td>
<td>✓</td>
<td>ALL</td>
</tr>
<tr>
<td>AIMS A Percent Passing</td>
<td>✓</td>
<td>ALL</td>
</tr>
<tr>
<td>ELL reclassification</td>
<td>✓</td>
<td>ALL</td>
</tr>
<tr>
<td>ELL 95% tested</td>
<td></td>
<td>ALL</td>
</tr>
<tr>
<td>ELL n-count</td>
<td></td>
<td>ALL</td>
</tr>
<tr>
<td>Graduation rate</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>Dropout rate</td>
<td></td>
<td>9-12</td>
</tr>
<tr>
<td>Falls Far Below reduction</td>
<td>✓</td>
<td>3 or 8</td>
</tr>
<tr>
<td>Alternative schools 3-year pooled SGP</td>
<td>✓✓</td>
<td>3-8, 10</td>
</tr>
<tr>
<td>Alternative schools AIMS improvement</td>
<td></td>
<td>ALL</td>
</tr>
<tr>
<td>Alternative schools academic persistence</td>
<td></td>
<td>ALL</td>
</tr>
<tr>
<td>Percent tested</td>
<td></td>
<td>3-8, 10</td>
</tr>
<tr>
<td>Stanford 10 On-target</td>
<td>✓</td>
<td>2</td>
</tr>
<tr>
<td>Stanford 10 Percent passing</td>
<td>✓</td>
<td>2</td>
</tr>
</tbody>
</table>

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 are included in the growth model if they had state-administered Reading and Mathematics standardized assessment results in fiscal year 2013 as well as fiscal year 2012. For accountability determinations, however, only students identified as full academic year in each respective Reading and Mathematics assessment contribute student growth percentile data to the school’s growth score calculation.

**Timeline & Appeals**

All data were initially extracted from the SAIS database on June 5, 2013 for use in preliminary letter grade determinations. After statewide integrity results were available on or around July 5, 2013, 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, 2013 to July 3, 2013, 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 individually and collectively then 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 granted, 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 final 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 2. Percent tested letter grade caps

<table>
<thead>
<tr>
<th>Percentage of Students Tested</th>
<th>Maximum Letter Grade Allowed</th>
<th>Eligible Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>95% or higher</td>
<td>A</td>
<td>200+</td>
</tr>
<tr>
<td>85-94%</td>
<td>B</td>
<td>139</td>
</tr>
<tr>
<td>75-84%</td>
<td>C</td>
<td>119</td>
</tr>
<tr>
<td>Less than 75%</td>
<td>D</td>
<td>99</td>
</tr>
</tbody>
</table>

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 grade 10. 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 2013.

\[
\text{Percent Tested} = \frac{0.50 (\text{Number of students tested in Reading} + \text{Number of students tested in Mathematics})}{0.50 (\text{Number of student enrolled on Reading test date} + \text{Number of students enrolled on Mathematics test date})}
\]

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. The total points earned by a school or LEA were compared to the classification scale as well as the test participation rate.

*Table 3. A-F Letter Grade Point Scale*

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Total Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>140 – 200</td>
</tr>
<tr>
<td>B</td>
<td>120 - 139</td>
</tr>
<tr>
<td>C</td>
<td>100 - 119</td>
</tr>
<tr>
<td>D</td>
<td>0 - 99</td>
</tr>
</tbody>
</table>

Schools under the Alternative Model used a distribution-based letter grading scale (described on page 38).

Schools that received “F” letter grades were evaluated by a committee appointed and facilitated by the ADE School Improvement Division. This committee evaluated all schools that received a letter grade of D or D-ALT in 2013 and 2012 and a label of “underperforming” or “failing” in 2011. Letter grades of “F” were assigned to schools based on the judgment of the F Label Appeals committee.
A-F Letter Grade Models

Four distinct models composed Arizona’s A-F Letter Grade Accountability System in 2013. Each model aims to fairly and accurately depict a school’s accountability determination in a relevant and representative manner.

