

AYP Proficiency Calculations

Introduction

For AYP proficiency calculations, all students taking the 3rd, 4th, 5th, 6th, 7th, and 8th grade Reading and Mathematics Ohio Achievement Assessments and the 10th grade Reading and Mathematics Ohio Graduation Tests are evaluated. Each student subgroup is evaluated for the Reading and Mathematics tests. The ten student subgroups that are evaluated for AYP are: All Students; American Indian/Alaskan Native Students; Asian/Pacific Islander Students; Black, non-Hispanic Students; Hispanic Students; Multi-Racial Students; White, non-Hispanic Students; Economically Disadvantaged Students; Students with Disabilities (IEP); and Students with Limited English Proficiency (LEP). Each student subgroup's results are aggregated across all AYP tested grades within a school building or school district, and the results are calculated separately for the Reading and Mathematics tests.

All student subgroups of sufficient size must meet both the Percent Proficient indicator and the Participation Rate indicator (please see the "AYP Participation" document for more information on the Participation Rate calculation for AYP) on a given test (Reading or Mathematics) in order for the building or district to meet AYP in that subject.

If the number of students in a particular student subgroup taking the test is less than 30, the student subgroup is not evaluated for AYP proficiency on that test and the building/district will receive an "NR" ("Not Rated") designation for that student subgroup. If the number of students is at least 30, the student subgroup is evaluated for AYP proficiency and must meet the designated AYP goal (also called AYP target) for that test.

For the 2010-2011 school year, there are four ways that a student subgroup can meet AYP for the Percent Proficient indicator:

1. By achieving a percent proficient that is at or above the AYP goal with the current year results;
2. By achieving a percent proficient that is at or above the AYP goal with the two-year combined results;
3. By meeting individualized Safe Harbor targets for AYP (please see the "AYP Safe Harbor Calculations" section of this document for a detailed explanation of Safe Harbor requirements); or
4. By achieving a percent proficient that is at or above the AYP goal with students who are projected to remain or to become proficient within the next two years (please see the "AYP Growth Measure Calculations" section of this document for a detailed explanation of growth measure requirements).

The 2010-2011 AYP goals for Reading and Mathematics are:

Grade and Test	2010-2011 Reading AYP Goal	2010-2011 Mathematics AYP Goal
3 rd Grade Ohio Achievement Assessments	82.70%	76.40%
4 th Grade Ohio Achievement Assessments	81.00%	80.30%
5 th Grade Ohio Achievement Assessments	81.00%	69.80%
6 th Grade Ohio Achievement Assessments	85.50%	73.10%
7 th Grade Ohio Achievement Assessments	81.20%	68.40%
8 th Grade Ohio Achievement Assessments	84.30%	68.50%
10 th Grade Ohio Graduation Tests	83.10%	76.00%

The Reading and Mathematics goals increased this year as part of the plan described in Ohio's Consolidated Application Accountability Workbook approved by the United States Department of Education and mandated by the *No Child Left Behind Act of 2001*. Additional incremental increases in the AYP goals will occur in the 2011-2012, 2012-2013, and 2013-2014 school years.

If a student subgroup reaches its percent proficient AYP goal with at least one of these four methods, then the student subgroup meets the Percent Proficient indicator. If a student subgroup does not reach its percent proficient AYP goal with any of these four methods, then it does not meet the Percent Proficient indicator.

AYP Current Year and Two-Year Combined Results

The following formulas show how the percent proficient is calculated using the current year results and the two-year combined results:

2010-2011 AYP Percent Proficient =	$\frac{\text{Number of Students in AYP Tested Grades Scoring at or above the Proficient Level on the Test (Required Test Type of STR or ALT) for the 2010-2011 School Year}}{\text{Number of Students in AYP Tested Grades Taking the Test (Required Test Type of STR or ALT) for the 2010-2011 School Year}}$	X 100
Two-Year Combined Results AYP Percent Proficient =	$\frac{\text{Number of Students in AYP Tested Grades Scoring at or above the Proficient Level on the Test (Required Test Type of STR or ALT) for the 2009-2010 and 2010-2011 School Years Combined}}{\text{Number of Students in AYP Tested Grades Taking the Test (Required Test Type of STR or ALT) for the 2009-2010 and 2010-2011 School Years Combined}}$	x 100

