

Career and Technical Education: Preparing K–12 Multilingual Learners for Postsecondary Education and Careers

What is Career and Technical Education?

Career and technical education (CTE)¹ encompasses courses and programs of study in which students acquire challenging academic, technical, and employability skills to succeed in postsecondary education and in-demand careers. High-quality CTE can increase student success in high school and postsecondary education and accelerates workforce development. CTE provides multilingual learners (MLs) with real-world opportunities to explore, engage in, and pursue rewarding careers.

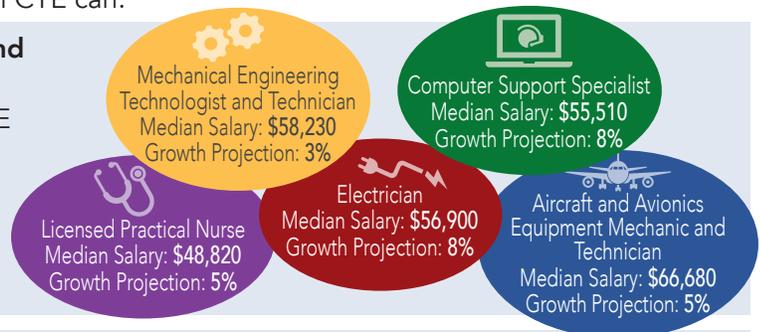
The Benefits of CTE for Multilingual Learners

Participation rates for MLs in CTE at the secondary, postsecondary, and adult levels is slightly lower than non-MLs.² Increasing ML access to and engagement in CTE can:

Lead to greater rates of high school completion and attainment of postsecondary education.^{3,4}

Evaluations of secondary CTE programs find that CTE concentrators⁵

- graduate from high school at higher rates;
- have higher college attendance and employment rates; and
- earn higher wages than their non-CTE peers.



Prepare MLs for in-demand occupations.⁶

Many in-demand CTE occupations:

- pay higher than the national median wage;
- have high growth potential in technology, engineering, health care, and advanced manufacturing;
- provide pathways into further education and career advancement; and
- require more than a high school diploma but less than a bachelor's degree.

A 2020 study of the NY P-TECH program model⁷ found that students in the program were more likely to earn CTE and other nonacademic credits than students in other high schools.⁸ Students in this program had higher pass rates on the NY Regents Exams and qualified for City University of New York dual enrollment earlier.

Graduation Rates for CTE concentrators vs. non-concentrators in Oregon: Years 2011–18.

CTE concentrators of all ethnicities have...



SPOTLIGHT ON OREGON

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¹ For a complete definition of CTE, please see Section (3)(5) of the Carl D. Perkins Career and Technical Education Act of 2006, as amended by the Strengthening Career and Technical Education for the 21st Century Act (Perkins V).

² Office of the English Language Acquisition, U.S. Department of Education. (2020). *English learners in career and technical education*. https://ncela.ed.gov/files/fast_facts/Del4.4_Els%20in%20CTE_20200617_508.pdf

³ Arneson, A., Hodara, M., & Klein, S. (2020). *Career and technical education in Oregon: Exploring who participates in high school and the outcomes they achieve*. Portland, OR: Education Northwest, Regional Educational Laboratory Northwest. <https://files.eric.ed.gov/fulltext/ED607349.pdf>

⁴ Brodersen, R. M., Gagnon, D., Liu, L., & Tedeschi, S. (2021). *The impact of career and technical education on postsecondary outcomes in Nebraska and South Dakota*. Regional Educational Laboratory Central. https://ies.ed.gov/ncee/edlabs/regions/central/pdf/REL_2021087.pdf

⁵ A CTE concentrator is a high school student who completed a sequence of courses aligned to a specific career cluster. These definitions can vary among the states (Section (12)(5) of Perkins V)

⁶ Bureau of Labor Statistics, U.S. Department of Labor, *Occupational outlook handbook*. <https://www.bls.gov/ooh/computer-and-information-technology/home.htm>; U.S. Department of Education. (2019). *CTE data stories*. <https://www2.ed.gov/datastory/cte/index.html#data-story-title>

⁷ P-TECH is career pathway model in partnership with IBM, the New York City Department of Education, and the City University of New York.

