

## What Is CTE?

Career Technical Education (CTE) is an educational option that 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 the national average, a difference estimated to save the economy \$168 billion each year.<sup>7</sup>
- **CTE provides pathways to advancement** – 84 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** – College graduates who earn a career-focused degree or credential are more likely to be employed in the future compared to those who earn an academic-focused credential. For example, 89.4 percent of those who earned career-focused bachelor’s degrees were employed compared to 83.4 percent of those with a bachelor’s degree in an academic field.<sup>9</sup>

## Fast Facts

- **75%:** High school graduates earning at least one CTE credit.<sup>1</sup>
- **21%:** High school students taking a concentration of CTE courses.<sup>2</sup>
- **93%:** 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

**89%**  
of public school parents agree that students should receive more education about career choices while in high school.<sup>10</sup>

**86%**  
of parents and students say they wish they could get more real world knowledge and skills during high school.<sup>11</sup>

**54%**  
of business leaders do not think the education system is teaching the skills needed for the workforce.<sup>12</sup>

## 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> At the same time, six out of the ten hardest-to-fill positions are in technical fields or require a CTE background.<sup>14</sup>
- **CTE prepares students for leading industries** – About half of all CTE learners are enrolled in programs in leading fields, including 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 \$9 for every dollar invested in CTE at the high school level, while Wisconsin averages a taxpayer benefit of \$12.20 for every dollar invested in its technical college system.

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### 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.

### The Emergency Medical Technician – Paramedic program at Waubensee Community College

is truly shared program with 14 local high schools offering a seamless transition for learners with a passion for health science who want a fast track to their career. Students not only take rigorous CTE and general education courses, they also participate in extended work-based learning experiences at a hospital or fire department, depending on their interest. All students earn credentials that have value in the labor market.

<sup>1</sup> <https://nces.ed.gov/surveys/ctes/tables/h123.asp>

<sup>2</sup> Analysis of [https://nces.ed.gov/programs/digest/d15/tables/dt15\\_105.30.asp?current=yes](https://nces.ed.gov/programs/digest/d15/tables/dt15_105.30.asp?current=yes) & [https://s3.amazonaws.com/PCRN/uploads/Perkins\\_RTC\\_2013-14.pdf](https://s3.amazonaws.com/PCRN/uploads/Perkins_RTC_2013-14.pdf)

<sup>3</sup> [https://cte.careertech.org/sites/default/files/CTE\\_and\\_Student\\_Achievement\\_2017.pdf](https://cte.careertech.org/sites/default/files/CTE_and_Student_Achievement_2017.pdf)

<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.

<sup>8</sup> <http://adulsted-laUSD-ca.schoolloop.com/file/1320734569583/1356617220814/6031349240189194650.pdf>

<sup>9</sup> <https://nces.ed.gov/surveys/ctes/tables/B04.asp>

<sup>10</sup> <http://pdkpoll.pdkintl.org/october/>

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

<sup>12</sup> <https://www.adeccousa.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> <http://www.manpowergroup.com/talent-shortage-2016>

<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)