Number of students in AYP tested grades scoring at or above the proficient level on the test: This is the number of students who took the 3rd, 4th, 5th, 6th, 7th, or 8th grade Reading and Mathematics Ohio Achievement Assessments or the 10th grade Reading and Mathematics Ohio Graduation Tests and scored at or above the proficient level. All grades (3rd, 4th, 5th, 6th, 7th, 8th, and 10th) are combined into one total for each subject and for each student subgroup. Only those students who have been enrolled for a "full academic year,"¹ who have taken the appropriate standard assessment (with or without accommodations) or the alternate assessment, and who meet student subgroup inclusion criteria are included in the total. The two-year combined results calculations include these students for both the 2009-2010 and 2010-2011 school years.

Number of students in AYP tested grades taking the test: This is the number of students required to take the 3rd, 4th, 5th, 6th, 7th, or 8th grade Reading and Mathematics Ohio Achievement Assessments or the 10th grade Reading and Mathematics Ohio Graduation Tests who actually took the tests. All grades (3rd, 4th, 5th, 6th, 7th, 8th, and 10th) are combined into one total for each subject and for each student subgroup. Only those students who have been enrolled for a "full academic year," who have taken the appropriate standard assessment (with or without accommodations) or the alternate assessment, and who meet student subgroup inclusion criteria

¹ The "full academic year" criterion requires that students be enrolled continuously in a building or district from the end of October Count Week through spring testing week (i.e., May 10 for students in grades 3-8 and March 19 for students in grade 10).

AYP Proficiency Calculations

are included in the total. The two-year combined results calculations include these students for both the 2009-2010 and 2010-2011 school years.

Notes: LEP students enrolled in U.S. schools for no more than 180 days of the 2010-2011 school year are not included in either the numerator or the denominator of the percent proficient calculation. Foreign exchange students who have been enrolled for less than 180 days also are not included in either the numerator or the denominator of the percent proficient calculation. Percent proficient calculations are subject to the 1.0% cap on alternate assessment scores that may count as proficient for an LEA.

AYP Safe Harbor Calculations

Safe Harbor is an alternative method for a student subgroup to meet the AYP Percent Proficient indicator in Reading or Mathematics. If a subgroup meets AYP proficiency in a subject by achieving a percent proficient that is at or above the AYP goal with the current year results or by achieving a percent proficient that is at or above the AYP goal with the two-year combined results, then it is not necessary to apply Safe Harbor calculations to that student subgroup. Safe Harbor calculations also do not need to be applied to student subgroups that do not meet the minimum subgroup size requirement for being evaluated for AYP (i.e., N = 30 students for the Percent Proficient indicator).

Safe Harbor calculations are displayed in the “Safe Harbor Determinations” table in the Secure Data Center’s (SDC) District AYP Workbooks and School AYP Workbooks. In the cases where a student subgroup meets AYP via current year results or two-year combined results, and in the cases where a student subgroup does not meet the minimum subgroup size requirement for being evaluated for AYP, the Safe Harbor determination shown in the final “Safe Harbor Met” column is “N/A” (Not Applicable). In the cases where a student subgroup does not meet AYP via current year results or two-year combined results, the Safe Harbor determination shown in the final “Safe Harbor Met” column is either “Met” or “Not Met.”

To meet AYP via Safe Harbor, a student subgroup must meet two requirements:

1. The student subgroup must make a 10% or greater reduction in its percentage of non-proficient students from the previous year (calculated separately for Reading and Mathematics); and
2. The student subgroup must meet AYP for a relevant non-test indicator (Attendance Rate for elementary, middle, and junior high schools, as well as schools that have no 12th grade students; Graduation Rate for high schools containing 9th – 12th grades; and either Attendance Rate or Graduation Rate for districts). Meeting AYP for the non-test indicator can be accomplished either by meeting the indicator’s AYP goal outright with current year results or two-year combined results, or by showing improvement over the previous year’s results. The AYP goals for the non-test indicators are 93.0% for Attendance Rate and 73.6% for Graduation Rate.

