

Using the Oregon Career and Technical Education Explorer Participation Dashboard

This document provides supplemental information for the career and technical education (CTE) participation explorer dashboard. The dashboard was [developed by Education Northwest](#) under a contract from the Oregon Department of Education.

This dashboard is based on analyses performed for the report [*Career and Technical Education in Oregon: Exploring Who Participates in High School and the Outcomes They Achieve*](#), published in 2020 by Regional Education Laboratory Northwest, which was then administered by Education Northwest. An [accompanying infographic](#) for the report is also available.

Term Definitions

This section provides definitions for terms used throughout the dashboard.

Highest Earned CTE Participation Category Definitions

These terms appear on the Annual Participation tab. All CTE participation categories are based on credits earned. Courses in which a student enrolls but fails to earn credit do not count toward CTE participation status. CTE participation categories are based on cumulative credits earned by the end of the selected school year. Students never lose or “go backwards” in CTE participation status, and transfer students carry their CTE participation status with them to their new school/district. These categories are mutually exclusive.

- **Participant who did not concentrate:** A student who has earned at least 0.5 but less than 1.0 credit in a single state-approved CTE program of study.
- **Perkins IV concentrator who did not reach Perkins V:** A student who has earned at least 1.0 but less than 2.0 credits in a single state-approved CTE program of study.
- **Perkins V concentrator:** A student who has earned 2.0 or more credits in a single CTE program. This is closely aligned to Oregon’s *Perkins V* concentrator definition.

Student Group Definitions: Annual Participation

These terms are used on the Annual Participation tab. The analysis on this tab includes all students in grades 9–12 who were enrolled in the selected school year.

English Language Learner (ELL) Status

- **Never ELL:** Student was not classified as an English learner during or prior to the selected school year.
- **Former ELL:** Student was classified as an English learner at any point prior to the selected school year but not during the selected school year.
- **Current ELL:** Student was classified as an English learner during the selected school year.

Free or Reduced-Price Lunch (FRPL) Eligibility

- **Non-FRPL:** Student was not eligible for free or reduced-price lunch in the selected school year.
- **FRPL:** Student was eligible for free or reduced-price lunch in the selected school year.

Individualized Education Program (IEP) Status

- **Does not have an IEP:** Student did not have an IEP in the selected school year.
- **Has an IEP:** Student had an IEP in the selected school year.

CTE Participation Category Definitions

These terms appear on the Cohort Participation and Equity Analysis tabs. All CTE participation categories are based on credits earned. Courses in which a student enrolls but fails to earn credit do not count toward CTE participation status. CTE participation categories are based on cumulative credits earned. Thus, a participation category earned by a student is retained over time and through transfers: students never lose or “go backwards” in CTE participation status, and transfer students carry their CTE participation status with them to their new school/district.

- **Participant:** A student who has earned 0.5 or more credits in a single CTE program.
- **Perkins IV concentrator:** A student who has earned 1.0 or more credits in a single state-approved CTE program of study. This is closely aligned to Oregon’s definition of a *Perkins IV* concentrator. All *Perkins IV* concentrators are also participants.
 - **Oregon’s definition of a *Perkins IV* concentrator was:** Any secondary student who has earned one (1) or more credits in a technical skill course(s) as part of an Oregon state-approved CTE program, of which at least one-half (0.5) credit must be designated as a “required” CTE course for program completion.

- Because the “required” course flag was not reliably available in the historical data, it is not applied here. For the purposes of this dashboard, all credits from courses in state-approved programs were used.
- **Perkins V concentrator:** A student who has earned 2.0 or more credits in a single state-approved CTE program of study. This is closely aligned to Oregon’s definition of a *Perkins V* concentrator. All *Perkins V* concentrators are also *Perkins IV* concentrators.
 - **Oregon’s definition of a Perkins V concentrator is:** A secondary CTE concentrator is a student who earns at least two credits in a single CTE program of study. One of those credits must be earned through a course or courses identified as intermediate or advanced.
 - Because the “intermediate or advanced” course flag was not defined and thus is not available in the historical data, it is not applied here. For the purposes of this dashboard, all credits from courses in state-approved programs were used. This also keeps the definition more consistent with the *Perkins IV* concentrator definition used in this dashboard, ensuring that the categories are cumulative (i.e., does not allow a student to be considered a *Perkins V* concentrator but not a *Perkins IV* concentrator).

Student Group Definitions: Cohort Participation and Equity Analysis

English Language Learner (ELL) Status

- **Never ELL:** Student was not classified as an English learner in grades K–12.
- **Former ELL:** Student was classified as an English learner at any point in grades K–8 but not in grades 9–12.
- **Current ELL (9–12):** Student was classified as an English learner at any point in grades 9–12.

Free or Reduced-Price Lunch (FRPL) Eligibility

- **Never FRPL in HS:** Student was not eligible for free or reduced-price lunch in grades 9–12.
- **Ever FRPL in HS:** Student was eligible for free or reduced-price lunch at any point in grades 9–12.

Individualized Education Program (IEP) Status

- **Did not have an IEP in HS:** Student did not have an IEP in grades 9–12.
- **Had an IEP in HS:** Student had an IEP at any point in grades 9–12.

Data Sources and Business Rules

The data for this dashboard were provided by the Oregon Department of Education (ODE). The following data collections were used in the analysis. Information about ODE data collections can be found at <https://www.ode.state.or.us/apps/CollectionCatalog>.

