

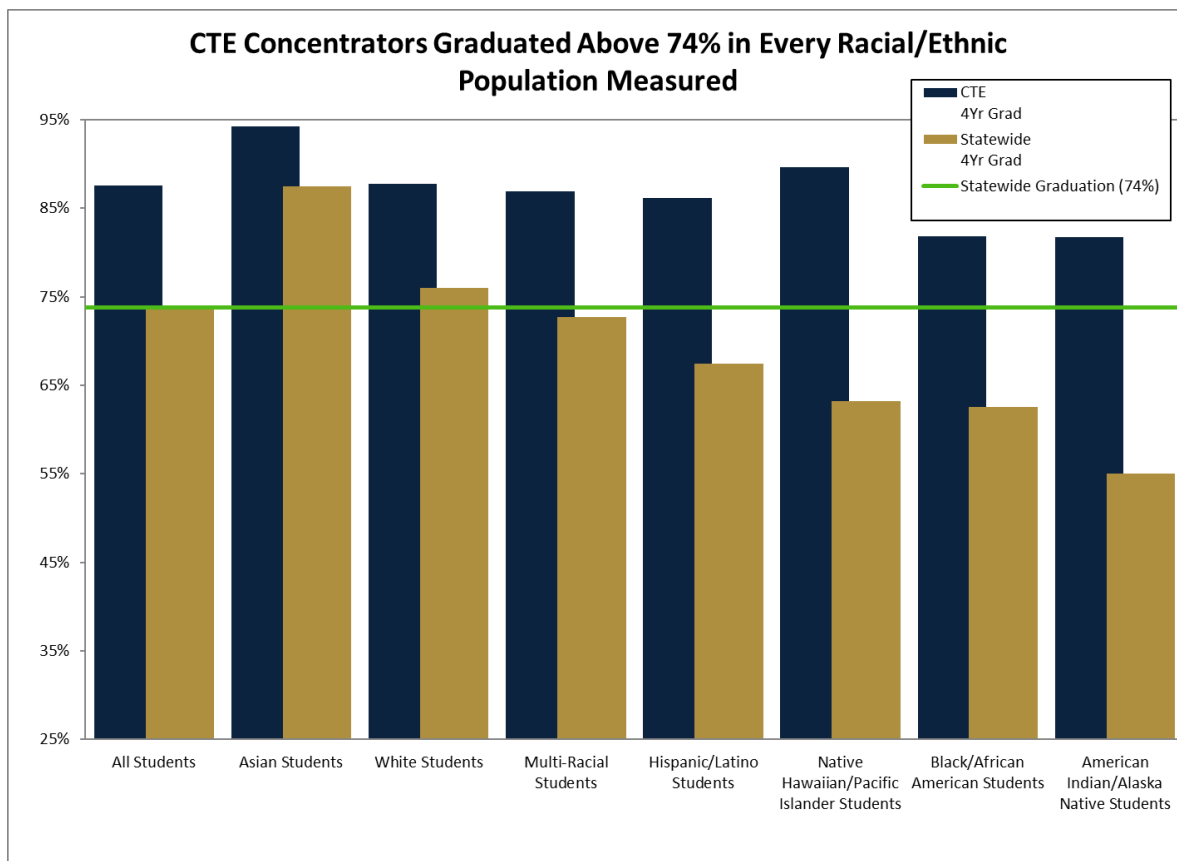
Oregon CTE Graduation Rates: 88% of Secondary CTE Concentrators Graduated in 2015

2015 Results in Oregon

In the class of 2015, the graduation rate for secondary Oregon Career and Technical Education (CTE) concentrators was 87.6%, nearly 14 percentage points higher than for students statewide.^{1,2,3} In addition, the increase in graduation rates for CTE concentrators was greatest for historically underserved student groups.