The following formula shows how the percent proficient goal for Safe Harbor is calculated:

2010-2011 Percent Proficient Goal for Safe Harbor =	(Percentage of Proficient Students during the 2009-2010 school year) + (Percentage of Non-Proficient Students during the 2009-2010 school year X 10.0%)
--	---

Percentage of proficient students the previous year: This is the percentage of students who scored at the proficient, accelerated, or advanced level during the 2009-2010 school year, among all students who were enrolled for a “full academic year” during the 2009-2010 school year who took the Ohio Achievement Assessments or Ohio Graduation Tests (calculated separately for Reading and Mathematics). This number includes students who took alternate assessments.

Percentage of non-proficient students the previous year: This is the percentage of students who scored at the limited or basic level during the 2009-2010 school year, among all students who were enrolled for a “full academic year” during the 2009-2010 school year who took the Ohio Achievement Assessments or Ohio Graduation Tests (calculated separately for Reading and Mathematics). This number includes students who took alternate assessments.

AYP Proficiency Calculations

The following example shows how the Safe Harbor formula is applied:

- Percentage of proficient students in 2009-2010 = 60.0%
- Percentage of non-proficient students in 2009-2010 = 40.0%
- Necessary reduction in percentage of non-proficient students = 10.0% of 40.0% = 4.0%
- Percent proficient goal for Safe Harbor in 2010-2011 = 60.0% + 4.0% = 64.0%

In this example, if at least 64.0% of all students are proficient in 2010-2011, and if AYP is met for the applicable non-test indicator (Attendance Rate or Graduation Rate), then AYP is met via Safe Harbor. If fewer than 64.0% of all students are proficient in 2010-2011, or if AYP is not met for the applicable non-test indicator, then AYP is not met via Safe Harbor.

AYP Growth Measure Calculations

The growth measure is the final method for a student subgroup to meet the AYP Percent Proficient indicator in Reading or Mathematics. If a student subgroup meets the AYP Percent Proficient indicator in a subject by other means (i.e., by achieving a percent proficient that is at or above the AYP goal with the current year results, by achieving a percent proficient that is at or above the AYP goal with the two-year combined results, or by meeting individualized Safe Harbor targets for AYP), then it is not necessary to apply the growth measure to that student subgroup. The growth measure also does not need to be calculated for student subgroups that do not meet the minimum subgroup size requirement for being evaluated for AYP (i.e., N = 30 students for the Percent Proficient indicator).

Growth measure results are displayed in the “Growth Measure Determinations” table in the Secure Data Center’s (SDC) District AYP Workbooks and School AYP Workbooks. In the cases where a student subgroup meets AYP via current year results, two-year combined results, or Safe Harbor, the growth measure determination shown in the “Reading/Math Growth Measure Met?” column is “N/A” (Not Applicable). In the cases where a student subgroup does not meet the minimum subgroup size requirement for being evaluated for AYP, the growth measure determination shown in the “Reading/Math Growth Measure Met?” column is “NR” (Not Rated). Finally, in all cases for which the growth measure is calculated (i.e., those cases in which a student subgroup does not meet AYP via its current year, two-year combined, or Safe Harbor results), the Growth Measure determination shown in the “Reading/Math Growth Measure Met?” column is either “Met” or “Not Met.”

