

**Connection Title:** Math and reading proficiency in high school: Percentage of tested students who meet grade-level standards in reading/English language arts and math as measured by state standardized tests

**Selected Descriptors:**

Educational Process: Classroom Perspectives->Academic Achievement  
 Educational Process: School Perspectives->Academic Standards  
 Curriculum Organization->Curriculum  
 Mathematics->Mathematics  
 Reading->Reading  
 Tests and Scales->Reading Tests  
 Social Processes and Structures->Standards  
 Language and Speech->English Language Learners (ELL)  
 Language and Speech->English Language Proficiency  
 Language and Speech->English Language Programs (ELP)  
 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  
 Education-to-Workforce (E-W) Indicator Framework ->EQ12: Access and completion of rigorous and accelerated college preparatory coursework

**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 tested students in high school who meet grade-level standards in reading/English language arts and math as measured by state standardized tests 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. Assessments -> Assessment -> Assessment Identification System  
 B. Assessments -> Assessment -> Assessment Identifier  
 C. Assessments -> Assessment -> Assessment Level for Which Designed  
 D. Assessments -> Assessment -> Assessment Purpose  
 E. Assessments -> Assessment Administration -> Assessment Administration Finish Date  
 F. Assessments -> Assessment Administration -> Assessment Administration Start Date  
 G. Assessments -> Assessment Result -> Assessment Result Score Value  
 H. Assessments -> Assessment Result -> Assessment Score Metric Type  
 I. Assessments -> Assessment Subtest -> Assessment Academic Subject  
 J. K12 -> Calendar -> Session -> School Year  
 K. K12 -> Calendar -> Session -> Session Begin Date  
 L. K12 -> Course Section -> Session End Date  
 M. K12 -> K12 School -> Identification -> School Identification System  
 N. K12 -> K12 School -> Identification -> School Identifier  
 O. K12 -> K12 Student -> Enrollment -> Enrollment Entry Date  
 P. K12 -> K12 Student -> Enrollment -> Enrollment Exit Date  
 Q. K12 -> K12 Student -> Enrollment -> Entry Grade Level  
 R. K12 -> K12 Student -> Identity -> Student Identification System  
 S. K12 -> K12 Student -> Identity -> Student Identifier  
 T. K12 -> LEA -> Identification -> Local Education Agency Identification System  
 U. K12 -> LEA -> Identification -> Local Education Agency Identifier

**Elements Not Currently in CEDS:**

**Disaggregates**

**CEDS Elements:**

A. Adult Education -> AE Student -> Status -> Low-income Status  
 B. K12 -> K12 School -> Directory -> School Type  
 C. K12 -> K12 Student -> Demographic -> Birthdate  
 D. K12 -> K12 Student -> Demographic -> Hispanic or Latino Ethnicity  
 E. K12 -> K12 Student -> Demographic -> Military Connected Student Indicator  
 F. K12 -> K12 Student -> Demographic -> Race  
 G. K12 -> K12 Student -> Demographic -> Rural Residency Status  
 H. K12 -> K12 Student -> Demographic -> Sex  
 I. K12 -> K12 Student -> Disability -> Disability Status  
 J. K12 -> K12 Student -> Disability -> IDEA Indicator  
 K. K12 -> K12 Student -> Disability -> Primary Disability Type  
 L. K12 -> K12 Student -> Disability -> Section 504 Status  
 M. K12 -> K12 Student -> Discipline -> Disciplinary Action Taken  
 N. K12 -> K12 Student -> Economically Disadvantaged -> Eligibility Status for School Food Service Programs  
 O. K12 -> K12 Student -> English Learner -> English Learner