⁸ Rosen R. D., Byndloss, C., Parise, L., Alterman, E., Dixon, M., & Medina, F. (2020). *Bridging the school-to-work divide: Interim implementation and impact findings from New York City's P-TECH 9-14 schools*. MDRC. https://www.mdrc.org/sites/default/files/P-TECH_Report_2020.pdf

⁹ Arneson, A., Hodara, M., & Klein, S. (2020). *Career and technical education in Oregon: Exploring who participates in high school and the outcomes they achieve*. Portland, OR: Education Northwest, Regional Educational Laboratory Northwest. <https://files.eric.ed.gov/fulltext/ED607349.pdf>

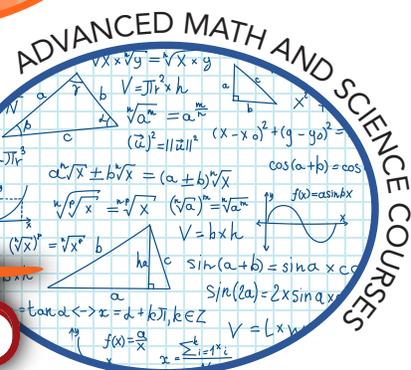
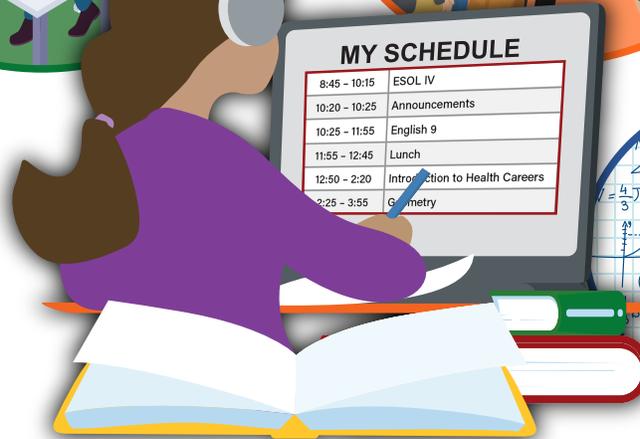
How Can Schools and Teachers Support ML Participation in CTE?

Once enrolled, MLs may need instructional and linguistic supports. To ensure equitable access and opportunity, K–12 schools can:^{10,11}

1. Provide CTE teachers with collaborative, high-quality, and sustained professional development (PD) to meet the linguistic needs of MLs.
2. Foster co-planning and co-teaching among ESL and CTE teachers.
3. Address issues that might prevent ML access to CTE, e.g., scheduling conflicts between English language development and CTE courses.
4. Ensure ML access to and supports in advanced math and science courses to succeed in upper-level CTE.
5. Address tracking and bias that may prevent MLs from enrolling in CTE courses.
6. Inform MLs and their families about the CTE courses/programs in their home language. If programs are not at the ML's school, discuss transportation options.
7. Provide job-embedded support to CTE teachers on ways that technology can support MLs.

DID YOU KNOW?

In-service PD on instructing ELs is an allowable use of Perkins V state leadership funds under [section 124](#). Funds available to local subrecipients under [section 135](#) can be an important part of a state's or district's strategy to improve the outcomes of ELs in CTE.



Want to know more about CTE courses and programming in U.S schools? Check out this [NCES report](#) and this [data story](#).

¹⁰ National Academies of Sciences, Engineering, and Medicine. (2018). *English learners in STEM subjects: Transforming classrooms, schools, and lives*. National Academic Press. https://sites.nationalacademies.org/cs/groups/dbassesite/documents/webpage/dbasse_191011.pdf

¹¹ U.S. Department of Education. (2019). *Perkins V: Supporting access & success* (Career and technical education special populations information brief). <https://s3.amazonaws.com/PCRN/file/special-populations-information-briefs.pdf>