2013 Traditional Model

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

*High School only
**K-8 Only

Figure 1. 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. Both the growth score and percentage of students passing the AIMS and AIMS A assessments are weighed equally under the traditional calculation of the A-F Letter Grades. The use of growth modeling described here also applies to the operationalization of growth in the alternative model discussed later.

Growth Model

The purpose of the growth component is to acknowledge 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. Including a student growth component into an accountability system is particularly important because it recognizes the degree to which the lowest achieving students strive to “gain ground” 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.

*Figure 2. 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. Grade 2 is the first statewide standardized assessment given; 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.

Both the growth of all FAY students and FAY students in the bottom 25% based on prior year scores comprise the 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 score higher. 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 five years of test history can be used in the determination of a student’s current year SGP. 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. In order to calculate the typical growth of 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 2013, their 2012 performance was compared in order to identify the bottom quartile for the school’s 2013 accountability determination. For these students, their 2013 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 4, 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 4. AIMS Mathematics and Reading grade level pass scores

<table>
<thead>
<tr>
<th>Grade</th>
<th>Reading Pass Score</th>
<th>Mathematics Pass Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>431</td>
<td>347</td>
</tr>
<tr>
<td>4</td>
<td>450</td>
<td>366</td>
</tr>
<tr>
<td>5</td>
<td>468</td>
<td>381</td>
</tr>
<tr>
<td>6</td>
<td>478</td>
<td>398</td>
</tr>
<tr>
<td>7</td>
<td>489</td>
<td>411</td>
</tr>
</tbody>
</table>

Table 5. AIMS numeric performance (all grades and subjects)

<table>
<thead>
<tr>
<th>Performance Indicator</th>
<th>Numeric Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Falls Far Below</td>
<td>1</td>
</tr>
<tr>
<td>Approaches</td>
<td>2</td>
</tr>
<tr>
<td>Meets</td>
<td>3</td>
</tr>
<tr>
<td>Exceeds</td>
<td>4</td>
</tr>
</tbody>
</table>

After all students in grades 4-8 have an adjusted difference score, the adjusted difference scores are rank ordered. Students whose adjusted difference scores fell below the 26th percentile qualified for the bottom 25% subgroup.

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.

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

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.

\[
\text{Total Growth Points} = 1 + (\text{All Students Growth Score})(.50) + (\text{Bottom 25\% Growth Score})(.50)
\]

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 6) 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.
Table 6. Components of the composite score

<table>
<thead>
<tr>
<th>Component</th>
<th>Points Possible</th>
<th>Applicable Grades</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIMS &amp; AIMS A proficiency</td>
<td>0 – 100</td>
<td>3-8, 10-12</td>
<td>Percentage of students who Meet or Exceed standards</td>
</tr>
<tr>
<td>ELL Additional Points</td>
<td>0 or 3</td>
<td>K-12</td>
<td>23% of FAY ELL students reclassified proficient</td>
</tr>
<tr>
<td>FFB Rate Reduction Additional Points</td>
<td>0 or 3</td>
<td>Grade 3 Reading,  Grade 8 Math</td>
<td>Reduction of annual falls far below rate</td>
</tr>
<tr>
<td>Dropout Rate Reduction Additional Points</td>
<td>0 or 3</td>
<td>9-12</td>
<td>Average annual reduction of dropout rate</td>
</tr>
<tr>
<td>Graduation Rate Additional Points</td>
<td>0 or 3</td>
<td>12</td>
<td>Average annual increase of 5-year graduation rate</td>
</tr>
</tbody>
</table>

High schools were eligible for up to 109 composite points because of ELL reclassification, dropout rate reduction, and graduation rate points; schools serving only elementary grades were eligible for up to 106 composite points including ELL reclassification and Falls Far Below reduction. However, all grade configurations 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 considered in the percentage of students passing. Students whose achievement level was “Meets” or “Exceeds” standards within each subject and grade level were counted as passing. Only Reading and Mathematics results are used in A-F Letter Grade accountability.

