



## What is CTE

Career Technical Education (CTE) provides learners with the knowledge and skills they need to be prepared for college and careers. CTE gives purpose to learning by emphasizing real-world skills and practical knowledge within a selected career focus.

Students in CTE programs take specialized courses, in addition to required courses, and often have the opportunity to participate in internships, engage with mentors and practice what they are learning through hands-on projects. Students can participate in CTE at the middle or high school level and at postsecondary institutions in all communities, in all states, across the U.S.

### CTE is Learning that Works for Students

*CTE works for students by delivering real options for college and rewarding careers.*

- **CTE fills a critical gap for high school students** – Students in CTE programs and their parents are *three times as likely* to report they are “very satisfied” with their and their children’s ability to learn real-world skills as part of their education compared to parents and students not involved in CTE.<sup>5</sup>
- **CTE creates pathways to college and career success** – Over 75 percent of students taking a concentration of CTE course enroll in postsecondary education after graduating high school.<sup>6</sup>
- **CTE leads to fewer dropouts** – Students involved in CTE are far less likely to drop out of high school than other students, a difference estimated to save the economy \$168 billion each year.<sup>7</sup>
- **CTE provides pathways to advancement** – In the 2016-17 program year, 86 percent of adult learners concentrating in CTE either continued their education or were employed within six months of completing their program.<sup>8</sup>
- **CTE delivers marketable degrees** – Associate degree holders earn a median annual income of \$47,000, but, depending on the field of study, can earn far more than even bachelor’s degree holders.<sup>9</sup>

## Fast Facts

- **81%:** High school graduates earning at least one CTE credit.<sup>1</sup>
- **20%:** High school students taking a concentration of CTE courses.<sup>2</sup>
- **94%:** High school graduation rate for CTE concentrators.<sup>3</sup>
- **69%:** Postsecondary students seeking a credential or degree in a career area.<sup>4</sup>
- **16:** Career Clusters, the way in which CTE programs are organized, each representing a different sector – from Information Technology and Health Sciences to Education & Training and Marketing.

## High Demand for CTE

**94%**

of parents strongly (60%) or somewhat approve (34%) of expanding access to career and vocational programs.<sup>11</sup>

**86%**

of parents and students say they wish they could get more real world knowledge and skills during high school.<sup>12</sup>

**54%**

of business leaders do not think the education system is teaching the skills needed for the workforce.<sup>13</sup>

BROUGHT TO YOU BY:

**ADVANCE** CTE  
State Leaders Connecting Learning to Work



## CTE is Learning that Works for Industry

CTE works for industry and employers by strengthening their ability to recruit and hire skilled talent.

- **CTE helps fill the skills gap** – Nearly 60 percent of companies report having difficulty filling job openings because of a lack of qualified applicants, which can cost a company upwards of \$800,000 each year in lost productivity and recruitment.<sup>13</sup> Thirty-nine percent of employers say lack of experience or hard skills are top drivers of the talent shortages.<sup>14</sup>
- **CTE prepares students for leading industries** – About one third of CTE learners are enrolled in programs in leading fields such as health care, information technology and STEM.<sup>15</sup>
- **CTE programs directly connect learners in high school and postsecondary with employers** - CTE programs provide a clear pipeline of talent and unique opportunities for students to engage in internships, apprenticeships and other meaningful on-the-job experiences.<sup>16</sup> In fact, employer participation is a requirement of funding for CTE programs in the majority of states.<sup>17</sup>
- **CTE gets a lot of bang for its buck** – *Washington* has found a return of \$26 in lifetime earnings and employee benefits for every dollar invested in CTE at the high school level,<sup>18</sup> while *Wisconsin* averages a taxpayer benefit of \$12.20 for every dollar invested in its technical college system.<sup>19</sup>

2017

Excellence in Action  
Award

**The Academy of Engineering at Harmony Magnet** engages its students in rigorous career-focused coursework, paired with a college-prep curriculum. Students are able to earn college credit while in high school in a number of ways, including through a capstone course that requires students to recognize a problem, research potential solutions, develop a plan to address the problem using the engineering design process, and build a product to solve the problem. All students participate in internships and 95% enrolled in college upon graduation.

<sup>1</sup> <https://nces.ed.gov/surveys/ctes/tables/h176.asp>

<sup>2</sup> Based on Advance CTE's analysis of CTE concentrator data at <https://perkins.ed.gov/pims/DataExplorer/CTEConcentrator> and public high school enrollment data at <https://www.census.gov/data/tables/2016/demo/school-enrollment/2016-cps.html>

<sup>3</sup> <https://perkins.ed.gov/pims/DataExplorer/Performance>

<sup>4</sup> <https://nces.ed.gov/surveys/ctes/tables/p127.asp>

<sup>5</sup> <https://careertech.org/resource/value-and-promise-of-cte-results-from-a-national-survey>

<sup>6</sup> <http://www2.ed.gov/rschstat/eval/sectech/nacte/career-technical-education/interim-report.pdf>

<sup>7</sup> Kotamraju, Pradeep. 2011. "Measuring the Return on Investment for CTE." Techniques: 28-31. Retrieved from <https://files.eric.ed.gov/fulltext/EJ943149.pdf>

<sup>8</sup> Only includes states that report data on adult CTE learners to the U.S. Department of Education. Retrieved from <https://perkins.ed.gov/pims/DataExplorer/Performance>

<sup>9</sup> <https://1gyhoq479ufd3yna29x7ubjn-wpengine.netdna-ssl.com/wp-content/uploads/Fiverules.pdf>

<sup>10</sup> [https://www.aft.org/sites/default/files/parentpoll2017\\_memo.pdf](https://www.aft.org/sites/default/files/parentpoll2017_memo.pdf)

<sup>11</sup> <https://careertech.org/resource/value-and-promise-of-cte-results-from-a-national-survey>

<sup>12</sup> <https://www.adecousa.com/employers/resources/skills-gap-in-the-american-workforce/>

<sup>13</sup> <http://press.careerbuilder.com/2017-04-13-The-Skills-Gap-is-Costing-Companies-Nearly-1-Million-Annually-According-to-New-CareerBuilder-Survey>

<sup>14</sup> [https://go.manpowergroup.com/hubfs/TalentShortage%202018%20\(Global\)%20Assets/PDFs/MG\\_TalentShortage2018\\_lo%206\\_25\\_18\\_FINAL.pdf?t=1537902614152](https://go.manpowergroup.com/hubfs/TalentShortage%202018%20(Global)%20Assets/PDFs/MG_TalentShortage2018_lo%206_25_18_FINAL.pdf?t=1537902614152)

<sup>15</sup> Analysis of data <https://perkins.ed.gov/pims/DataExplorer/>

<sup>16</sup> For examples of high-quality CTE programs, see [www.careertech.org/excellence-in-action](http://www.careertech.org/excellence-in-action)

<sup>17</sup> [https://cte.careertech.org/sites/default/files/State-of-CTE\\_Employer-Engagement\\_FINAL.pdf](https://cte.careertech.org/sites/default/files/State-of-CTE_Employer-Engagement_FINAL.pdf)

<sup>18</sup> <http://www.wtb.wa.gov/CTE2018Dashboard.asp>

<sup>19</sup> <http://districtboards.org/documents/Quarterly%20Meeting/115/TechColEffectGraphicBrochure.pdf>

BROUGHT TO YOU BY:

**ADVANCE** CTE  
State Leaders Connecting Learning to Work