

U.S. Department of Education
NCES 2008-001

Postsecondary Career/Technical Education: Changes in the Number of Offering Institutions and Awarded Credentials from 1997 to 2006

Students can earn credentials in career-related fields at either the subbaccalaureate or the baccalaureate level (for example, a certificate in engineering technology or a bachelor's degree in engineering). Although previous reports examine both of these sectors (Hudson and Carey 2005, Levesque et al. 2008), this Issue Brief focuses on the subbaccalaureate sector. This focus corresponds to the definition of career/technical education (CTE) as “organized educational activities that provide technical skill proficiency, an industry-recognized credential, a certificate, or an associate degree.”¹ This brief provides a more in-depth view of this diverse educational sector. Specifically, the brief examines changes among less-than-4-year Title IV postsecondary institutions (hereafter, “institutions”),^{2,3} looking at the number of institutions that offer CTE and the number of subbaccalaureate CTE credentials (certificates and associate's degrees) these institutions award. The analysis uses data from the Integrated Postsecondary Education Data System (IPEDS), administered by the National Center for Education Statistics (NCES), to examine change over a 9-year period (academic years 1997 through 2006).^{4,5}

Trends are examined by institutional sector, focusing first on the three sectors most commonly offering CTE: public 2-year institutions, for-profit less-than-2-year institutions, and for-profit 2-year institutions. In 2006, these sectors collectively accounted for 87 percent of the less-than-4-year institutions that offered CTE and awarded 94 percent of all subbaccalaureate CTE credentials. Public less-than-2-year, private not-for-profit 2-year, and private not-for-profit less-than-2-year institutions accounted for the remaining 13 percent of less-than-4-year institutions offering CTE and awarded the remaining 6 percent of subbaccalaureate CTE credentials.

Trends in Number of Institutions Offering CTE

The total number of less-than-4-year institutions offering CTE

declined in the late 1990s, then increased each year between 2001 and 2006, resulting in a net increase of 3 percent over the 9-year period between 1997 and 2006 (from 3,706 to 3,833) (table 1).

The three sectors most commonly offering CTE experienced different patterns of change over the 9 years. The number of public 2-year institutions offering CTE fluctuated slightly over the 9-year period, resulting in an overall decrease from 1,147 in 1997 to 1,128 in 2006, a decline of 2 percent (figure 1). The number of for-profit less-than-2-year institutions—the sector with the largest number of institutions offering CTE—decreased from 1,252 in 1997 to 1,095 in 1999, then increased to 1,372 by 2006, resulting in a net 10 percent increase in this sector from 1997 to 2006. The number of for-profit 2-year institutions offering CTE generally followed the same pattern as the for-profit less-than-2-year sector, with a slight decline in the late 1990s and an increase during the early 2000s, for an overall increase from 723 in 1997 to 835 in 2006 (a net increase of 15 percent).

The three other sectors offering CTE also experienced different patterns of change. The number of private not-for-profit 2-year institutions offering CTE declined 34 percent from 1997 to 2006. The public less-than-2-year sector experienced overall growth of 3 percent from 1997 to 2006 in the number of institutions offering CTE. The private not-for-profit less-than-2-year sector experienced overall growth of 7 percent during the same period.

Changes in Distribution of Institutions

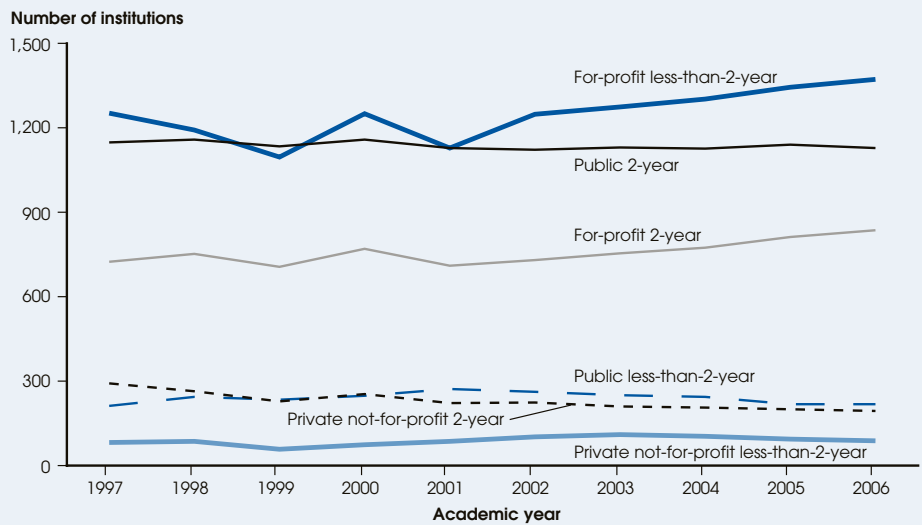
Different patterns of change in the number of less-than-4-year institutions in each sector resulted in changes in their distribution. In addition to declines in the number of public 2-year institutions offering CTE, this sector comprised a smaller percentage of all less-than-4-year institutions offering CTE at the end of the 9-year period than at the beginning

Table 1. Number of less-than-4-year Title IV postsecondary institutions offering career/technical education (CTE) credentials and number of subbaccalaureate CTE credentials awarded by these institutions: 1997 through 2006

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Institutions	3,706	3,694	3,451	3,749	3,542	3,684	3,723	3,752	3,805	3,833
Credentials	792,054	754,155	726,841	764,717	739,171	788,720	900,568	954,895	978,767	981,056

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Completions and Institutional Characteristics (IC) data files, various years (e.g., report year 2006 uses IC 2006-07 and Completions 2005-06).