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 student 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. In order to be considered FAY for a fall AIMS test date, the student 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). The accountability determination excludes all non-FAY students who test on either Fall or Spring test dates.
Table 7. Example: Student-level assessment

<table>
<thead>
<tr>
<th>Grade</th>
<th>Public SAIS ID</th>
<th>Subject</th>
<th>Type</th>
<th>Perform</th>
<th>FAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>00000001</td>
<td>Reading</td>
<td>AIMS</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>00000001</td>
<td>Math</td>
<td>AIMS</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>00000002</td>
<td>Reading</td>
<td>AIMS A</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>00000002</td>
<td>Math</td>
<td>AIMS A</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>00000003</td>
<td>Reading</td>
<td>AIMS</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>00000003</td>
<td>Math</td>
<td>AIMS</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>00000004</td>
<td>Reading</td>
<td>AIMS</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>00000004</td>
<td>Math</td>
<td>AIMS</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>00000005</td>
<td>Reading</td>
<td>AIMS</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>00000005</td>
<td>Math</td>
<td>AIMS</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>00000006</td>
<td>Reading</td>
<td>AIMS A</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>00000006</td>
<td>Math</td>
<td>AIMS A</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>00000007</td>
<td>Reading</td>
<td>AIMS</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>00000007</td>
<td>Math</td>
<td>AIMS</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>00000008</td>
<td>Reading</td>
<td>AIMS</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>00000008</td>
<td>Math</td>
<td>AIMS</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>00000009</td>
<td>Reading</td>
<td>AIMS A</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>00000009</td>
<td>Math</td>
<td>AIMS A</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>0000010</td>
<td>Reading</td>
<td>AIMS</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>0000010</td>
<td>Math</td>
<td>AIMS</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>0000011</td>
<td>Reading</td>
<td>AIMS</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>0000011</td>
<td>Math</td>
<td>AIMS</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 8. Example: School-level percent passing points calculation

Percent Passing Points  =  \[ 100 \times \frac{6+8}{11+11} = 64 \]

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 passed the AIMS.

ADE Research and Evaluation and ADE Assessment have provided the 2012-2014 AIMS scale score ranges and associated performance bands for your reference. (see Appendix C).
ELL Reclassification Additional Points

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, or 2013) for one or more days in the current fiscal year.

The criteria to receive ELL points in A-F accountability were modified for the 2013 A-F Letter Grade determinations. 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 adjustments to the ELL criteria for school year 2012-2013.

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 2013, students withdrawn from ELL services by parent request in FY 2011, 2012, or 2013, and students withdrawn from ELL services due to SPED criteria in FY 2011, 2012, or 2013.

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 2013 A-F Letter Grades ELL Points:

\[
\text{Percentage of ELL students tested} = \frac{100 \times \text{No. of ELL students with a valid Listening, Reading, & Writing Score on the Spring 2013 AZELLA}}{\text{No. of ELL students with a need enrolled on the first day of the spring AZELLA, including parent withdrawals}}
\]

Criterion 3: Reclassification rate

Included in this calculation are students who meet the definition of full academic year (FAY) and are either receiving ELL services or have been withdrawn from ELL services by parent request. The following equation describes the 23% reclassification rate criterion which was used in calculating 2013 A-F Letter Grades ELL Points:

\[
\text{Percentage of students reclassified} = \frac{100 \times \text{No. of FAY ELL students with an Overall Proficiency Level of Proficient on the Spring 2013 AZELLA}}{\text{No. of FAY ELL students with a complete Spring 2013 AZELLA}}
\]

Graduation Rate Additional Points

To promote high graduation rates for all students enrolled in Arizona public high schools, the accountability system recognizes whether the majority of students at a school matriculate within five years of entering high school. Schools can receive three additional points for either growing their five-year graduation rate or for maintaining a high five-year graduation rate.

All schools 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 2013 criteria for receiving graduation rate additional points mirror the criteria used in 2012. High schools received 3 points added to the composite score by meeting any one of the criteria described in Table 9.