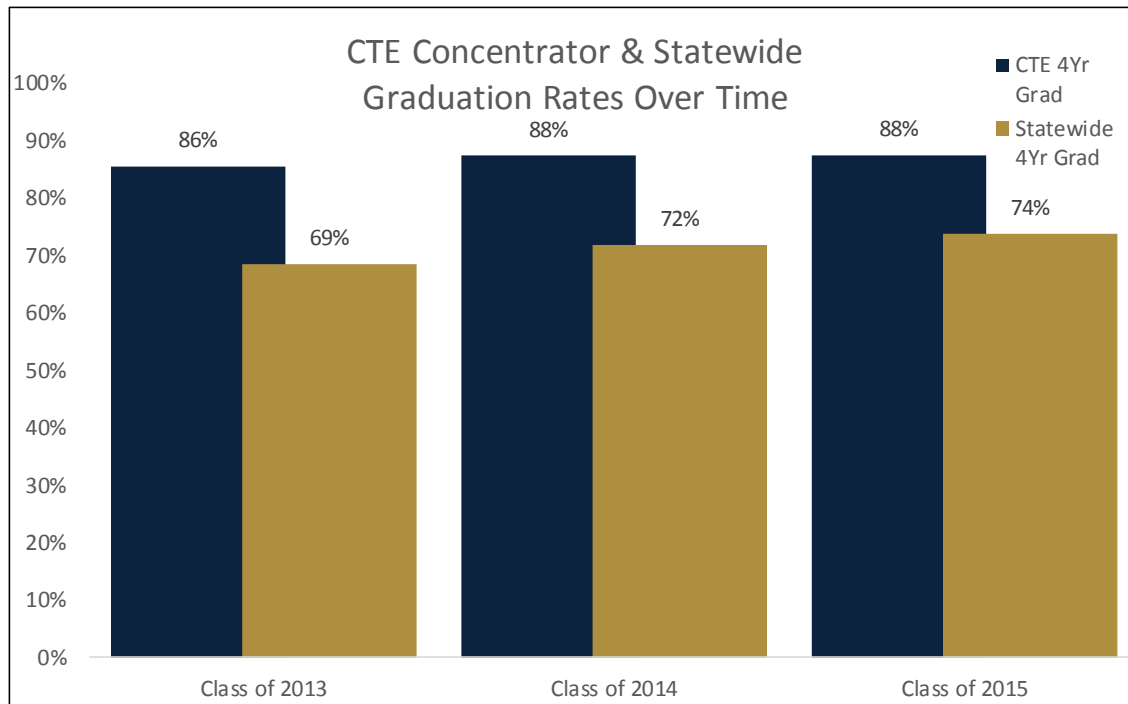
Class of 2015 Student Population	CTE 4Yr Grad	CTE n	Statewide 4Yr Grad	Statewide n	Grad Difference
American Indian/Alaska Native Students	82%	230	55%	793	27%
Native Hawaiian/Pacific Islander Students	90%	87	63%	304	27%
Black/African American Students	82%	259	63%	1,170	19%
Hispanic/Latino Students	86%	2,630	67%	8,908	19%
Multi-Racial Students	87%	643	73%	2,185	14%
White Students	88%	10,103	76%	29,984	12%
Asian Students	94%	706	87%	1,827	7%
All Students	88%	14,658	74%	45,171	14%

Not only did CTE concentrators graduate at higher rates than students in the same population statewide, they graduated above the statewide average of 74% in every racial/ethnic student population measured.



Historical Context

The 2015 results are not unique; CTE concentrators in Oregon have a consistent edge in high school graduation rates. The CTE concentrator graduation rate was 14 points higher for the Class of 2015, 16 points higher for the Class of 2014, and 17 points higher for the Class of 2013.



Research on CTE Graduation

Oregon’s CTE graduation results are supported by CTE research from around the country. According to the Association for Career & Technical Education (ACTE), nationwide “the average high school graduation rate for students concentrating in CTE programs is [13 percentage points higher than the] average [cohort] graduation rate.”⁴

A 2013 study from Mississippi State University found that “the 4-year graduation rate for Mississippi CTE students [in Career Pathways was] 81.1% . . . considerably higher than the state-reported graduation rate of 73.7% for all students.” (Bin Lim et al., 2013⁵)

A 2016 study of Arkansas students by the Fordham Institute found that “[CTE] concentrators are 21 percentage points more likely to graduate from high school than otherwise identical students.” (Dougherty, 2016⁶)

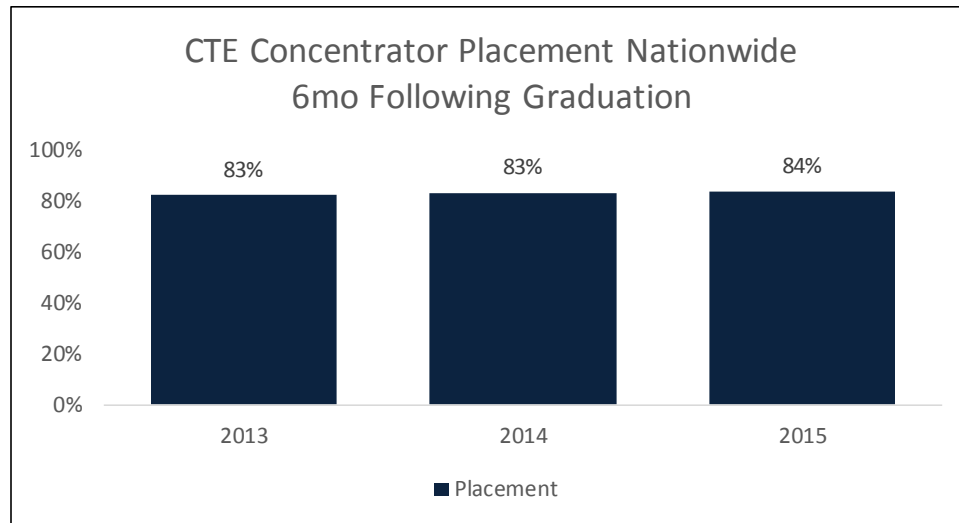
CTE Promotes College and Career Readiness

