



CTE TODAY!



What is Career and Technical Education?

- Encompasses 94 percent of high school students and 8.4 million individuals seeking postsecondary certificates and associate degrees in CTE fields¹
- Is delivered flexibly through high schools, area career centers, career academies, community and technical colleges, four-year universities and more
- Educates students for a range of career options through 16 Career Clusters[®] and 79+ pathways
- Offers clear pathways to industry certifications, postsecondary certificates and degrees
- Partners with businesses to prepare students for tomorrow's workforce
- Fulfills employer needs in high-skill, high-wage, high-demand areas
- Prepares students to be college- and career-ready by providing core academic skills, employability skills and technical, job-specific skills

Today's cutting-edge, rigorous and relevant career and technical education (CTE) prepares youth and adults for high-wage, high-skill, high-demand careers in established and emerging industries.

CTE Works for Business

CTE addresses the needs of industries and helps close the skills gap.

- Half of all STEM jobs call for workers with less than a bachelor's degree.⁸
- Health care occupations, many of which require an associate degree or less, make up 12 of the 20 fastest growing occupations.⁹
- 3 million workers will be needed for the nation's infrastructure in the next decade, including designing, building and operating transportation, housing, utilities and telecommunications.¹⁰
- Middle-skill jobs, jobs that require education and training beyond high school but less than a bachelor's degree, are a significant part of the economy. Of the 55 million job openings created by 2020, 30 percent will require some college or a two-year associate degree.¹¹
- More than 80 percent of manufacturers report that talent shortages will impact their ability to meet customer demand.¹²

CTE Works for the Economy

Investing in CTE yields big returns for state economies.

- In Wisconsin, taxpayers receive \$12.20 in benefits for every dollar invested in the technical college system.¹³
- In Washington, for every dollar invested in secondary CTE programs, taxpayers receive a \$9 return on investment.¹⁴
- In Tennessee, CTE returns \$2 for every \$1 invested. At the secondary level, CTE program completers account for more than \$13 million in annual tax revenues.¹⁵

CTE Works for High School Students

High school students involved in CTE are more engaged, graduate at higher rates and typically go on to postsecondary education.

- Taking one CTE class for every two academic classes minimizes the risk of students dropping out of high school.²
- The average high school graduation rate for students concentrating in CTE programs is 93 percent, compared to an average national freshman graduation rate of 80 percent.³
- 91 percent of high school graduates who earned 2-3 CTE credits enrolled in college.⁴

CTE Works for College Students and Adults

Postsecondary CTE prepares students and adults for in-demand careers, and allows them to take on less debt.

- Students can attend public community and technical colleges for a fraction of the cost of tuition at other institutions: \$3,520, on average, in 2016-2017.⁵
- According to research in Texas, Colorado and Virginia, graduates with technical or applied science associate degrees out-earn bachelor's degree holders by \$2,000 to \$11,000.⁶
- 27 percent of people with less than an associate degree, including licenses and certificates, earn more than the average bachelor's degree recipient.⁷

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Endnotes

1. U.S. Department of Education, National Center for Education Statistics, *High School Transcript Study, 2009*; U.S. Department of Education, National Center for Education Statistics, *2007–08 National Postsecondary Student Aid Study*.
2. Plank et al, *Dropping Out of High School and the Place of Career and Technical Education*, National Research Center for CTE, 2005.
3. U.S. Department of Education, Office of Career, Technical and Adult Education data; Civic Enterprises et al, *Building a Grad Nation: Progress and Challenge in Ending the High School Dropout Epidemic: Annual Update*, 2014.
4. U.S. Department of Education, National Center for Education Statistics, *Data Point: Career and Technical Education Coursetaking and Postsecondary Enrollment and Attainment: High School Classes of 1992 and 2004*, 2016.
5. College Board, *Average Published Undergraduate Charges by Sector, 2016-17*.
6. Schneider, *Higher Education Pays: But a Lot More for Some Graduates Than for Others*, College Measures, 2013.
7. Harvard Graduate School of Education, *Pathways to Prosperity: Meeting the Challenge of Preparing Young Americans for the 21st Century*, 2011.
8. Rothwell, *The Hidden STEM Economy*, Brookings Institution, 2013.
9. U.S. Department of Labor, Bureau of Labor Statistics, *Occupational Outlook Handbook, 2014–15 Edition, Fastest Growing Occupations*; U.S. Department of Labor, Bureau of Labor Statistics, *Occupational Outlook Handbook, 2014–15 Edition, Healthcare Occupations*.
10. Kane and Tomer, *Infrastructure Skills: Knowledge, Tools, and Training to Increase Opportunity*, Brookings Institution, 2016.
11. Carnevale et al, *Recovery: Job Growth and Education Requirements Through 2020*, Georgetown University Center on Education and the Workforce, 2013.
12. Deloitte and The Manufacturing Institute, *The Skills Gap in U.S. Manufacturing: 2015-2025 Outlook*, 2015.
13. Wisconsin Technical College System, *The Technical College Effect*, 2014.
14. Washington State Workforce Training and Education Coordinating Board, *CTE 2015 Dashboard*.
15. Harrison et al, *The Economic Impact of Secondary and Postsecondary Career and Technical Education in Tennessee*, Sparks Bureau of Business and Economic Research and the University of Memphis, 2006.