Table 9. Graduation Rate Additional Points Criteria

<table>
<thead>
<tr>
<th>Graduation Rate Criteria</th>
<th>Target</th>
<th>Points Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average of 5-Year Grad Rate for 3 years</td>
<td>( \geq 90% )</td>
<td>3</td>
</tr>
<tr>
<td>Current Year 5-Year Grad Rate ( \geq 74% )</td>
<td>1% average annual increase</td>
<td>3</td>
</tr>
</tbody>
</table>

2 Only students with a scored Reading, Writing, and Listening assessment were included in the numerator for 2013 accountability. This definition of percentage of ELL students tested only applies to fiscal year 2013.
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:

\[
\text{Single Year Graduation Rate} = \frac{\text{No. in cohort who graduated within 5 years}}{\text{Original cohort + Transfers in} - \text{Transfers out}}
\]

To calculate a high school or 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 2013, the five-year graduates were members of cohort 2012; all graduation codes for cohort 2012 entered into SAIS by July 1, 2013 were used in the graduation rate calculation. Specifically, for 2013, the cohort calculation of the three year average is described below:

\[
\text{Three year average of 5-year graduates} = \frac{\text{No. of 2012 cohort grads} + \text{No. of 2011 cohort grads} + \text{No. of 2010 cohort grads}}{\text{(2012 original cohort + Transfers in} - \text{Transfers out) + (2011 original cohort + Transfers in} - \text{Transfers out) + (2010 original cohort + Transfers in} - \text{Transfers out)}}
\]

To award a school 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 2012 graduation rate as of July 2, 2013?
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 2013, the following equation was used:

\[
\text{Average annual change} = \frac{\text{Current year 5-year grad rate – Baseline year 5-year grad rate}}{\text{Current fiscal year – Baseline fiscal year}}
\]
For a school that uses 2006 as a baseline, the following information is used to evaluate the graduation rate points based on the average annual change:

- Fiscal year 2006, cohort 2005 graduation rate = 79%
- Fiscal year 2013, cohort 2012 graduation rate = 88%

This information yields an average annual change of 1.2%. In this example, the school is required to maintain an average annual change of at least 1%. The school 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 a twelve-month reporting period. The 2013 criteria for receiving dropout rate additional points also mirror the criteria from 2012. 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 10.

**Table 10. Dropout rate reduction additional points criteria**

<table>
<thead>
<tr>
<th>Dropout Rate Criteria</th>
<th>Target</th>
<th>Points possible</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-Year Average Dropout Rate</td>
<td>≤ 6%</td>
<td>3</td>
</tr>
<tr>
<td>Current Year Dropout Rate ≤ 9%</td>
<td>1% average annual decrease</td>
<td>3</td>
</tr>
<tr>
<td>Current Year Dropout Rate &gt; 9%</td>
<td>2% average annual decrease</td>
<td>3</td>
</tr>
</tbody>
</table>

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 2013, 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:

\[
\text{Three-year Dropout Rate} = \frac{\# \text{ students who dropped out in 2013, 2012, or 2011}}{\# \text{ students enrolled during the 2013, 2012, or 2011 school year}}
\]
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 2013 as of July 2, 2013?
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:

\[
\text{Average annual change} = \frac{\text{Current year dropout rate} - \text{Baseline year dropout rate}}{\text{Current fiscal year} - \text{Baseline fiscal year}}
\]

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

- Fiscal year 2006, school-wide dropout rate = 11%
- Fiscal year 2013, school-wide dropout rate = 9%

This information yields an average annual change of -0.3%. 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

New for 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 11. Criteria to receive three additional points for FBB reduction

<table>
<thead>
<tr>
<th>Grade 3 Reading Criteria</th>
<th>Target</th>
<th>Points Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-Year Average FFB Rate</td>
<td>≤ 3%</td>
<td>3</td>
</tr>
<tr>
<td>Current Year FFB Rate ≤ 5%</td>
<td>1% annual decrease</td>
<td>3</td>
</tr>
<tr>
<td>Current Year FFB Rate &gt; 5%</td>
<td>2% annual decrease</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Grade 8 Math Criteria</th>
<th>Target</th>
<th>Points Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-Year Average FFB Rate</td>
<td>≤ 25%</td>
<td>3</td>
</tr>
<tr>
<td>Current Year FFB Rate ≤ 30%</td>
<td>1% annual decrease</td>
<td>3</td>
</tr>
<tr>
<td>Current Year FFB Rate &gt; 30%</td>
<td>2% annual decrease</td>
<td>3</td>
</tr>
</tbody>
</table>