The growth measure is used to make a prediction about a student’s future test performance. In the growth measure calculation, students in 4th through 8th grades belonging to a given student subgroup who are not proficient in the current year, but whose test results indicate a trajectory toward proficiency within two years, are treated as proficient for the current year. AYP is then recalculated to include in its numerator all students in 4th through 8th grades projected to be proficient within two years plus the students in grades 3 and 10 who are proficient in the current year. If a student subgroup reaches its AYP goal with the percent proficient that has been recomputed to include all students in 4th through 8th grades who are projected to be proficient within two years, then the student subgroup meets the AYP Percent Proficient indicator. If a student subgroup does not reach its AYP goal with the percent proficient that has been recomputed to include all students in 4th through 8th grades who are projected to be proficient within two years, then the student subgroup does not meet the AYP Percent Proficient indicator.

AYP Proficiency Calculations

The following formula shows how the percent proficient is calculated after incorporating the growth measure results:

2010-2011 AYP Growth Measure Percent Proficient =	Number of students in AYP Tested Grades Scoring at or above the Proficient Level on the Test (Required Test Type of ALT) for the 2010-2011 School Year + Number of students in Grades 3 and 10 Scoring at or above the Proficient Level on the Test (Required Test Type of STR) for the 2010-2011 School Year + Number of Students in AYP Tested Grades 4-8 Projected to Score at or above the Proficient Level on the Test (Required Test Type of STR) within two years of the 2010-2011 School Year <hr style="width: 50%; margin: auto;"/> Number of Students in AYP Tested Grades Taking the Test (Required Test Type of STR or ALT) for the 2010-2011 School Year	X 100
--	---	--------------

Number of students in AYP tested grades scoring at or above the proficient level on the test: This is the number of students who took the 3rd, 4th, 5th, 6th, 7th, or 8th grade Reading and Mathematics Ohio Achievement Assessments or the 10th grade Reading and Mathematics Ohio Graduation Tests and scored at or above the proficient level. All grades (3rd, 4th, 5th, 6th, 7th, 8th, and 10th) are combined into one total for each subject and for each student subgroup. Only those students who have been enrolled for a “full academic year,” who have taken the alternate assessment, and who meet student subgroup inclusion criteria are included in the total.

Number of students in Grades 3 and 10 scoring at or above the proficient level on the test: This is the number of students who took the 3rd grade Reading and Mathematics Ohio Achievement Assessments or the 10th grade Reading and Mathematics Ohio Graduation Tests and scored at or above the proficient level. Both grades (3rd and 10th) are combined into one total for each subject and for each student subgroup. Only those students who have been enrolled for a “full academic year,” who have taken the appropriate standard assessment (with or without accommodations), and who meet student subgroup inclusion criteria are included in the total.

Number of students in AYP tested grades 4-8 projected to score at or above the proficient level on the test: This is the number of students who took the 4th, 5th, 6th, 7th, or 8th grade Reading and Mathematics Ohio Achievement Assessments who are projected to become proficient on the Reading and/or Mathematics tests within two years. All grades (4th, 5th, 6th, 7th, and 8th) are combined into one total for each subject and for each student subgroup. Only those students who have been enrolled for a “full academic year,” who have taken the appropriate standard assessment (with or without accommodations), and who meet student subgroup inclusion criteria are included in the total.

Number of students in AYP tested grades taking the test: This is the number of students required to take the 3rd, 4th, 5th, 6th, 7th, or 8th grade Reading and Mathematics Ohio Achievement Assessments or the 10th grade Reading and Mathematics Ohio Graduation Tests who actually took the tests. All grades (3rd, 4th, 5th, 6th, 7th, 8th, and 10th) are combined into one total for each subject and for each student subgroup. Only those students who have been enrolled for a “full academic year,” who have taken the appropriate standard assessment (with or without accommodations) or alternate assessment, and who meet student subgroup inclusion criteria are included in the total.

AYP Weighted Points Calculations

In early 2007, The United States Department of Education asked Ohio to implement a new formula for calculating whether proficiency results in Reading and Mathematics meet or do not meet AYP goals (also called AYP targets). This new formula was first used for AYP calculations during the 2006-2007 school year and is being used again during the 2010-2011 school year. Although the formula itself for calculating whether AYP is met or not met has changed, the end result of meeting or not meeting AYP is the same as it was with the old formula. The formula used in previous years weighted the grade-level AYP goals for the Reading and Mathematics tests by the number of students taking the tests in each grade. This resulted in the different grade-level AYP goals being combined to create one overall AYP goal for every measured group or entity (i.e., student subgroup, school building, or school district) for each subject, and the AYP goals could be different across entities because of their unique student configurations.

