



A GUIDE TO ADEQUATE YEARLY PROGRESS DETERMINATIONS

August 2011

SECTION I: INTRODUCTION AND BACKGROUND

Introduction

The Utah State Office of Education (USOE) has implemented an accountability system that meets the requirements of the No Child Left Behind Act of 2001. In addition to the Utah Performance Assessment System for Students (U-PASS), a process of making annual determinations of Adequate Yearly Progress (AYP) is in place. Together, these systems provide a comprehensive accountability model for public education in Utah.

This document is designed to provide both a high level overview of the AYP process, followed by a more detailed treatment of each component. By so doing, this document will be useful to those seeking a general understanding of the system and those who are looking for more in-depth information about each part of the process.

No Child Left Behind

The federal No Child Left Behind Act of 2001 (NCLB) is the most recent reauthorization of the Elementary and Secondary Education Act (ESEA) of 1965. NCLB extended federal education law in several important ways. Some of the most prominent provisions related to assessment and accountability include:

- States must adopt challenging academic standards in reading, language arts, mathematics, and science and assess these standards annually in grades 3-8 and in one grade from 10-12
- Assessment results must be publicly reported and disaggregated by key student groups including:
 - Economically disadvantaged
 - Ethnic groups
 - Limited English proficient
 - Students with disabilities
- An accountability system must be created to make annual determinations of Adequate Yearly Progress (AYP), with the goal of having all students proficient in reading and mathematics by the 2013-2014 academic year
- Sanctions are identified for schools receiving Title I funds that fail to make AYP for at least two consecutive years.

SECTION II: FOUNDATIONS OF UTAH'S AYP PROCESS

Consistent with federal requirements, there are three main components to Utah's AYP determination process:

- Participation
- Academic Achievement
- Additional Indicator

Participation

The participation requirement stipulates that 95% of students in each district, school, and student group containing 40 or more students must participate in the appropriate state assessment.

Academic Achievement

Academic achievement sets progressively rigorous standards that districts, schools, and student groups containing 10 or more students must achieve – the Annual Measurable Objective (AMO). When the percent of students scoring proficient or above on the appropriate state assessment meets or exceeds the AMO “bar” or is within a 99% confidence interval, that group has met the academic achievement criterion.

There are alternate methods for meeting the academic achievement criterion, termed “safe harbor.” In brief, a group qualifies under safe harbor if the percent of students who are not proficient is reduced by 10% compared to the previous year. That is, the proficiency rate based on the students in the prior year is compared to the proficiency rate of the students in the present year.

Failing this, safe harbor can be demonstrated by showing “progress.” This approach involves comparing proficiency rates for qualifying matched student groups or cohorts from year to year. If the cohort reduces the percent of students not proficient by 10%, the criterion is met.

Additional Indicator

Attendance is used as the additional indicator for elementary and middle schools. Schools are required to attain a 93% attendance rate or any improvement from the previous year to meet this criterion. Graduation rate is the additional indicator for high schools. A rate of 85.7% must be attained to meet this standard.

Student groups of 40 or more must meet the additional indicator standard if academic achievement was demonstrated via safe harbor.

SECTION III: AYP DETERMINATIONS

Participation

The participation rate is determined by dividing the number of students attempting the CRT and UAA by the total number of validated warehouse students with CRT and UAA tests. The resulting ratio must be equal to or greater than 95% to meet this standard.

If the participation rate is below 95%, multi-year averaging will be used. First, the participation rate will be computed based on participants in the current year and the previous year. If the resulting rate is 95% or more, this standard is met. If not, the participation rate will be calculated based on the current year and the two preceding years. If the resulting rate is equal to or greater than 95%, the participation criterion is met. If not, AYP is not achieved.