A growing body of research shows that the benefits of CTE Programs of Study extend beyond high school graduation. The same 2013 study of Mississippi students also found that “purposeful Programs of Study in career and technical education at the secondary level can not only increase graduation rates, but also create a college and career ready individual.” (Bin Lim et al., 2013)

The 2016 study of Arkansas students found that “the more CTE courses students take, the better their education and labor outcomes,” and that CTE concentrators are “more likely to be employed... [have] average

quarterly wages that are higher... [and are] more likely to be enrolled in a two-year college than similar, non-concentrators.” (Dougherty, 2016)

Recipients of Carl D. Perkins Grants track CTE concentrator placements six months following graduation in three areas: employment, enrollment in higher education, and military service⁷. According to data available through the Perkins Data Explorer⁸, more than 80% of CTE concentrators nationwide are employed, enrolled in higher education, or serving in the military six months after graduation.



Class of 2015 Oregon CTE Success Stories:

In the graduating class of 2015, 62 of 156 Oregon districts with approved Programs of Study had CTE concentrator graduation rates of at least 90%.

The chart below highlights 16 Oregon school districts where the CTE graduation edge was greater than 15 points, and where more than 25% of graduating seniors in the district qualified as CTE concentrators.

District	CTE n	CTE 4Yr District Graduation	District n	4yr District Graduation	Grad Difference	% of Students CTE Concentrator
Crook County	101	84%	378	46%	38%	27%
Hermiston	167	93%	373	64%	29%	45%
Astoria	36	>95%	143	75%	20%	25%
Sweet Home	47	91%	177	67%	24%	27%
North Bend	156	73%	359	51%	22%	43%
South Lane	97	86%	224	64%	21%	43%
Lebanon Community	129	83%	321	63%	20%	40%
Douglas County 4	202	84%	565	64%	20%	36%
Centennial	139	91%	483	71%	20%	29%
Salem-Keizer	851	91%	2,997	72%	19%	28%
Jefferson County	112	76%	194	57%	19%	58%
Three Rivers_Josephine County	130	84%	435	66%	18%	30%
Umatilla	68	82%	119	65%	18%	57%
Springfield	291	83%	831	66%	17%	35%
David Douglas	385	91%	865	74%	17%	45%
Bethel	228	90%	411	74%	15%	55%

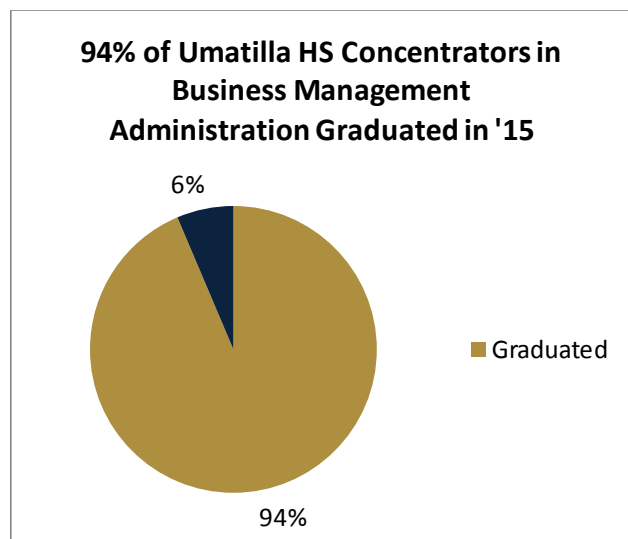
In order to identify common themes among school districts with successful CTE Programs of Study, staff from the ODE Office of Teaching, Learning, and Assessment spoke with CTE teachers, school and district administrators, and CTE Regional Coordinators from two districts with exemplary CTE results. Three promising practices emerged for successful delivery of CTE:

- CTE *pathways* promote college and career readiness.
- High quality *Programs of Study* are common in districts with high CTE graduation rates.
- CTE *teachers* are deeply committed and are key to student success.