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

\[
\text{Three-year FFB Rate} = \frac{\text{No. of FAY grade 3 AIMS Reading where performance level =1 or No. of FAY grade 8 AIMS Mathematics where performance level =1 in 2013, 2012, or 2011}}{\text{No. of FAY grade 3 AIMS Reading where performance level > 0 or No. of FAY grade 8 AIMS Mathematics where performance level > 0 in 2013, 2012, or 2011}}
\]

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 2013 as of July 2, 2013?
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.

\[
\text{Annual change} = \text{Current year FFB rate} - \text{Prior year FFB rate}
\]
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.

2013 Small Schools

![Diagram of Growth Score and Composite Score](image)

**Growth Score**
- 100 points possible

- Growth
- ALL Students
- Pooled 3-Year Median SGP

**Composite Score**
- 100+ points possible

- Academic Outcomes
- 3-yr Pooled Avg.
- Percent Passing AIMS & AIMS A
- • ELL Reclassification
- • Graduation Rate *
- • Dropout Rate *
- • FFB Rate**

*High School only
**K-8 only

\[(\text{Growth Score} + \text{Composite Score} = \text{Total Points})\]

\[(100 \text{ points possible} + 100 \text{ points possible} + 3 + 3 + 3 = 200+ \text{ points possible})\]

*Figure 3. Small schools model*

For 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. This is a significant shift from the 2012 accountability system which pooled all schools with less than 100 students enrolled. In 2013, significantly fewer schools and LEAs used pooled data in their letter grade determinations.
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 4. Data used in small schools pooling method](image)

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:

$$3\text{-Year Pooled Percent Passing} = \frac{2013 \text{ FAY # Passing AIMS & AIMS A} + 2012 \text{ FAY # Passing AIMS & AIMS A}}{2012 \text{ FAY # Tested AIMS & AIMS A} + 2011 \text{ FAY # Tested AIMS & AIMS A}} \times \frac{2013 \text{ FAY # Passing AIMS & AIMS A} + 2012 \text{ FAY # Passing AIMS & AIMS A}}{2012 \text{ FAY # Tested AIMS & AIMS A} + 2011 \text{ FAY # Tested AIMS & AIMS A}}$$
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 2013 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 2013, 2012, and 2011 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. 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 3) and percent tested (see Table 2).

2013 K-2 School Model

![2013 K-2 School Model](image)

\[
\text{On-Target Score} + \text{Composite Score} = \text{A-F Letter Grade}
\]

\[
(100 \text{ points possible}) + (100 + 3 \text{ points possible}) = 200+ \text{ points possible}
\]

*Figure 5. 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 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).

Table 12. On-target scale scores (SS) used for Stanford 10 to AIMS

<table>
<thead>
<tr>
<th>Subject</th>
<th>On-Target Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics</td>
<td>577</td>
</tr>
<tr>
<td>Reading</td>
<td>580</td>
</tr>
</tbody>
</table>

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 6. “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.

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

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 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).
2013 Alternative School Model

Growth Score + Composite Score = A-F ALT Letter Grade
(140 points possible) + (60 + 3 + 3* + 3 points possible) = 200+ points possible

Due to their unique nature, schools identified as alternative schools in fiscal years 2012 or 2013 used slightly different measures for determining letter grades. According to the Arizona State Board of Education, an alternative school must have intended to serve students exclusively in one or more of the following categories:

1. Students with behavioral issues (documented history of disruptive behavior)
2. Students identified as dropouts
3. Students in poor academic standing who are either severely behind on academic credits (more than one year) or have demonstrated a pattern of failing grades
4. Pregnant and/or parenting students
5. Adjudicated youth
6. Any school offering secondary instruction for academic credit used to fulfill Arizona State Board of Education graduation requirements (in part or in full) must offer a diploma of high school graduation.
Additionally, a school operated by a school district must have adopted a mission statement that clearly identifies its purpose and intent to serve a specific student population (please see criterion three) that will benefit from an alternative school setting. A charter school must be expressly chartered to serve a specific student population that will benefit from an alternative school setting. The educational program and related student services of the school must match the mission or charter of the school.

