

Connection Title: Successful completion of Algebra I by 9th grade: Percentage of first-time grade 9 students who complete Algebra I or an equivalent course by the end of their 9th-grade year

Selected Descriptors:

Educational Process: Societal Perspectives->College Preparation
Curriculum Organization->Curriculum
Educational Levels, Degrees, and Organizations->Grade 9
Mathematics->Mathematics
Education-to-Workforce (E-W) Indicator Framework ->EQ6: Access to quality school environments
Education-to-Workforce (E-W) Indicator Framework ->EQ9: Contributions to academic growth
Education-to-Workforce (E-W) Indicator Framework ->EQ11: On track for high school graduation indicators

Author: Education-to-Workforce Framework Collaborators Group

Location: More Than One State

Source for CEDS Connection Information: Education-to-Workforce Indicator Framework
(<https://educationtoworkforce.org/>)

Description of CEDS Connection:

This Connection identifies the CEDS elements needed to measure the percentage of first time 9th grade students who complete Algebra I or an equivalent course by the end of their 9th grade year and includes the recommended analysis criteria. This Connection supports the Education-to-Workforce Indicator Framework.

Go Further with this Connection

You can use this Connection with your own data system. Click on the myConnect logo to apply the elements from your shared map to this Connection.



Data Elements

Metric

CEDS Elements:

A. K12 -> Calendar -> Session -> School Year
B. K12 -> Course Section -> Course Section Identifier
C. K12 -> Course Section -> Enrollment -> Course Section Exit Type
D. K12 -> K12 Course -> Course Begin Date
E. K12 -> K12 Course -> Course End Date
F. K12 -> K12 Course -> School Courses for the Exchange of Data Course Code
G. K12 -> K12 Course -> School Courses for the Exchange of Data Course Subject Area
H. K12 -> K12 School -> Identification -> School Identification System
I. K12 -> K12 School -> Identification -> School Identifier
J. K12 -> K12 Student -> Enrollment -> Cohort Year
K. K12 -> K12 Student -> Enrollment -> Enrollment Entry Date
L. K12 -> K12 Student -> Enrollment -> Enrollment Exit Date
M. K12 -> K12 Student -> Enrollment -> Entry Grade Level
N. K12 -> K12 Student -> Identity -> Student Identification System
O. K12 -> K12 Student -> Identity -> Student Identifier
P. K12 -> LEA -> Identification -> Local Education Agency Identification System
Q. K12 -> LEA -> Identification -> Local Education Agency Identifier
R. K12 -> SEA -> Identification -> State Agency Identification System
S. K12 -> SEA -> Identification -> State Agency Identifier

Elements Not Currently in CEDS:

Disaggregates

CEDS Elements:

A. Adult Education -> AE Student -> Status -> Low-income Status
B. K12 -> K12 School -> Directory -> Administrative Funding Control
C. K12 -> K12 School -> Directory -> Charter School Type
D. K12 -> K12 School -> Directory -> School Type
E. K12 -> K12 School -> Identification -> Organization Type
F. K12 -> K12 Student -> Demographic -> Hispanic or Latino Ethnicity
G. K12 -> K12 Student -> Demographic -> Military Connected Student Indicator
H. K12 -> K12 Student -> Demographic -> Race
I. K12 -> K12 Student -> Demographic -> Rural Residency Status
J. K12 -> K12 Student -> Demographic -> Sex
K. K12 -> K12 Student -> Disability -> Disability Status
L. K12 -> K12 Student -> Disability -> IDEA Indicator
M. K12 -> K12 Student -> Disability -> Primary Disability Type
N. K12 -> K12 Student -> Disability -> Section 504 Status
O. K12 -> K12 Student -> Disability -> Status End Date
P. K12 -> K12 Student -> Disability -> Status Start Date
Q. K12 -> K12 Student -> Discipline -> Disciplinary Action End Date
R. K12 -> K12 Student -> Discipline -> Disciplinary Action Start Date
S. K12 -> K12 Student -> Discipline -> Disciplinary Action Taken
T. K12 -> K12 Student -> Economically Disadvantaged -> Eligibility Status for School Food Service Programs
U. K12 -> K12 Student -> English Learner -> English Learner Status
V. K12 -> K12 Student -> English Learner -> Program Participation Exit Date
W. K12 -> K12 Student -> English Learner -> Program

Elements Not Currently in CEDS:

