

Calculation Guidance for Alternative Education Campus Measures

Colorado Department of Education
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Purpose

This document provides guidance on the measures and metrics used within the AEC school performance framework report. It includes definitions and calculation formulas. For cut-points for these measures, refer to the AEC Selection of Measures form.

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Student Academic Achievement # 1. CSAP/TCAP, CSAPA/CoAlt, & Lectura/Escritura (combined)

Definition:

Percent of students enrolled by October 1 scoring proficient or advanced.

(Only applicable if at least 16 students have valid scores)

(REQUIRED measure for grades 3-10, provided by CDE)

Equation:

Numerator:

For the three most recent years of assessment data, students enrolled on or before October 1 scoring Proficient or Advanced on CSAP/TCAP and Lectura/Escritura, or Developing or Novice on CSAPA/CoAlt in each of the following content areas:

- Reading
- Writing
- Math
- Science

Denominator:

Students enrolled on or before October 1 scoring Unsatisfactory or Partially Proficient on CSAP/TCAP or Inconclusive, Exploring or Emerging on CSAPA/CoAlt in the content areas listed above.

Exempt from both numerator and denominator:

- Students enrolled after October 1 of a given year.
- Students receiving did not test codes and/or invalid scale scores (i.e. No Scores)

Student Academic Achievement # 2. Nationally or state normed interim assessments capable of measuring achievement according to the Colorado Academic Standards

Definition:

- a) Of students continuously enrolled for at least 8 weeks and enrolled at the time of testing, the percent scoring at or above grade level on the spring administration of approved alternative assessment.

OR

- b) Of students continuously enrolled for at least 8 weeks and enrolled at the time of both pre- and post-test administrations, the percent increasing at least one grade level between pre- and post-tests of approved alternative assessment.

(Only applicable for assessments that give a grade level equivalent or have a way to convert scores to grade equivalents and if denominator for calculation is at least 16 students)

(OPTIONAL)

Equation:

a) Numerator:

Students scoring at or above assigned grade level equivalent on approved alternative assessment (can include multiple content areas for each assessment)

- NWEA MAP
- Scantron
- Acuity
- Galileo
- Wide Range Achievement Test (WRAT)
- Test for Adult Basic Education (TABE)
- Accuplacer

Denominator:

Students scoring at or above assigned grade level equivalent

PLUS

Students scoring below assigned grade level equivalent

b) Numerator:

Students increasing at least one grade level between pre- and post-test of approved alternative assessment (can include multiple content areas for each assessment)

- NWEA MAP
- Scantron
- Acuity
- Galileo
- Wide Range Achievement Test (WRAT)
- Test for Adult Basic Education (TABE)

Denominator:

Students increasing at least one grade level between pre- and post-test

PLUS

Students dropping or maintaining same grade level between pre- and post-test

Exempt from both numerator and denominator:

- Students not continuously enrolled for at least 8 weeks

Student Longitudinal Academic Growth # 1. Colorado Growth Model

Definition:

School's median growth percentile (MGP) based on students that were enrolled by October 1.

(Only applicable if at least 20 students have valid growth scores)

(REQUIRED measure for grades 4-10, provided by CDE)

Equation:

For the three most recent years of CSAP/TCAP data, students enrolled on or before October 1 with valid growth percentiles are used to calculate a school's median growth percentile.

Exempt from calculation:

- Students enrolled after October 1 of a given year.
- Students not receiving student growth percentiles (i.e. students without two consecutive years of assessment results or students with non-traditional grade progression patterns)

Student Longitudinal Academic Growth # 2. Demonstrated growth on a nationally or state normed interim assessment capable of measuring progress on the Colorado Academic Standards

Definition:

Of students continuously enrolled for at least 8 weeks and enrolled during two or more test administrations, the percent achieving their target growth on the approved alternative assessment.

(Only applicable if denominator for calculation is at least 16 students)

(OPTIONAL)

Equation:

Numerator:

Students achieving their target growth on approved alternative assessment

- NWEA MAP
- Scantron
- Acuity
- Galileo
- Wide Range Achievement Test (WRAT)
- Test for Adult Basic Education (TABE)
- CELApro

Denominator:

Students achieving their target growth on approved alternative assessment

PLUS

Students NOT achieving their target growth on approved alternative assessment

Exempt from both numerator and denominator:

- Students not continuously enrolled for at least 8 weeks at time of second assessment

Postsecondary & Workforce Readiness # 1. High School Completion

Definition:

Completion rate is the percentage of students from a beginning of year 9th grade cohort (adjusted for verified transfers in and out with adequate documentation), who graduate OR otherwise complete high school. For the purposes of the AEC SPF, it is the highest value among the aggregated 4, 5, 6 or 7 year completion rates.