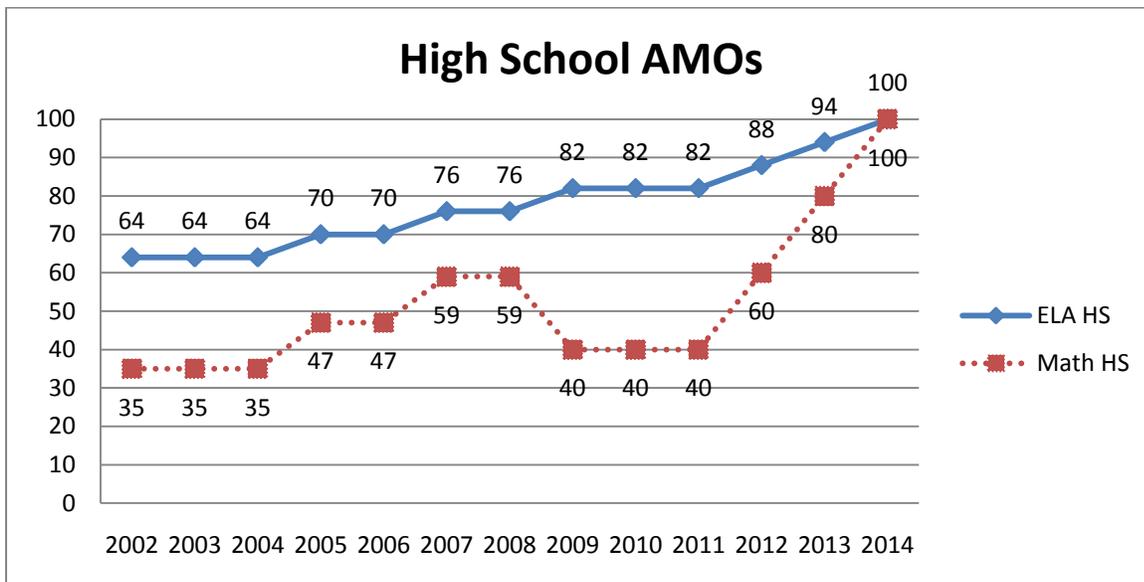
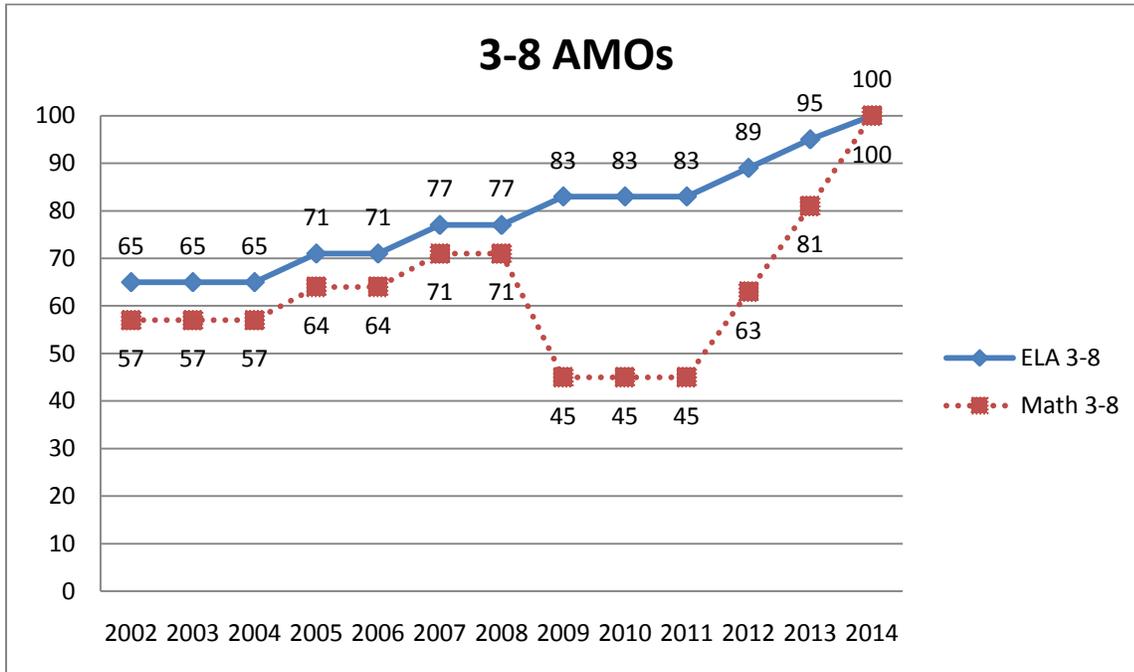
Participation rate is calculated for groups of 40 or more. If the school size is less than 40, AYP determinations are based on other indicators.