Participation Start Date
X. K12 -> K12 Student -> Homeless -> Homeless Serviced Indicator
Y. K12 -> K12 Student -> Homeless -> Homelessness Status
Z. K12 -> K12 Student -> Homeless -> Status End Date
AA. K12 -> K12 Student -> Homeless -> Status Start Date
AB. K12 -> K12 Student -> IDEA -> Program Participation Exit Date
AC. K12 -> K12 Student -> IDEA -> Program Participation Start Date
AD. K12 -> K12 Student -> Identity -> Personal Information Type
AE. K12 -> K12 Student -> Individualized Program -> Student Support Service Type
AF. K12 -> K12 Student -> Language -> ISO 639-3 Language Code
AG. K12 -> K12 Student -> Language -> Language Type
AH. K12 -> K12 Student -> Migrant -> Migrant Status
AI. K12 -> K12 Student -> Migrant -> Program Participation Exit Date
AJ. K12 -> K12 Student -> Migrant -> Program Participation Start Date
AK. K12 -> K12 Student -> Program -> Program Participation Exit Date
AL. K12 -> K12 Student -> Program -> Program Participation Start Date
AM. K12 -> K12 Student -> Program -> Program Participation Status
AN. K12 -> K12 Student -> Program -> Program Type
AO. K12 -> Parent/Guardian -> Education -> Highest Level of Education Completed

► Analysis Recommendations

General Connection Information

CEDS elements are shown in ***bold/italized*** font.

This metric is part of the Education-to-Workforce (E-W) Indicator Framework, specifically "Outcomes and Milestones" which pertain to key outcomes and milestones along the E-W continuum strongly associated with people achieving economic mobility and security.¹ Using CEDS elements, this Connection will measure the percentage of first-time grade 9 students who complete Algebra I or an equivalent course by the end of their 9th-grade year.

This metric is a measurement for a key indicator, "Successful completion of Algebra 1 by 9th grade," and measures whether students successfully complete Algebra I or an equivalent course before or during grade 9.

Calculating a Response

Use the following CEDS elements to determine the school years for which the data will be measured:

- ***School Year*** = most recent school year, representing July 1 through June 30

Use the following CEDS elements to determine the universe of students:

Pull all unique students which is determined by using a unique ***Student Identifier*** where ***Student Identification System*** = State

Where the student:

- is associated with a State Education Agency through the ***State Agency Identifier*** where ***State Agency Identification System*** = SEA
- is associated with a Local Education Agency through the ***Local Education Agency Identifier*** where ***Local Education Agency Identification System*** = SEA
- is associated with a K12 school through the ***School Identifier*** where ***School Identification System*** = SEA

From the universe of students, narrow the list to first time 9th graders using the following CEDS elements:

- ***Cohort Year*** = the school year being reported
- ***Entry Grade Level*** = 09
- ***Enrollment Entry Date*** is = July 1 of the school being reported
- ***Enrollment Exit Date*** is = June 30 of the school year being reported

Using the following CEDS elements, narrow the list of 9th grade students to those that completed Algebra I or an equivalent course during the 9th grade:

Pull the unique ***Course Section Identifier*** where

- ***School Courses for the Exchange of Data Course Code*** = 02052 (Algebra I), and/or 02053 (Algebra I – Part 1) and 02054 (Algebra I – Part 2)
- ***School Courses for the Exchange of Data Course Subject Area*** = 02 (Mathematics)
- ***Course Begin Date*** and ***Course End Date*** are within the school year being reported
- ***Course Section Exit Type*** = Completed for Credit or Completed No Credit

To calculate the percentage of first time 9th grade students who complete Algebra I or an equivalent course by the end of their 9th grade year:

- Count the number of first time 9th grade students that completed Algebra I or an equivalent course
- Count the total number of students
- Divide the number of students that completed Algebra I or an equivalent course by the total number of students and multiply by 100

Disaggregate by Home Language

Use the following CEDS elements to disaggregate the final set of students by home language:

- ***Language Type*** = Home Language, and
- ***ISO 639-3 Language Code*** = Eng (English)
- ***English Learner Status*** = Yes

Disaggregate by Homelessness

Use the following CEDS elements to disaggregate the final set of students by homelessness:

- ***Homelessness Status*** = Yes
- ***Status Start Date*** ≤ July 1 of the school year being reported
- ***Status End Date*** = June 30 of the school year being reported

Disaggregate by Race and Ethnicity

Use the following CEDS elements to disaggregate the final set of students by Race:

Filter records where ***Hispanic or Latino Ethnicity*** = No

Count, by race, where any of the following are true:

- ***Race*** = American Indian or Alaska Native
- ***Race*** = Asian
- ***Race*** = Black or African American
- ***Race*** = Native Hawaiian or Other Pacific Islander
- ***Race*** = White
- ***Race*** = Demographic Race Two or More Races
- ***Race*** = Race and Ethnicity Unknown

Use the following CEDS elements to disaggregate the final set of students by Hispanic or Latino Ethnicity:

- Filter records where **Hispanic or Latino Ethnicity** = Yes

Disaggregate by Sex

**Note: CEDS does not have a Gender element. While Sex is not a proxy for Gender it is the closest approximation currently available.*

