

# Postsecondary Occupational Education Among Students Who Took Career and Technical Education in High School

**DATA POINT**

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This Data Point examines postsecondary education enrollment rates overall and in occupational areas of study, among 2013 public high school graduates as of 2016. The report uses data from the High School Longitudinal Study of 2009 (HLSL:2009), which initially surveyed a nationally representative sample of grade 9

students in 2009, with follow-up surveys in 2012, 2013, and 2016 and a high school transcript collection in 2013. The analysis is based on approximately 11,600 HLSL:09 ninth-graders who graduated from public high schools by August 2013, had complete transcripts, and participated in the 2016 follow-up.

The Data Point focuses on high school graduates who had been career and technical education (CTE) concentrators in high school. Graduates were CTE concentrators if they earned at least 2 credits in 1 of the 10 CTE subject areas listed in the figure notes (“2-credit concentrators”) or at least 3 credits in 1 of these CTE subject areas (“3-credit concentrators”).<sup>1</sup> Among 2013 public high school graduates, 38 percent were 2-credit concentrators and 20 percent were 3-credit concentrators.<sup>2</sup>

**About three-quarters of graduates who were CTE concentrators in high school enrolled in postsecondary education, although a lower percentage did so than among students who had not concentrated in CTE.**

Overall, 78 percent of 2013 public high school graduates enrolled in postsecondary education within 3 years of graduation, including 74 percent of 2-credit concentrators and 73 percent of 3-credit concentrators. By contrast, enrollment rates for those who were not 2- or 3-credit concentrators were 80 percent and 79 percent, respectively (**FIGURE 1**).

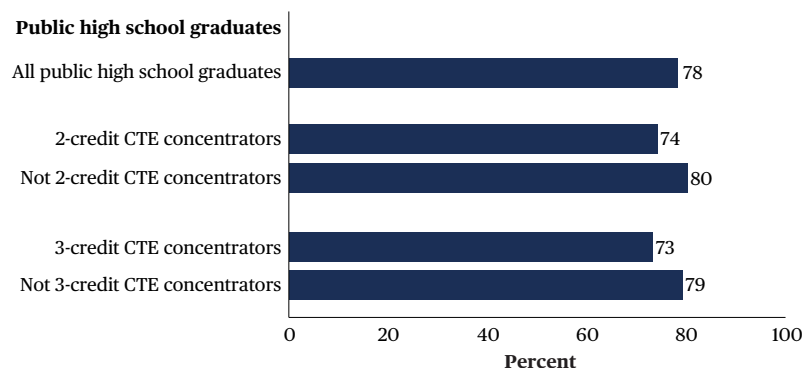
High school graduates’ postsecondary fields of study and credentials (degrees and certificates) were classified into nonoccupational and occupational fields, with occupational fields aligned to the 10 designated high school CTE areas.<sup>3</sup>

**After enrolling in postsecondary education, about three-quarters of**

**CTE concentrators pursued an occupational field of study, but only about one-quarter were in a field aligned with their area of CTE concentration in high school.**

Overall, 70 percent of graduates who went on to postsecondary education either had earned a credential in an occupational field

**FIGURE 1. Percentage of 2013 public high school graduates who enrolled in postsecondary education as of 2016, by career and technical education (CTE) concentrator status in high school: 2016**



NOTE: The 2- and 3-credit concentrators are students who earned at least 2 or at least 3 credits, respectively, in at least 1 of the following 10 CTE areas: agriculture and natural resources; business, finance, and marketing; communications and communication technologies; computer and information science; construction; consumer services; engineering, design, and production; health care; mechanical repair and operation; and public services. See <http://nces.ed.gov/surveys/ctes/tables/H233.asp> for more precise estimates and standard errors.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, High School Longitudinal Study of 2009 (HLSL:2009), Base-year, 2013 Update, Second Follow-up, and High School Transcript File.

by 2016 or, if they had not earned a credential, had an occupational field for their last field of study (FIGURE 2).<sup>4</sup> The percentage who did so, however, was higher among graduates who had concentrated in CTE than among those who had not. Seventy-seven percent of 2-credit concentrators versus 66 percent of those who were not 2-credit concentrators pursued an occupational field of study; among 3-credit concentrators, the percentages were 80 and 68, respectively.

For CTE concentrators, it is possible to examine whether they continued their postsecondary education in an occupational field that is aligned with their high school area of

concentration. This analysis finds that 26 percent of 2-credit concentrators who enrolled in postsecondary education pursued a field of study aligned with their area of CTE concentration in high school, as did 28 percent of 3-credit concentrators.