Academic Achievement

To determine if a student group, school, or district has met the academic achievement standard, all groups of 10 or more Full Academic Year (FAY) students must meet the established Annual Measureable Objective (AMO). Essentially, the AMO sets the “bar” for the percent of students who must score proficient to make AYP.

Annual Measureable Objective (AMO)

Consistent with federal regulations, Utah established a baseline AMO in 2002 for ELA and mathematics in 3-8 and high school. These standards increase every two years up to the final goal of 100% proficient in 2013-2014. The graphs below show Utah’s AMO standards.



Confidence Interval for AMO

If a group does not meet the AMO outright, a 99% confidence interval is calculated. This is a test of statistical significance with a one tailed alpha of .01. A group makes AYP via confidence interval if the outcome is not statistically significant. Stated another way, this procedure answers the question, “can we conclude with 99% certainty that the result is not due to chance?” If the lower bound of the 99% confidence interval includes the obtained value, we conclude that the difference is not significant and the criterion is met.

The confidence interval can be calculated as follows:

$$\text{Lower_CI} = \text{AMO\%_proficient} - 2.33 * SE$$

$$SE = \sqrt{\frac{\text{AMO\% proficient} * (1 - \% \text{AMOproficient})}{\text{FAY_students}}}$$

For example, the mathematics 3-8 AMO in 2008 is 78%. That is, 78% of students in an elementary school would need to score proficient on the CRTs in grades 3-5 to satisfy this requirement. Assume this school serves 20 FAY students in a specific group and 13 of these students score proficient, which is 65%. The confidence interval calculation seeks to determine if there is a statistically significant difference between the obtained value of 65% and the target value of 78%. If the difference is significant, the school did not meet the academic achievement indicator for this student group. If not, this criterion is satisfied via confidence interval.

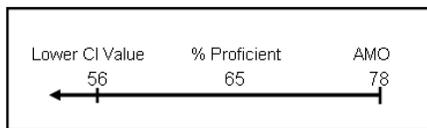
In our example, the standard error is computed as follows:

$$SE = \sqrt{\frac{.78 * (1 - .78)}{20}} \quad SE = .093$$

The standard error is .093. To get the lower range of the confidence interval the following calculation is applied:

$$\text{Lower_CI} = .78 - 2.33 * .093 = .78 - .22 = .56$$

Because the obtained (or actual) percent proficient value, 65%, is greater than 56%, the school has met the academic indicator via confidence interval.



The confidence interval calculation is primarily influenced by the number of students in the student group. If the student group is large, the calculation will establish a relatively small band around this figure, indicating the obtained figure is relatively precise. If the group is small, the error associated with that value will be larger, consequently the confidence interval includes more values.

Safe Harbor

If the district, school, or student group fails to make academic achievement through application of the confidence interval, the safe harbor provision applies. A group must decrease the percent of students who do not achieve a proficient score on the applicable state assessment by at least 10% to qualify for safe harbor.

By way of example, let us say that 56% of the students in a particular student group scored proficient or above, but that was not high enough to meet the AMO. This student group would meet safe harbor if the percent of students scoring below proficient decreases by 10% from the previous year. In this example, if 51% had scored proficient or advanced last year, this student group would meet the safe harbor target because the decrease in non-proficient students went from 49% to 44%, a decrease of 11.4%. In this safe harbor calculation, we are comparing all eligible students in a student group within a particular school to all eligible students in that student group last year. In an elementary school, for example, this would mean comparing the current year's 3rd, 4th, and 5th graders to last year's 3rd, 4th, and 5th graders.