**Elements Not Currently in CEDS:**

Status  
P. K12 -> K12 Student -> English Learner -> Program  
Participation Exit Date  
Q. K12 -> K12 Student -> English Learner -> Program  
Participation Start Date  
R. K12 -> K12 Student -> Homeless -> Homeless Serviced  
Indicator  
S. K12 -> K12 Student -> Homeless -> Homelessness Status  
T. K12 -> K12 Student -> Homeless -> Status End Date  
U. K12 -> K12 Student -> Homeless -> Status Start Date  
V. K12 -> K12 Student -> Individualized Program -> IDEA  
Disability Type  
W. K12 -> K12 Student -> Individualized Program -> Student  
Support Service Type  
X. K12 -> K12 Student -> Language -> ISO 639-3 Language  
Code  
Y. K12 -> K12 Student -> Migrant -> Migrant Status  
Z. K12 -> K12 Student -> Migrant -> Program Participation Exit  
Date  
AA. K12 -> K12 Student -> Migrant -> Program Participation Start  
Date  
AB. K12 -> K12 Student -> Program -> Program Participation  
Exit Date  
AC. K12 -> K12 Student -> Program -> Program Participation  
Start Date  
AD. K12 -> K12 Student -> Program -> Program Participation  
Status  
AE. K12 -> K12 Student -> Program -> Program Type  
AF. K12 -> Organization -> Identification -> Organization Type  
AG. 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 that are strongly associated with individuals achieving economic mobility and security.

This metric is a measurement for a key indicator, "Math and reading proficiency in high school" and measures whether students in high school have demonstrated proficiency in math and reading/English language arts according to high-quality state standards.

### Calculating a Response

*Indicator Name: Access to early college coursework*

*Metric: Percentage of students in an early college course who take the relevant end-of-course test needed to earn credit (for example, AP or IB test), overall and by subject*

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 of students using the following CEDS elements:

Filter records where

- ***Assessment Academic Subject*** = 01166 (Mathematics)
- ***Assessment Level for Which Designed*** = Ninth grade (09), Tenth grade (10), Eleventh grade (11) and Twelfth grade (12)
- ***Assessment Identifier*** = the ID for the standardized state assessment
- ***Assessment Identification System*** = State-assigned number
- ***Assessment Score Metric Type*** = Proficiency Level
- ***Assessment Administration Start Date*** ≥ July 1 of the school year being reported
- ***Assessment Administration Finish Date*** ≤ June 30 of the school year being reported
- ***Assessment Purpose*** = State Accountability
- ***Assessment Result Score Value*** is not null

Identify which students meet grade level standards in reading/English language arts:

Filter records where

- ***Assessment Academic Subject*** = 13372 (English) or 00560 (Reading) or 13373 (Reading/Language Arts)
- ***Assessment Level for Which Designed*** = Ninth grade (09), Tenth grade (10), Eleventh grade (11) and Twelfth grade (12)
- ***Assessment Identifier*** = the ID for the standardized state assessment
- ***Assessment Identification System*** = State-assigned number
- ***Assessment Score Metric Type*** = Proficiency Level
- ***Assessment Administration Start Date*** ≥ July 1 of the school year being reported
- ***Assessment Administration Finish Date*** ≤ June 30 of the school year being reported
- ***Assessment Purpose*** = State Accountability
- ***Assessment Result Score Value*** is not null

To calculate the percentage of students in high school who meet grade level standards:

- Count the number of students who met the grade level standard in Math
- Count the total number of students assessed
- Divide the number of students who met the grade level standard in Math by those assessed and multiply by 100

Repeat for reading/English language arts.

### Disaggregate by Home Language

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

- ***Language Type*** = Home Language
- ***ISO 639-3 Language Code*** ≠ Eng; and/or
- ***English Learner Status*** = Yes

### Disaggregate by Homelessness

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

- ***Homelessness Status*** = Yes
- ***Homeless Serviced Indicator*** = Yes
- ***Status Start Date*** ≤ the school year being reported

- **Status End Date** ≥ 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 element to disaggregate the final set of students by Urbanicity.

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

## Disaggregate by Migrant Family Household

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

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

## 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 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 K12 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 elements 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, or Unknown

## 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

- ◊ **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

Use the following CEDS element to disaggregate the final set of students by Age Group:

- ◊ **Birthdate** = Age as of October 1 of the school year being reported

No related connections

A. Title: Education-to-Workforce Indicator Framework; Source: Education-to-Workforce Indicator Framework (see <https://educationtoworkforce.org/>)