**Endnotes**

<sup>1</sup>The 2- and 3-credit concentrator concepts have been used in past National Center for Education Statistics (NCES) reports, and the 2-credit cutoff aligns with federal CTE legislation (P.L. 115-224, section 7[12]). CTE concentrators are compared here to graduates who did not concentrate in a CTE subject area. Graduates who were not, for example, 2-credit concentrators could have earned any number of CTE credits (including no CTE credits), but without earning 2 or more CTE credits in one area. Because concentrators,

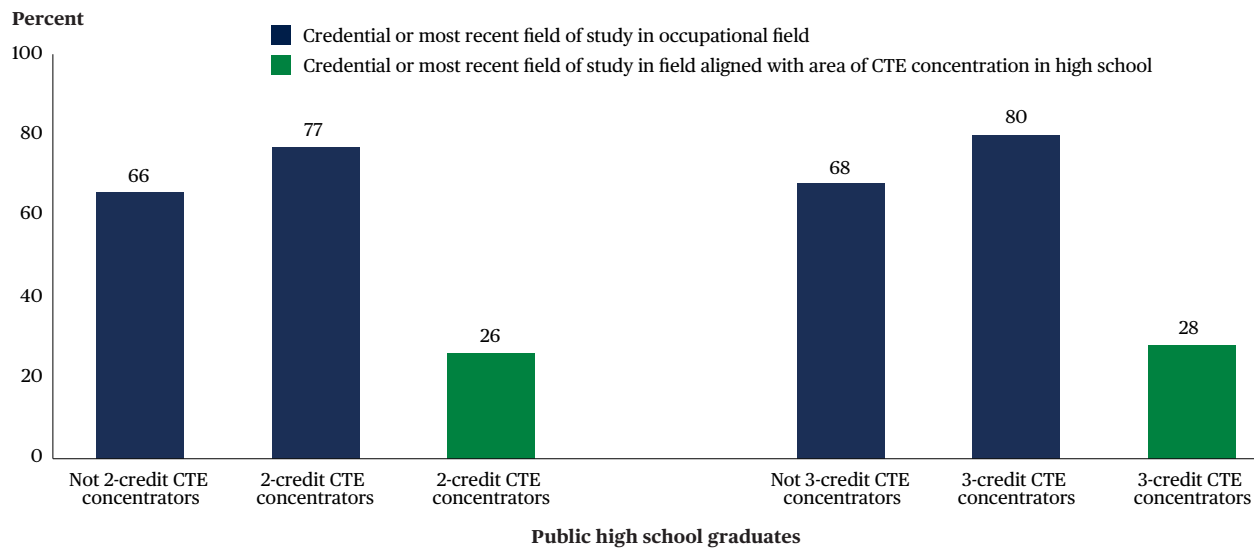
by definition, had to earn a minimum number of CTE credits (2 or 3), graduates who did and did not concentrate in CTE differ not just in their coursetaking in a particular CTE area but also in their amount of CTE coursetaking. For example, 2-credit concentrators earned an average of 4.64 CTE credits, and graduates who were not 2-credit concentrators earned an average of 1.33 CTE credits; for 3-credit concentrators, the corresponding averages were 5.77 and 1.82, respectively (see <https://nces.ed.gov/surveys/ctes/tables/H193.asp>).

<sup>2</sup>Not in figures; see <https://nces.ed.gov/surveys/ctes/tables/H188.asp>.

<sup>3</sup>See [https://nces.ed.gov/pubs2020/data/2020008\\_crosswalk.xlsx](https://nces.ed.gov/pubs2020/data/2020008_crosswalk.xlsx) for the crosswalk linking secondary and postsecondary occupational fields.

<sup>4</sup>Not in figures; see <https://nces.ed.gov/surveys/ctes/tables/H243.asp>.

**FIGURE 2. Among 2013 public high school graduates who enrolled in postsecondary education as of 2016, percentage whose postsecondary credential or most recent field of study was in an occupational field, and percentage whose credential or most recent field of study was in a field aligned with their area of career and technical education (CTE) concentration in high school: 2016**



NOTE: The 2- and 3-credit concentrators are students who earned at least 2 or at least 3 credits, respectively, in at least 1 of the following 10 CTE areas: agriculture and natural resources; business, finance, and marketing; communications and communication technologies; computer and information science; construction; consumer services; engineering, design, and production; health care; mechanical repair and operation; and public services. See <http://nces.ed.gov/surveys/ctes/tables/H243.asp> and <http://nces.ed.gov/surveys/ctes/tables/H246.asp> for more precise estimates and standard errors.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, High School Longitudinal Study of 2009 (HLSL:2009), Base-year, 2013 Update, Second Follow-up, and High School Transcript File.