Confidence Interval for Safe Harbor

If safe harbor is not achieved based on initial calculations, a 75% confidence interval is applied. This is a test to determine if the reduction in percent not proficient is significantly different than the target 10% reduction value. If the obtained value is less than the upper bound of the 75% confidence interval, we conclude that the difference is not significant and the criterion is met.

The confidence interval can be calculated as follows:

$$Upper_CI = Obtained\% \text{ proficient} + .68 * SE$$

$$SE = \sqrt{\frac{TARGET\% \text{ proficient} * (1 - TARGET\% \text{ proficient})}{FAY_students}}$$

In the example referenced earlier, 51% of a student group scored proficient the previous year. Since 49% were not proficient that year, the target for safe harbor is a ten percent improvement on 49%, which is 44.1% (49*.90). That is, 44.1% or fewer students should be not proficient in the current year. A confidence interval can then set on the 44.1% to determine if the actual reduction is significantly different from the target. Because the goal is to obtain a value of less than the target value, the confidence interval sets an upper range. In other words, missing the target only occurs when the percent not proficient exceeds the reduction goal. In these circumstances, the confidence interval is applied to see if this difference is statistically significant. Assuming there are 20 FAY students in the group, the calculation is as follows:

$$SE = \sqrt{\frac{.441 * (1 - .441)}{20}} \quad SE = .111$$

The standard error is .111. To get the upper range of the confidence interval the following calculation is applied:

$$\text{Upper_CI} = .441 + .68 * .111 = .441 + .075 = .516$$

If the percent not proficient is equal to or less than 51.6%, the group has made safe harbor via the confidence interval.

Progress

For student groups that do not meet the AMO standard and do not meet safe harbor as described above, another safe harbor calculation based on a matched cohort (or panel) of students will be applied. This approach compares the performance of the same FAY students in a group from the previous year to the current year. If there is a 10% reduction in the percent of matched students scoring below proficient, this standard is met. This calculation is only applied if there is a 95% match rate (students can be matched to any public school in Utah).

Following the example presented above for safe harbor, progress would be demonstrated if the current year 3rd, 4th, and 5th grade students had a reduction in the percent scoring below proficient when these same students were in 2nd, 3rd, and 4th grade, respectively.

Additional Indicator

All student groups that make AYP through safe harbor are held accountable for an additional indicator as part of AYP. (Note: if a group meets the AMO target with or without confidence interval or meets the progress criterion the additional indicator does not apply.) The indicator for elementary and middle schools is attendance and for high schools it is graduation rate.

Attendance

Attendance rate is obtained by dividing the sum of days in attendance by the sum of days in membership for all students in the school or student group. Groups that meet or exceed an attendance rate of 93% have achieved the standard for this indicator. If a group is below this standard but has improved attendance rate compared to the previous year, it is considered to have satisfied the additional indicator requirement.

Graduation Rate

Graduation rate is obtained by dividing the graduates in a cohort by graduates plus dropouts in the cohort. The cohort begins in grade 10. If a school or group achieves a graduation rate of 85.7% it has met the standard for this indicator.

The following rules apply to calculation of graduation rate:

- Graduation rate is only applied for groups (cohorts) containing 40 or more students. If the group is below 40, the indicator doesn't apply and the cohort is considered to have met the graduation rate standard.
- If the graduation rate is less than 85.7%, but greater than the graduation rate for the prior year, the cohort has met the standard.*
- The graduation rate "lags" by one year. For example, the 2008 graduation rate is computed based on the class of 2007 cohort.
- Regular diploma graduates may include students with disabilities who can be retained as seniors until the age of 22. As long as such students are retained, their year of expected graduation is incremented by one, so their completion status is included in the graduation rate for the applicable class.