(Only applicable if base is at least 16 students)

(REQUIRED measure if serving grade 12, provided by CDE)

Equation:

Overall Completion Rate (3-year aggregate)

		4-year	5-year	6-year	7-year
Anticipated Year of Graduation	2008	88.0	90.8	90.8	91.9
	2009	88.7	91.9	93.5	
	2010	87.6	90.3		
	2011	89.7			
	Aggregated	88.5	91.0	92.2	91.9

A completion rate must be calculated for each combination of 9th grade cohort (a.k.a. Anticipated Year of Graduation) and actual completion year (4, 5, 6, or 7). In other words, calculating a 2011 4-year completion rate, 2010 4-year and 5-year completion rates, 2009 4-year, 5-year and 6-year completion rates and 2008 4-year, 5-year, 6-year and 7-year completion rates (the unshaded cells containing values in the matrix table above). The example calculation below is for a school’s 2011 4-year completion rate.

Numerator:

4-year completers in 2011

Completers include students who:

- receive a traditional diploma

- receive a GED certificate through the completion of a GED program;
- receive a certificate of completion;
- complete a vocational program; or
- are accepted into an institution of higher education.

Denominator:

Students with AYG of 2011 enrolled in school at the beginning of grade 9, plus students transferring in minus students documented as transferring out

For the 3-year SPF, schools earn points based on the highest value among the following: aggregated 2008, 2009, 2010 and 2011 4-year completion rate, aggregated 2008, 2009 and 2010 5-year completion rate, aggregated 2008 and 2009 6-year completion rate, or 2008 7-year completion rate (the bottom row of shaded cells in the table above). For each of these rates, the aggregation is the result of adding the completion totals for all available years and dividing by the sum of the graduation/completion bases across all available years.

Postsecondary & Workforce Readiness # 2. Students Dropping Out

Definition:

Drop-out rate is an annual rate of the percentage of all students enrolled in grades 7-12 who leave school during a single school year without subsequently attending another school or educational program. For the purposes of the AEC SPF, it is a 3-year aggregate of the school’s drop-out rate.

(REQUIRED measure for grades 7-12, provided by CDE)

(Only applicable if denominator for calculation is at least 16 students)

Equation:

Numerator:

Students across grades 7-12 within a school coded as drop outs in the prior three years who did not subsequently attend another school or educational program

Denominator:

Total number of students in grades 7-12 that were part of the membership base at any time during the three most recent school years

Postsecondary & Workforce Readiness # 3. Colorado ACT

Definition:

Average ACT composite score.

(Only applicable if denominator for calculation is at least 16 students)

(REQUIRED measure if serving grade 11, provided by CDE)

Equation:

Mean (average) of valid composite CO ACT scores

Exempt from both numerator and denominator:

- Students receiving did not test codes and/or invalid composite scores (i.e. No Scores)

Postsecondary & Workforce Readiness # 4. High School Graduation

Definition:

Graduation rate is the percentage of students from a beginning of year 9th grade cohort (adjusted for verified transfers in and out with adequate documentation), who graduate high school. For the purposes of the AEC SPF, it is the highest value among the aggregated 4, 5, 6 or 7 year graduation rates.

(Only applicable if denominator for calculation is at least 16 students)

(OPTIONAL measure, provided by CDE)

Equation:

Overall Graduation Rate (3-year aggregate)

		4-year	5-year	6-year	7-year
Anticipated Year of Graduation	2008	88.0	90.8	90.8	91.9
	2009	88.7	91.9	93.5	
	2010	87.6	90.3		
	2011	89.7			
	Aggregated	88.5	91.0	92.2	91.9

A graduation rate must be calculated for each combination of 9th grade cohort (a.k.a. Anticipated Year of Graduation) and actual graduation year (4, 5, 6, or 7). In other words, calculating a 2011 4-year graduation rate, 2010 4-year and 5-year graduation rates, 2009 4-year, 5-year and 6-year graduation rates and 2008 4-year, 5-year, 6-year and 7-year graduation rates (the unshaded cells containing values in the matrix table above). The example calculation below is for a school's 2011 4-year graduation rate.