For fiscal year 2013, 184 alternative schools received A-F ALT Letter Grades. These schools were identified as alternative in 2012 or completed application materials prior to the May 1, 2013 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 2013, 35% 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 partially based on growth of grade 10 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 7. Pooled data from alternative school missing students with SGP in 2013
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 2012 & Fall 2012 (FY 2013)
- Fall 2012 & Spring 2013 (FY 2013)

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.

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.

\[
\text{Percent Improved} = 100 \times \frac{\text{(No. of students where (Test 2 Perform – Test 1 Perform) ≥ 1) in both Reading and Mathematics}}{\text{(No. of students tested on Spring 2012 AND Fall 2012 + No of students tested on Fall 2012 AND Spring 2013 + No. of students Grades 4-8 tested on Spring 2012 AND Spring 2013) in both Reading and Mathematics}}
\]

AIMS Improvement represents 35% 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. However, the weight differs because of the primary emphasis on growth for the alternative student population which is typically behind academically. 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 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 penalty for the student testing only once in the fiscal year.

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 2013, FAY students enrolled at the school in 2012, and FAY students enrolled at the school in 2011 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.

Additional Points

ELL reclassification points, as well as graduation rate 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, the requirements to earn three additional points for graduation rate differ in the alternative schools model. Instead, the requirements to earn the three additional graduation rate points reflect the statewide graduation rates of alternative schools only (see Table 12). Though the targets differ for alternative schools based on their unique population, the actual calculations of the 3-year average 5-year graduation rate as well as the average annual change since the baseline year mirror the equations used in the Traditional Model.

Table 13. Criteria for alternative school graduation rate additional points

<table>
<thead>
<tr>
<th>Graduation Rates</th>
<th>Target</th>
<th>Points Possible</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-Year Average of 5-Yr Grad Rate</td>
<td>( \geq 48% )</td>
<td>3</td>
</tr>
<tr>
<td>Current Year 5-Yr Grad Rate ( \geq 52% )</td>
<td>1% average annual increase</td>
<td>3</td>
</tr>
<tr>
<td>Current Year 5-Yr Grad Rate &lt; 52%</td>
<td>2% average annual increase</td>
<td>3</td>
</tr>
</tbody>
</table>

In addition to the three points possible for ELL reclassification and the three points possible for graduation rate increases, alternative schools may earn three additional points for upholding academic...
persistence among their students. An academically persistent student is one who was enrolled in an Arizona public school in fiscal year 2012 and who returned to any public school in fiscal year 2013. This measure includes retained students and excludes students who were grade 12 completers or graduates in the former school year.

To identify whether an alternative school student was academically persistent, enrollment records for school years 2012 and 2013 were drawn together for each student. The school where the student was identified in 2012 was held responsible for the student’s re-enrollment. If an eligible student, non-completer or graduate in 2012, enrolled in a school in 2012 and re-enrolled in any school in Arizona in 2013, the student counted as persistent. The following equation describes the calculation of an alternative school’s persistence rate.

\[
\text{Persistence Rate} = \frac{(\text{No. of students enrolled in 2012 and re-enrolled in 2013}) - \text{No. of students coded as Graduates or Completers in 2012})}{\text{No. of students enrolled in 2012} - \text{No. of students coded as Graduates or Completers in 2012}}
\]

For 2013 accountability, alternative schools were evaluated on the re-enrollment of the students who attended their school in 2012. 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 13). The growth of ‘All Students’, the growth as indicated by percent improved on AIMS, and one additional point were summed and multiplied by .70 in order to weight total growth at 70% of the letter grade determination. The percentage of students passing AIMS and AIMS A was multiplied by .30 in order to weight academic outcomes by 30%. Any additional points such as ELL reclassification, graduation rate, and academic persistence were added after the percentage of students passing AIMS was weighted by 30%. All components were summed in order to arrive at the alternative school’s total points.
Table 14. Example: Calculating an alternative school's total score