*Starting with 2008 AYP determinations, if a student group makes safe harbor (with or without confidence interval) and if the group size is greater than 40 for both years and if graduation rate is below 85.7% for a student group other than whole school, attendance for the current year and prior year will be used to determine if there is an increase in the additional indicator.

SECTION IV: ASSESSMENTS

Academic Achievement is based on percent of students proficient on Core CRTs in English Language Arts (ELA) and mathematics.

English Language Arts

Core CRT results in ELA grades 3-8 and 10 are used to determine percent of students proficient for purposes of AYP. Proficient is defined as scores in Level 3 or Level 4.

Mathematics

Students in grades 3-6 typically take the grade level mathematics CRTs. Starting in grade 7, students take the course appropriate CRT: 7th grade mathematics, pre-algebra, algebra, or geometry. For high school mathematics AYP determinations, performance on algebra or geometry CRTs will be used. As with ELA, proficient is defined as obtaining a score in Level 3 or Level 4.

Science

Students are required to participate in the appropriate science assessment under NCLB. However, performance on science assessments are not factored into Academic Achievement for AYP determinations.

Utah Alternate Assessment

Students with the most significant cognitive disabilities take the Utah Alternate Assessment (UAA). Students scoring at level 3 or 4 on the appropriate UAA are counted as “proficient” in AYP determinations for the special education student group, the whole school, and as part of any other group to which they belong (e.g., economically disadvantaged). Although all students who qualify are administered the UAA, federal regulations permit no more than 1% of UAA results to be counted as “proficient” in AYP determinations.

SECTION V: PARTICIPATION AND INCLUSION RULES

The following section presents information on how various definitions contribute to the calculation of a school’s participation rate and determine how various students are included in the accountability system for AYP determination. Basic participation rules are presented first, followed by the specific inclusion/participation rules for students with disabilities and English language learners.

Attempted

Tests with a participation code of "Attempted" will be counted even if the student did not answer any questions (i.e., response code=0). Otherwise, 0 response counts will be dropped (with the exception of UAA tests which also have a response count of 0).

Blank Answer Document

Blank answer documents are always given a score of zero. Any special codes are maintained as reported by the LEA.

Full Academic Year (FAY)

160 days or more of membership in the school or LEA (if district accountability)

Late answer documents

- Prior to June 25th for traditional schools – the test is scanned, scored and included in Accountability
- Prior to July 6th for year round schools – the test is scanned, scored and included in Accountability
- After June 25th for traditional schools – the test is NOT scanned or scored; defaults to absent
- After July 6th for year round schools – the test is NOT scanned or scored; defaults to Absent

Minimum student group (n) rule:

- **Participation**—A minimum group size of 40 is required to calculate participation for either ELA or mathematics. If a unit has between 11-39 examinees, it is evaluated on performance and is considered to have met the participation standard.
- **Academic Achievement**—For a group to be evaluated against the AMO there must be at least 10 FAY students in ELA or mathematics.
- **Additional Indicator**- For attendance and graduation rate, the minimum group size is 40.

Mobile Student

A student who spends less than 160 days, or its equivalent in one school.

Participation

Tests marked with a non-participation code of 1 or 2 (absent & excused) AND a response count greater than zero (i.e., they attempted at least one question) will have the non-participation code deleted. In other words, responses on the test form override the non-participation codes. Non-Participation (Absent/Excused) will not count against the school for Academic Achievement, but will count for the participation rate.

Student Groups

All assessment and accountability reports are disaggregated by: Asian/Pacific Islander, Native American, African American, Hispanic, White, Gender, Migrant status, English Language Learner, Students with Disabilities, Students without Disabilities, Economically disadvantaged, and Non Economically disadvantaged.