Numerator:

4-year graduates in 2011

Graduates include students receiving traditional diplomas

Denominator:

Students with AYG of 2011 enrolled in school at the beginning of grade 9, plus students transferring in minus students documented as transferring out

For the 3-year SPF, schools earn points based on the highest value among the following: aggregated 2008, 2009, 2010 and 2011 4-year graduation rate, aggregated 2008, 2009 and 2010 5-year graduation rate, aggregated 2008 and 2009 6-year graduation rate, or 2008 7-year graduation rate (the bottom row of shaded cells in the table below). For each of these rates, the aggregation is the result of adding the graduation totals for all available years and dividing by the sum of the graduation/completion bases across all available years.

Postsecondary & Workforce Readiness # 5. Transition Success

Definition:

Percent of students experiencing a positive transition after attending this school.

(OPTIONAL measure applying only to non-degree/certificate granting schools)

Equation:

Numerator:

Students with positive transitions

- Students returning to their home school
- Students enrolling in GED program
- Students enrolling in other public schools or AECs in the same district or a different district within the state
- Students entering day treatment program
- Students enrolling in vocational school

Denominator:

Students with positive transitions

PLUS

Students with negative transitions

- Students who dropped out
- Students who were expelled
- Students who reached the maximum age for services
- Students who committed an offense while enrolled in the school and were detained or committed
- Students violating probation while enrolled in the school who were then detained or committed

Exempt from both numerator and denominator:

- Students still enrolled at the end of the most recent year
- Students with neutral transitions
 - Students transferring to home-bound education (i.e. home schooling)
 - Students who were hospitalized due to a critical illness/injury
 - Students transferring to private schools
 - Students moving to another state
 - Students who died
 - Students leaving school because of a *pre-enrollment* crime and entering detention
 - Students awaiting trial on a *pre-enrollment* crime, plead or being convicted

Postsecondary & Workforce Readiness # 6. Post-completion success

Definition:

Of students receiving a diploma, certificate or GED at the end of the prior year, the percent providing proof of planned college enrollment, enlistment, or employment.

(OPTIONAL)

Equation:

Numerator:

Students demonstrating post-completion success

- Completer students providing evidence of planned college enrollment (evidence can include: a copy of a letter of admission, registration form, course schedule or transcript)
- Completer students providing evidence of military enlistment (i.e., letter of enlistment)
- Completer students providing evidence of employment (evidence can include: a copy of the written job offer, or pay stub)

Denominator:

Prior year completers demonstrating post-completion success

PLUS

Prior year completers NOT demonstrating post-completion success

- Completer students who did NOT provide evidence of planned college enrollment, enlistment or employability

Exempt from both numerator and denominator:

- Students who did NOT receive a diploma, certificate or GED at the end of the prior year

Postsecondary & Workforce Readiness # 7. Workforce Readiness

Definition:

Of the students with senior level credit, the percent of students to meet or exceed a score representing readiness to successfully enter the labor market prior to program exit.

(Only applicable if denominator for calculation is at least 16 students)

(OPTIONAL)

Equation:

Numerator:

Students demonstrating workforce readiness

- Students with senior level credits, scoring at or above the threshold representing readiness on an approved assessment (currently includes Work Keys and TABE) in the most recent year

Denominator:

Students demonstrating workforce readiness

PLUS

Students NOT demonstrating workforce readiness

- Students with senior level credits scoring below the threshold representing readiness on an approved assessment in the most recent year

Exempt from both numerator and denominator:

- Students who do not have enough credits to qualify them as a senior, regardless of assigned grade (if grade is determined by age rather than credit accumulation)

Postsecondary & Workforce Readiness # 8. Credit/course completion

Definition:

Percent of students to complete the number of credits/courses necessary to remain on track to graduate within the timeframe established upon enrollment.

(Only applicable if denominator for calculation is at least 16 students)

(OPTIONAL)

Equation:

Numerator:

Students completing necessary number of credits/courses

- Students who have completed in the most recent year the number of credits/courses necessary to remain on track to graduate within the timeframe established upon enrollment

Denominator:

Students completing necessary number of credits/courses

PLUS

Students NOT completing necessary number of credits/courses

- Students completing fewer than the number of credits/courses necessary to remain on track to graduate within the timeframe established upon enrollment
- Students who dropped out
- Students who were expelled
- Students who reached the maximum age for services
- Students who committed an offense while enrolled in the school and were detained or committed
- Students violating probation while enrolled in the school who were then detained or committed

Exempt from both numerator and denominator:

- Students transferring to other educational settings prior to completing the academic term
 - Students returning to home school
 - Students transferring to other AEC, public or private school
 - Students transferring to home-bound education (i.e. home schooling)
 - Students who were hospitalized due to a critical illness/injury
 - Students who died
 - Students leaving school because of a pre-enrollment crime and entering detention
 - Students awaiting trial on a pre-enrollment crime, plead or being convicted

Student Engagement # 1. Attendance

Definition:

The Average Daily Attendance rate is the total number of full or partial days attended out of the total possible days attended for the most recent three years. This measure is aggregated across all students within a school.