Umatilla School District

Umatilla School District's CTE concentrator graduation rate is 82% and is more than 17 percentage points higher than the district average of 65%. In addition, nearly 60% of district seniors qualified as CTE concentrators.

Umatilla High School's largest CTE *Program of Study*, Business Management Administration, had 47 senior concentrators in the graduating class of 2015. Forty-four of 47 seniors graduated, a rate of nearly 94%.



Umatilla School District has emphasized *college and career pathways* throughout CTE *Programs of Study*. This emphasis on *pathways* has anecdotally improved college and career readiness and has measurably improved placement outcomes for CTE concentrators following graduation. ODE tracks placements – including employment, enrollment in higher education, and military service – for CTE concentrators six months following graduation. From the graduating class of 2013 to

the graduating class of 2015, placement for concentrators in Umatilla School District increased by nearly 50%, and placement in 2015 was ten percentage points higher than the state average.

Umatilla School District Superintendent Heidi Sipe says, “Positive student outcomes are the result of comprehensive high school planning and actions. College-going culture is strong throughout the school and is supported by opportunities like GEAR UP, Success 101, CTE options, and district-paid college tuition. CTE is vital to the school and *CTE instruction* is focused on the needs of individual students, and on providing a flexible experience that builds relevant skills.”

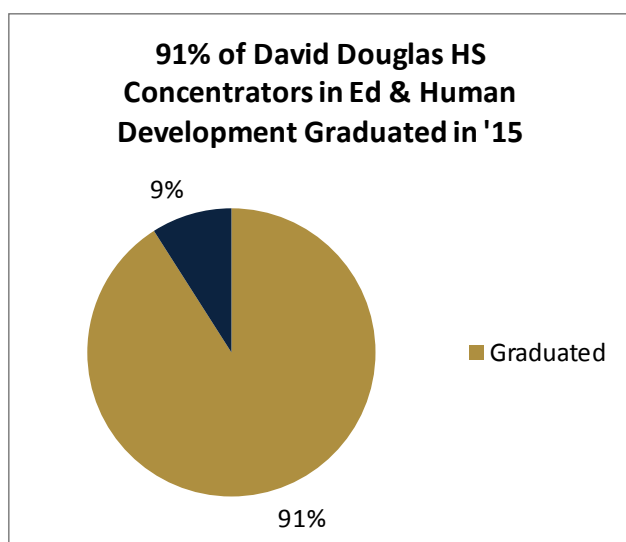
According to Keith Gebers, Umatilla High School CTE Business Teacher, “At Umatilla High School, the scaffolding created by administration with the guidance of the counselor and superintendent allows all students at UHS to get a step up on *post-secondary pathways*. The district not only allows for college credits through the Business *Program of Study*, they pay for those credits the students pass.”

David Douglas School District

David Douglas School District's CTE concentrator graduation rate is 91% and is 17 percentage points higher than the district average of 74%. In addition, 45% of district seniors qualified as CTE concentrators.

David Douglas High School's largest CTE *Program of Study* is Education and Human Development, which had 155 senior CTE concentrators in 2015, and accounted for approximately 40% of all senior CTE concentrators in the school. Of 155 senior concentrators in Education and Human Development, 141 graduated, a rate of 91%.

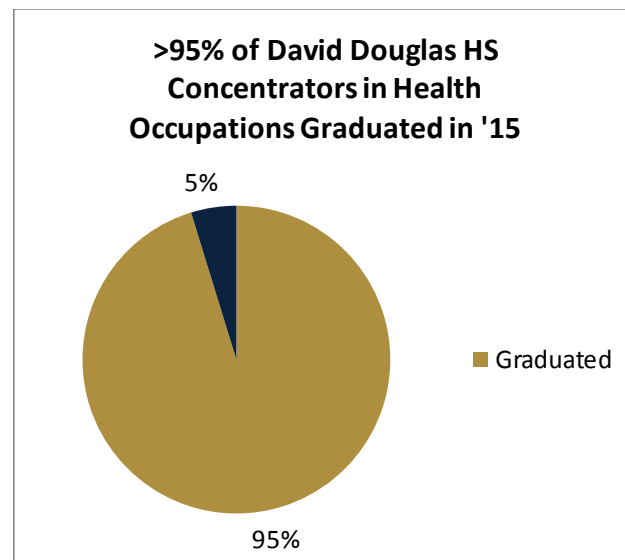
“In the preschool education program, second year [CTE] students do one-on-one tutoring and assessments as well as facilitate planning and implementation groups for first year students,” says ODE Education Specialist Marnie Jewell. “Once students access these courses, their rate of return is very high because the *instructor* incorporates student leadership in each classroom, enabling [CTE] students of all abilities to develop their skills. The program is strengthened by the relationships developed within a very diverse community. Most exciting is seeing the ‘emerging teacher’ blossom when [CTE] students find success facilitating others’ learning.”