<table>
<thead>
<tr>
<th>Component</th>
<th>Score</th>
<th>Weight</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Growth</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Growth – All students SGP</td>
<td>55</td>
<td>.70</td>
<td>39</td>
</tr>
<tr>
<td>Growth – AIMS improvement</td>
<td>78</td>
<td>.70</td>
<td>55</td>
</tr>
<tr>
<td><strong>Academic Outcomes</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent passing AIMS &amp; AIMS A</td>
<td>55</td>
<td>.60</td>
<td>33</td>
</tr>
<tr>
<td>ELL Reclassification</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Graduation Rate</td>
<td>3</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Persistence Points</td>
<td>3</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL POINTS</strong></td>
<td></td>
<td></td>
<td>133</td>
</tr>
</tbody>
</table>

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 distribution-based scale. To identify the thresholds for the alternative school A-F Letter Grades, 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. The standard deviation of total points earned by each school with non-missing growth and academic outcome points was used to set the cut scores for each letter grade (see Figure 8).
Schools receiving a “C-ALT” letter grade had a total point value falling between one half of a standard deviation above and below the mean. Subsequent thresholds designate the point bands for each “ALT” letter grade (see Figures 8 and 9). Letter grades issued in 2012 also utilized this distribution-based scale; therefore, the approximate percentage of A-ALT, B-ALT, C-ALT, and D-ALT schools remained relatively consistent from 2012 to 2013.

Figure 8. Alternative schools' distribution-based scale

Figure 9. Steps in determining alternative schools' letter grades
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.

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.

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 15. Grade values for “alternative only LEAs”

<table>
<thead>
<tr>
<th>School Grade</th>
<th>Value</th>
<th>LEA Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-ALT</td>
<td>4</td>
<td>A</td>
</tr>
<tr>
<td>B-ALT</td>
<td>3</td>
<td>B</td>
</tr>
<tr>
<td>C-ALT</td>
<td>2</td>
<td>C</td>
</tr>
<tr>
<td>D-ALT</td>
<td>1</td>
<td>D</td>
</tr>
<tr>
<td>NR</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Excluding schools labeled “NR” and 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

<table>
<thead>
<tr>
<th>Grade Span</th>
<th>Hours</th>
<th>Minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>KG</td>
<td>260</td>
<td>15,600</td>
</tr>
<tr>
<td>1-3</td>
<td>534</td>
<td>32,040</td>
</tr>
<tr>
<td>4-6</td>
<td>667</td>
<td>40,050</td>
</tr>
<tr>
<td>7-8</td>
<td>801</td>
<td>48,060</td>
</tr>
<tr>
<td>9-12</td>
<td>675</td>
<td>40,500</td>
</tr>
</tbody>
</table>
## Appendix B

Appeals Committee Rubric

Entity ID:

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Initial Review</th>
<th>Review of Evidence Provided</th>
<th>Comments</th>
</tr>
</thead>
</table>
| **Data Calculation Discrepancies** i.e., school attempts to compare data details with their data sets and gets different numbers | Not applicable                                      | Data does not match that of ADE. School submits evidence of discrepancies and provides additional data. | ☐ Compelling evidence  
☐ Not compelling evidence  
☐ Not applicable evidence |
| **Special Circumstances Outside the Control of School/District Administration or Management**  
i.e., school indicates significant teacher attrition; environmental issues/events; adverse testing conditions; school/community emergency/crisis | Not applicable                                      | School had a situation that was unavoidable and outside of the school’s control and hindered the test administration or student performance. This situation resulted in adverse data for the year(s) in question. | ☐ Compelling evidence  
☐ Not compelling evidence  
☐ Not applicable evidence |
| **Policy/Methodology Issues**  
i.e., school disagrees with use of baseline | Not applicable                                      |                                                                           |                                                                 |

The ADE will not accept/review appeals related to policy/methodology.
<table>
<thead>
<tr>
<th>Reason Reviewed</th>
<th>Initial Review</th>
<th>Review of Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Calculation Discrepancies</td>
<td>N/A</td>
<td>Correct data/calculation, Data does not match</td>
</tr>
<tr>
<td>Special Circumstances</td>
<td>N/A</td>
<td>Did not cause overall performance, Adverse result based on situation</td>
</tr>
<tr>
<td>Policy/Methodological Issues</td>
<td></td>
<td>The ADE will not accept/review appeals related to policy/methodology.</td>
</tr>
</tbody>
</table>

Please indicate appropriate response(s) by checking within the box(es) provided.