Student refused to test (RT)

- For tests marked with a participation code of RT AND a response count greater than zero, the RT code is removed and the test is scored for both participation (add to numerator and denominator) and academic achievement (i.e., the response count overrides the RT code)
- If the response count is zero then the RT code is retained and the test is included in participation (add to numerator and denominator) calculations and as non proficient in academic achievement.

Student takes test in a different school than resident school

Student participation and academic achievement is attributed to the school of residence

Unknown & Withdrawn answer documents

Student is removed from all calculations

Unreturned answer documents

A test record with a score of zero and a non-participation code of 'Absent' will cause an error report to be generated

Students with Disabilities

Accommodations

Students are eligible to receive any accommodation as specified by USOE accommodation guidance. Accommodations must be indicated on each student's answer document.

Modifications

If modified and accommodation is bubbled, the test score is invalidated and the student is counted as non-proficient for achievement and as a non-participant for participation rate calculations.

Retain in student group for Two Years

SWD students will count in the SWD student group for two school years after the school year in which they exit the SWD program. This will be determined by the SWD exit date in the warehouse and for only those students who the district provides an exit date. This can also include "former SWD students if a student who was identified as SWD at some time in the prior two years but who no longer meets the State's definition of SWD"

UAA

The Utah Alternate Assessment (UAA) is designed to assess the knowledge and skills of the most significantly cognitively disabled students. UAA scores count in all achievement calculations and a student participating on UAA counts as a participant in the same way and for the same grades that grade level tests count for non-disabled students. However, if any CRT score is present for a student, then all UAA scores (math, language arts, science) are set to non-proficient. Proficiency on the Utah Alternate Assessment will be limited to 1% of the total state enrollment. UAA Tests can include the same test taken in multiple years.

Inclusion/Participation Definitions for English Language Learners (ELL)

ELL Students

- If an ELL student's first year in U.S. schools is April 15th or later, he/she is exempt from all tests and is not included in AYP determinations. The next year will be that student's first year in U.S. Schools.
- Student in their first year in U.S. schools will not be required to take the English Language Arts CRT, but will be required to take the math and science CRTs. CRT scores for ELL students in their first year will not be used for AYP calculations. All other ELL students will participate in accordance with NCLB with appropriate accommodations.
- In the student's second school year and beyond in the U.S., all test scores will count for academic performance and participation.

ELL Students Retained in the student group for Two Years

ELL students will count in the LEP student group for two school years after the school year in which they exited the ELL program. This is determined by the `lep_exit_date` in the `student_lep` table of the warehouse. This is applied *only to those students who the district provides an exit*

date for. This can also include “former LEP student is a student who was identified as LEP at some time in the prior two years but who no longer meets the State’s definition of LEP”

Language Proficiency Categories

- Level 1 Entering
- Level 2 Beginning
- Level 3 Developing
- Level 4 Expanding
- Level 5 Bridging
- O Identified as ELL but opted out of services by parent
- U ELL & UAA
- Y Non-tested ELL student
- Blank Not ELL

- Students who are Fluent (F) need to have that designation continued on his/her S1 record for 2 years beyond the school year in which he/she was initially submitted as a former ELL student.
- If there is not a language proficiency code for the current year, previous year code/score used. If previous year score is used, the file will so indicate.
- If student has a clearinghouse data element that identifies him/her as LEP, but no UALPA scaled score, then the UALPA proficiency score will be left blank.
- If student has a UALPA scaled score, but no LEP information then parent or primary language or instructional type is marked as unknown. LEP will be marked as Y.
- If a student has a UALPA code or an ELL code from the clearinghouse, they are counted as ELL in U-PASS, AYP and AMAO.
- Y and U codes for ELL students are not included in accountability calculations
- If student has a clearinghouse data element that identifies him/her as LEP, but no UALPA scaled score, then the UALPA proficiency score will be left blank.
- If student has a UALPA scaled score, but no LEP information then parent or primary language or instructional type is marked as unknown. LEP will be marked as Y.
- If a student has a UALPA code or an ELL code from the clearinghouse, they are counted as ELL in AYP and UPASS.