**Note: Male + Female will not always equal 100% for states that have more choices beyond male and female.*

Use the following CEDS elements to disaggregate the final set of students by Sex:

- **Sex** = Male, Female, or Not Selected

Disaggregate by Disability Status

Use the following CEDS elements to disaggregate the final set of students by Disability Status:

Students with a Disability

- **Disability Status** = Yes; and/or
- **Status Start Date** ≤ the school year being reported
- **Status End Date** ≥ the school year being reported
- **IDEA Indicator** = Yes; and/or
- **Section 504 Status** = Yes

Count, by disability type, where any of the following are true:

- **IDEA Disability Type** = Autism
- **IDEA Disability Type** = Deaf-blindness
- **IDEA Disability Type** = Deafness
- **IDEA Disability Type** = Developmental delay
- **IDEA Disability Type** = Emotional disturbance
- **IDEA Disability Type** = Hearing impairment
- **IDEA Disability Type** = Intellectual disability
- **IDEA Disability Type** = Multiple disabilities
- **IDEA Disability Type** = Orthopedic impairment
- **IDEA Disability Type** = Other health impairment
- **IDEA Disability Type** = Specific learning disability
- **IDEA Disability Type** = Traumatic brain injury
- **IDEA Disability Type** = Visual impairment

Filter records based on **Primary Disability Type** when **IDEA Indicator** = Yes

- **Program Participation Start Date** ≤ the school year being reported
- **Program Participation Exit Date** ≥ the school year being reported

Students without a Disability

- **Disability Status** = No; and
- **Primary Disability Type** is null; and
- **IDEA Indicator** = No; and
- **Section 504 Status** = No

Count the number of students with a disability and the number of students without a disability.

Disaggregate by Urbanicity

Use the following CEDS elements to disaggregate the final set of students by Urbanicity:

- **Rural Residency Status** = Yes (indicating Rural) or No (indicating Urban)

Disaggregate by Parental Education Level

Use the following CEDS element to disaggregate the final set of students by Parental Education Level:

- **Highest Level of Education Completed** = Determine what the highest level of education completed is for the parents/guardians of the student

Disaggregate by Migrant Family Household

Use the following CEDS elements to disaggregate the final set of students by Migrant Family Household:

- **Migrant Status** = Yes or No
- **Program Participation Start Date** = July 1 of the school year being reported
- **Program Participation Exit Date** = June 30 of the school year being reported or null

Disaggregate by English Learner

Use the following CEDS elements to disaggregate the final set of students by English Learner:

- **English Learner Status** = Yes, No
- **Program Participation Start Date** ≤ the school year being reported
- **Program Participation Exit Date** ≥ the school year being reported

Disaggregate by K12 School Type

Use the following CEDS elements to disaggregate the final set of students by School Type:

- **Charter School Type** = School Charter or College University or NA; and
- **School Type** = Regular, Special, Career and Technical, Alternative or Reportable
- **Administrative Funding Control** = Public School, Private School, or Other
- **Organization Type** = K12 School, Education Institution

Disaggregate by Individuals or Family Military Status

Use the following CEDS element to disaggregate the final set of students by Individuals or Family Military Status:

- **Military Connected Student Indicator** = Not Military, Active Duty, National Guard or Reserve, Unknown

Disaggregate by Income Level

Use the following CEDS elements to disaggregate the final set of students by Income Level:

- **Eligibility Status for School Food Service Programs** = Free, Full price, Reduced price, Other
- **Low-income Status** = Yes, or No

Disaggregate by Justice Involvement

Use the following CEDS elements to disaggregate the final set of students by Justice Involvement:

- **Disciplinary Action Taken** = Juvenile Justice Referral, Law enforcement referral, or Placed in juvenile detention center
- **Disciplinary Action Start Date** ≤ the school year being reported
- **Disciplinary Action End Date** ≥ the school year being reported

Disaggregate by Individual With Current or Past Child Welfare Involvement

Use the following CEDS elements to disaggregate the final set of students by Individual with Current or Past Child Welfare Involvement:

- **Program Type** = 75000 (Foster Care)
- **Student Support Service Type** = 00295 (Children's protective services)
- **Program Participation Start Date** ≤ the school year being reported

◦ *Program Participation Exit Date* ≥ the school year being reported

▸ **Related Connections**

No related connections

▸ **Related References**

A. Title: Education-to-Workforce Indicators at a Glance (p2); Source: Education-to-Workforce Indicator Framework (see https://educationtoworkforce.org/sites/default/files/2023-05/2.2b_IndicatorsAtaGlance_Final.pdf)

Author's Comments/Additional Information

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Last Modified: 02/17/2025

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