- CTE course and CTE program, 2007/08 through 2020/21. *2021/22 data will be added when available.*
 - The dataset includes all student-level course records for courses that are part of a state-approved CTE program of study in the given year.
 - Fields used in the analysis include: ssid, districtid, schoolid, learningarea, cluster, course, section, grade, and credits.
 - Programs of study are identified in the dataset by unique combinations of school, cluster, and learning area.
 - The first graduation cohort on the dashboard is 2015/16. Students on “normative” time in this cohort began high school in 2012/13. However, we used all available years of data to capture participation for students who were enrolled in high school for more than four years. Students who exited high school prior to 2015/16 are not reflected in any of the dashboard data.
- Cumulative average daily membership (ADM), 2007/08 through 2020/21. *2021/22 data will be added when available.*
 - District membership was determined by the school at which a student was enrolled the longest (in calendar days, not school days) during the relevant academic year.
 - Student demographics (gender, race/ethnicity, and grade level) and other characteristics (ELL status, FRPL status, and IEP status).
 - Though school/district membership from 2015/16 and after is reflected in the dashboard, earlier ADM records were used to determine the ELL categories described above (we include never and former ELL categories, which require data prior to high school).
- Graduation, 2016/17 through 2020/21. *2021/22 data will be added when available.*
 - Graduation cohorts are defined by the year a student earned a regular or modified diploma.
 - All available CTE coursework taken was used to calculate participation categories.

Notes about student transfers. A student’s CTE participation category is cumulative across all years of high school and “follows” a student to graduation, regardless of school and/or district transfers. For example, consider a student who takes a 1.0 credit course in a health sciences program of study in grade 11 and transferred to a new school in grade 12. That student is still considered a *Perkins IV* concentrator in the health sciences learning area, regardless of whether their grade 12 school offers a health sciences program.

Programs of study are defined at the school level. Consider the same student above, who earned 1.0 credit in a health sciences program of study in grade 11. If the school they transfer to in grade 12 also offers a program of study in health sciences and the student earns 1.0 more credit, that student has now earned 1.0 credit each in two distinct programs of study. Because they are technically different programs, the highest participation level this student has reached is *Perkins IV* concentrator, since credits do not sum across programs.

Shape files for Oregon school districts used in the map on the overview tab were obtained from the United States Census Bureau: <https://www.census.gov/geographies/mapping-files/time-series/geo/cartographic-boundary.html>.

Suppression

The rates for any group of fewer than 10 is suppressed (not shown) on the dashboard. To prevent back-calculation of suppressed results, complementary suppression was also used on the next largest group in any cross-tabulation.

Frequently Asked Questions

Why is there missing data for my region/district for certain years and/or student groups?

To protect student privacy, analyses on groups fewer than 10 are suppressed. Complementary suppression on other groups is also used as necessary to prevent back-calculation.

TIP: If your district/region is small, select the “combined years” on the Cohort Participation and Equity Analysis tabs. This pools multiple years of student data, and often the Ns are large enough to be shown.

Why do some views show a combined gender category “Female (F) or Non-binary (X)” instead of separating Female (F) and Non-binary (X) categories?

In the 2018/19 school year, ODE implemented a new gender code in student and staff data collections that provides non-binary, intersex, and gender-fluid individuals with an option to identify their gender as non-binary. In some CTE consortia and school districts, the size of this group is fewer than 10 and would have to be suppressed from these data tables along with one other gender category (complementary suppression). In order to reduce the amount of suppression, for these cases, Female (F) or Non-binary (X) students are included in a combined category. When suppression is not necessary for student safety and data concerns, we intentionally separate all gender categories in order to honor the distinct experiences of non-binary, female, and male students.

Some totals do not add up to 100 percent. Why?

Student group or learning area totals may not sum to the grand total due to missing/unknown values and/or rounding. All percentages displayed are rounded to the nearest percent.

Why are there districts missing on the map of Oregon on the Overview tab and/or from the list of districts on the Annual Participation, Cohort Participation, and Equity Analysis tabs?

Data for that district may be suppressed (see missing data FAQ) or may not exist. This is the case for districts that do not serve grades 9–12 (elementary districts that are PK or K–5 or 8).

Which students are included in each graduation cohort used on the Cohort Participation and Equity Analysis tabs?

The graduation cohort for a selected year includes all students who graduated high school, with a regular or modified diploma, in that year. Students who dropped out, aged out, or transferred are not included in the cohort analyses.

Specifically, these are not the cohorts used to calculate the adjusted cohort graduation rate (ACGR), which is determined by the year a student enters high school. The cohorts used for these analyses include on-time graduates (four years or less) and extended graduates (more than four years).

Are students counted more than once if they participated in more than one CTE program of study (i.e., duplicated counts)?

The calculation of each distinct rate on the dashboard uses unduplicated counts of students. However, students may be represented in more than one distinct rate across different learning areas. Specifically:

- If a student participated in multiple programs in different areas, they will be counted as a participant one time within each area.
- If a student participated in multiple programs in the same area, the participation category reflects the highest achieved by a student across all programs with the area.
- Totals combined across all areas are unduplicated counts of students, and the participation category reflects the highest achieved by a student across all learning areas.

What is the N (or the denominator) used for a given percentage?

The size of each student group varies across the dashboard, depending on the filters set. The Ns for any given percentage are in the “tooltip” for that data point.

TIP: If your district/region is small, select the “combined years” on the Cohort Participation and Equity Analysis tabs. This pools multiple years of student data, and often the Ns are large enough to be shown.