The new formula shifts the element that is weighted to account for unique student configurations so that the grade-level AYP goals for the Reading and Mathematics tests remain consistent across all student subgroups and entities (please see the “AYP Proficiency Calculations” section of this document for the grade-level AYP goals for the 2010-2011 school year). In this formula, the grade-level AYP goal is subtracted from the actual percent proficient achieved in a tested grade. This difference, which is positive if the tested grade surpasses its AYP goal and negative if the tested grade does not attain its AYP goal, then is multiplied (i.e., “weighted”) by the percentage of total test takers in a given entity that the students in a tested grade represent, thus accounting for different enrollments in AYP tested grades. The resulting product of this calculation is referred to as “weighted points.” Weighted points are calculated separately for each tested grade and then summed across all tested grades within an entity. If the summed weighted points are greater than or equal to zero, AYP is met. If the summed weighted points are less than zero, AYP is not met.

The grades and subjects included in all AYP calculations (i.e., current year, two-year combined, Safe Harbor, and growth measure calculations) for the 2010-2011 school year are:

- 3rd Grade – Reading and Mathematics Ohio Achievement Assessments;
- 4th Grade – Reading and Mathematics Ohio Achievement Assessments;
- 5th Grade – Reading and Mathematics Ohio Achievement Assessments;
- 6th Grade – Reading and Mathematics Ohio Achievement Assessments;
- 7th Grade – Reading and Mathematics Ohio Achievement Assessments;
- 8th Grade – Reading and Mathematics Ohio Achievement Assessments; and
- 10th Grade – Reading and Mathematics Ohio Graduation Tests.

AYP Proficiency Calculations

The following tables provide examples of how the AYP weighted points calculations work:

Table 1. AYP Weighted Points Calculations – District Mathematics Example

(A) Grade	(B) Number Tested	(C) Number Proficient	(D) Percent Proficient (C/B)	(E) AYP Goal	(F) Difference (D-E)	(G) Percent in Each Grade (B/Total)*	(H) Weighted Points (F*G)
3 rd	100	65	65.0%	68.5%	-3.5	20.4%	-7
4 th	90	55	61.1%	73.7%	-12.6	18.4%	-2.3
5 th	80	50	62.5%	59.7%	2.8	16.3%	.5
6 th	70	50	71.4%	64.1%	7.3	14.3%	1.0
7 th	60	50	83.3%	57.8%	25.5	12.2%	3.1
8 th	50	45	90.0%	58.0%	32.0	10.2%	3.3
10 th	40	35	87.5%	68.0%	19.5	8.2%	1.6
--	Σ = 490	--	--	--	--	--	Σ = 6.5

*The Total used in this example is 490, the sum of all students enrolled in the tested grades (see Column B).

Since the sum of the weighted points across all grades is positive (6.5), this district meets AYP in Mathematics.

Table 2. AYP Weighted Points Calculations – Grade 6-8 Middle School Reading Example

(A) Grade	(B) Number Tested	(C) Number Proficient	(D) Percent Proficient (C/B)	(E) AYP Goal	(F) Difference (D-E)	(G) Percent in Each Grade (B/Total)*	(H) Weighted Points (F*G)
6 th	90	50	55.6%	80.6%	-25.0	42.9%	-10.7
7 th	70	50	71.4%	74.9%	-3.5	33.3%	-1.2
8 th	50	50	100.0%	79.0%	21.0	23.8%	5.0
--	Σ =210	--	--	--	--	--	Σ = -6.9

*The Total used in this example is 210, the sum of all students enrolled in the tested grades (see Column B).

Since the sum of the weighted points across all grades is negative (-6.9), this middle school does not meet AYP in Reading.