(REQUIRED measure unless the school is a facility or residential campus, provided by CDE)

Numerator:

Aggregate number of whole and partial days the students have attended school in the current year

Denominator:

The aggregate number of whole and partial days students would have attended school if there had been no absences for the current school year.

(Calculated by adding the number of days that each student was enrolled in the current school year. Expelled students are included until date of expulsion. This number should be the sum of Total Days Attended, Total Days Excused Absent and Total Days Unexcused Absent)

Student Engagement # 2. Truancy

Definition:

The truancy rate is the total number of full or partial days that students were absent without an excuse out of the total possible days attended for the most recent three years. If a student is absent without an excuse by the parent/guardian or if the student leaves school or a class without permission of the teacher or administrator in charge, it will be considered to be an unexcused absence and the student shall be considered truant. This measure is aggregated across all students within a school.

(REQUIRED measure unless the school is a facility or residential campus, provided by CDE)

Numerator:

Aggregate number of full or partial days possible to attend that students were absent without an excuse.

Denominator:

The aggregate number of whole and partial days students would have attended school if there had been no absences for the current school year.

(It is calculated by adding the number of days that each student was enrolled in the current school year. Expelled students are included until date of expulsion. This number should be the sum of Total Days Attended, Total Days Excused Absent and Total Days Unexcused Absent)

Student Engagement # 3. Student Re-engagement

Definition:

Of students who had previously dropped out of ANY public school that re-enrolled in the most recent year, the percent that remained enrolled through the end of the year.

(Only applicable if denominator for calculation is at least 16 students)

(OPTIONAL)

Equation:

Numerator:

Re-engaged students

- Students who dropped out of ANY public school at any time and re-enrolled in this school at any time during the most recent year (e.g. enrolled December, 2011) that remained enrolled through the end of the year (e.g. May 2012)
- Students who dropped out of ANY public school at any time, re-enrolled in, and received a diploma, certificate or GED from this school in the most recent year.
- Students who dropped out of ANY public school at any time and re-enrolled in this school in the most recent year who then transferred to another AEC, public school, private school, or facility

Denominator:

Re-engaged students

PLUS

Non-re-engaged students

- Students who dropped out of ANY public school at any time and re-enrolled in this school in the most recent year (e.g. enrolled December, 2011) that dropped out before the end of the year (e.g. February 2012)
- Students who dropped out of ANY public school at any time and re-enrolled in this school in the most recent year that were expelled before the end of the year

Exempt from both numerator and denominator:

- Returning students (see definition in Student Engagement #4 below)
- Students transferring into the school without having been a drop-out

Student Engagement # 4. Returning Students

Definition:

Of students who completed the prior year at this school and were eligible to return, the percent who re-enrolled and attended this school for at least 8 weeks during the current year.

(Only applicable if denominator for calculation is at least 16 students)

(OPTIONAL)

Equation:

Numerator:

Returned students

- Students who, having completed the prior year at this school, re-enrolled and attended this school for at least 8 weeks during the current year (includes retained students)

Denominator:

Returned students

PLUS

Non-returned students

- Students who dropped out during the summer
- Students who moved to any other school/AEC/program/educational setting other than their home school
- Students who were expelled

Exempt from both numerator and denominator:

- Students who graduated at the end of the previous year
- Students who completed a certificate or other non-degree granting program at the end of the previous year
- Students who died
- Students who returned to their home school after the end of the previous year and before the start of the current school year. (Note this does not exempt students who transferred to a school/AEC/program/educational setting other than their home school)
- Non-retained students who completed the highest grade served by the school in the previous year

Student Engagement # 5. Socio-Emotional or Psychological Adjustment

Definition:

Of students continuously enrolled for 8 weeks or more and enrolled during two or more assessment administrations, the percent that show positive change on reliable, research-based psychosocial instruments reflecting educationally significant psychological, behavioral, or attitudinal adjustment.

(Only applicable if denominator for calculation is at least 16 students)

(OPTIONAL)

Equation:

Numerator:

Students with positive adjustment

- Students who show positive score change on instrument

Denominator:

Students with positive adjustment

PLUS

Students with negative or neutral adjustments

- Students who do not show positive score change on instrument

Exempt from both numerator and denominator:

- Students enrolled in the school for fewer than 8 weeks