**Committee Recommendation:**
- [ ] **Granted**
- [ ] **Denied**

**Final Appeal Decision:**
- [ ] **Granted**
- [ ] **Denied**

**Comments:**

**Appeal Result:**
## Appendix C

### AIMS Scale Scores and Performance Levels

**Spring 2012 - Spring 2014**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Performance Level</th>
<th>Reading Scale Scores</th>
<th>Writing Scale Scores</th>
<th>Mathematics Scale Scores</th>
<th>Science Scale Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd</td>
<td>Falls Far Below</td>
<td>200-378</td>
<td>100-302</td>
<td>303-346</td>
<td>406-540</td>
</tr>
<tr>
<td></td>
<td>Approaches</td>
<td>379-430</td>
<td>Suspended</td>
<td>347-405</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Meets</td>
<td>431-515</td>
<td></td>
<td>406-540</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Exceeds</td>
<td>516-640</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4th</td>
<td>Falls Far Below</td>
<td>220-401</td>
<td>120-330</td>
<td>462-499</td>
<td>547-800</td>
</tr>
<tr>
<td></td>
<td>Approaches</td>
<td>402-449</td>
<td>Suspended</td>
<td>462-499</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Meets</td>
<td>480-535</td>
<td></td>
<td>500-546</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Exceeds</td>
<td>536-660</td>
<td></td>
<td>547-800</td>
<td></td>
</tr>
<tr>
<td>5th</td>
<td>Falls Far Below</td>
<td>240-423</td>
<td>140-347</td>
<td>438-380</td>
<td>436-580</td>
</tr>
<tr>
<td></td>
<td>Approaches</td>
<td>424-467</td>
<td></td>
<td>438-380</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Meets</td>
<td>468-555</td>
<td></td>
<td>438-380</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Exceeds</td>
<td>556-675</td>
<td></td>
<td>436-580</td>
<td></td>
</tr>
<tr>
<td>6th</td>
<td>Falls Far Below</td>
<td>250-432</td>
<td>160-365</td>
<td>436-397</td>
<td>446-600</td>
</tr>
<tr>
<td></td>
<td>Approaches</td>
<td>433-477</td>
<td></td>
<td>436-397</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Meets</td>
<td>478-570</td>
<td></td>
<td>438-445</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Exceeds</td>
<td>571-690</td>
<td></td>
<td>446-600</td>
<td></td>
</tr>
<tr>
<td>7th</td>
<td>Falls Far Below</td>
<td>260-442</td>
<td>180-381</td>
<td>411-459</td>
<td>460-620</td>
</tr>
<tr>
<td></td>
<td>Approaches</td>
<td>443-488</td>
<td></td>
<td>411-459</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Meets</td>
<td>489-566</td>
<td></td>
<td>460-620</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Exceeds</td>
<td>587-720</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8th</td>
<td>Falls Far Below</td>
<td>270-451</td>
<td>200-408</td>
<td>473-499</td>
<td>532-800</td>
</tr>
<tr>
<td></td>
<td>Approaches</td>
<td>452-498</td>
<td>Suspended</td>
<td>473-499</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Meets</td>
<td>499-601</td>
<td></td>
<td>500-531</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Exceeds</td>
<td>602-800</td>
<td></td>
<td>532-800</td>
<td></td>
</tr>
<tr>
<td>HS</td>
<td>Falls Far Below</td>
<td>500-626</td>
<td>300-432</td>
<td>200-474</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Approaches</td>
<td>627-673</td>
<td>430-479</td>
<td>474-516</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Meets</td>
<td>674-772</td>
<td>487-536</td>
<td>475-519</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Exceeds</td>
<td>773-900</td>
<td>537-700</td>
<td>537-800</td>
<td></td>
</tr>
</tbody>
</table>