According to Assistant Principal Linda Vancil, “David Douglas has been very intentional when developing CTE course offerings for our students. We have taken into account industry demand, student interest, and *teacher expertise*. It has been a consistent goal to *articulate college credit* for all of our CTE offerings.”

David Douglas High School’s second largest CTE *Program of Study* is Health Occupations, which had 136 senior CTE concentrators and accounted for

approximately one third of all senior CTE concentrators in the school. In the graduating class of 2015, the graduation rate for CTE concentrators in Health Occupations was over 95%.



Assistant Principal Vancil added, “Our counseling staff meets individually with every student in grades 8-11 to *assess student interest, select courses, and set future goals*. All 3,000 students have a one-on-one meeting to solidify their plans and ensure a schedule that meets their needs.”

This emphasis on *pathways* within CTE *Programs of Study* has anecdotally improved college and career readiness. According to ODE’s tracking of placement outcomes including employment, enrollment in higher education, and military service for CTE concentrators six months following graduation, CTE concentrators in David Douglas School District consistently outperform statewide averages for placement following graduation. In the graduating class of 2013, placement for David Douglas School District CTE concentrators was 12% higher than the statewide average; in 2015, placement was 13% higher than the statewide average.

CTE is a crucial mechanism to achieve ODE’s goal that every student starts strong, transitions successfully and graduates career and college ready. We commend districts for their commitment to CTE and support efforts to expand CTE offerings to even more students from historically underserved student groups.

Footnotes

1. CTE means content, programs, and instructional strategies based on business and industry workplace skills and technical skill sets and needs. Instruction incorporates standards-based academic content, technical skills and workplace behaviors necessary for success in careers of the 21st century.
2. The CTE instruction reflected in Oregon's published results happens exclusively in the context of ODE approved Programs of Study and State Recognized Programs. CTE Programs of Study are designed by secondary and postsecondary partners to be a series of complete, yet non-duplicative career focused courses. Programs of Study emphasize technical, academic, and career knowledge and skills acquired in applied career contexts.
3. A CTE concentrator is defined as any secondary student who has earned one or more credits in a technical skill course(s) as part of an Oregon state-approved CTE Program (CTE Program of Study, State-Recognized CTE Program), of which at least one-half credit must be designated as "required" for program completion.
4. "ACTE- About CTE" ([link](#))
5. "Graduation Rates and Contributing Factors in CTE Students Versus Traditional Academic Students" ([link](#))
6. "Career and Technical Education in High School: Does it Improve Student Outcomes?" ([link](#))
7. "Carl D. Perkins Career and Technical Education Improvement Act of 2006" ([link](#))
8. Perkins Web Portal Data Explorer ([link](#))

Additional Details

- A. This analysis is correlational and should not be interpreted as demonstrating that CTE causes graduation rate increases.
- B. CTE graduation rates and statewide graduation rates are not precisely an apples-to-apples comparison.
 - 1) Oregon statewide cohort graduation rates include every first year student (net of students moving into/out of the state, etc.). Oregon CTE graduation rates include only CTE concentrators.
 - 2) CTE graduation rates are included in, and contribute to, school, district, and state graduation numbers.
- C. CTE concentrators are not necessarily representative of all students.
- D. The best explanations available today for CTE graduation rates are anecdotal and come from the field (administrators, teachers, students, etc.). What we hear from the field is that CTE is different in important ways: learning reflects student interests, it is specifically focused on career outcomes, and students participate in deliberate practice, typically through applied learning.
- E. CTE concentrators receive mentorship from adults, many of whom have industry experience. This mentorship takes a variety of forms and is exemplified by CTSOs. CTSOs are composed of "11 not-for-profit organizations, specifically authorized by the U.S. Congress in the [Carl D. Perkins Career and Technical Education Improvement] Act." ([link](#))
- F. Caution is strongly urged regarding making generalizations about data based on small numbers. Percentages can vary greatly with very limited changes in student counts. It is also recommended that the data presented in this report be combined, and considered in context, with the other data available regarding students, courses, and programs in a district.

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