Figure 1. Number of less-than-4-year Title IV postsecondary institutions offering career/technical education, by control and level of institution: 1997 through 2006



SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Completions and Institutional Characteristics (IC) data files, various years (e.g., report year 2006 uses IC 2006-07 and Completions 2005-06).

(31 vs. 29 percent; table 2). Reflecting their growth in numbers, both for-profit less-than-2-year and for-profit 2-year institutions comprised a larger percentage of less-than-4-year institutions offering CTE in 2006 than in 1997, increasing, respectively, from 34 to 36 percent of these institutions, and from 20 to 22 percent.

In the three smaller sectors, private not-for-profit 2-year institutions decreased from 8 to 5 percent of all less-than-4-year CTE-offering institutions from 1997 to 2006, while private not-for-profit less-than-2-year institutions remained at 2 percent in both years, and public less-than-2-year institutions remained at 6 percent.

Trends in Number of CTE Credentials Awarded

The number of subbaccalaureate CTE credentials awarded provides a more direct indicator of changes in CTE offerings by the different sectors over time. The total number of subbaccalaureate CTE credentials awarded increased 24 percent between 1997 and 2006, from 792,054 to 981,056 (table 1).

The number of subbaccalaureate CTE credentials awarded over the 9 years increased in each of the three largest sectors (figure 2). In spite of an initial period of decline, the public 2-year sector experienced a 24 percent increase in CTE credentials awarded over the 9-year period. For-profit less-than-2-year institutions awarded 31 percent more subbaccalaureate CTE credentials in 2006 than in 1997 (185,093 vs. 141,538), with most of the increase occurring after 2001. For-profit 2-year institutions awarded 66 percent more subbaccalaureate CTE credentials in 2006 than in 1997 (162,923 vs. 98,112) with the number of credentials awarded increasing every year except 1999 and 2001.

Declines in CTE credentials were more common among the remaining three sectors. Overall, both public less-than-

2-year and private not-for-profit 2-year institutions awarded fewer subbaccalaureate CTE credentials in 2006 than in 1997—48 percent less among public less-than-2-year institutions (58,243 in 1997 vs. 30,377 in 2006) and 21 percent less among private not-for-profit 2-year institutions (23,583 vs. 18,694). However, the number of subbaccalaureate CTE credentials awarded by private not-for-profit less-than-2-year institutions increased over the 9 years by 52 percent (from 7,139 in 1997 to 10,819 in 2006). Much of the overall increase for this sector occurred during the early 2000s (2001 to 2003).

Changes in Distribution of Credentials

Public 2-year institutions' share of all subbaccalaureate CTE credentials declined over the 9-year period (from 59 to 58 percent; table 2). In contrast, for-profit less-than-2-year and for-profit 2-year institutions' shares increased (18 to 19 percent and 12 to 17 percent, respectively) from 1997 to 2006.

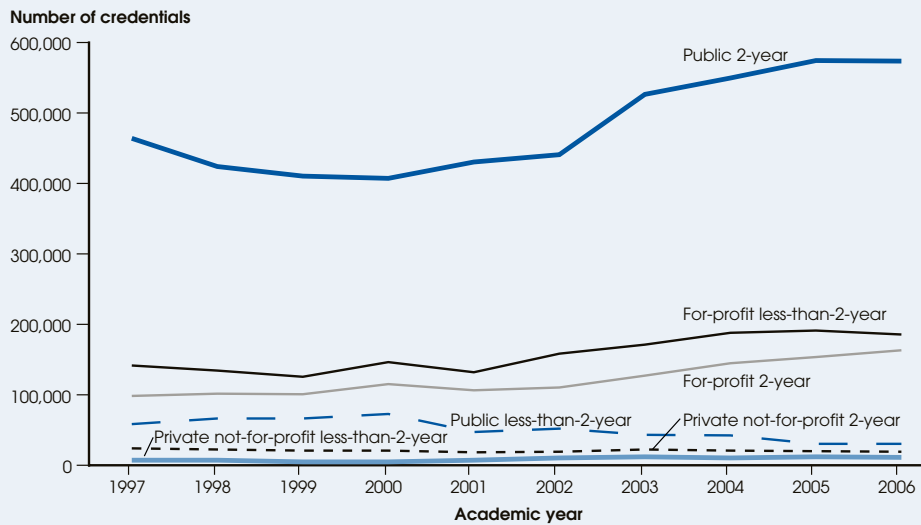
In the three smaller sectors, public less-than-2-year institutions' share declined from 7 percent in 1997 to 3 percent in 2006. The percentage of subbaccalaureate CTE credentials awarded by private not-for-profit 2-year institutions declined by 1 percentage point (from 3 to 2), while that of private not-for-profit less-than-2-year institutions remained constant at 1 percent.

Table 2. Percentage distributions of less-than-4-year Title IV postsecondary institutions offering career/technical education (CTE) credentials and of subbaccalaureate CTE credentials awarded by these institutions, by control and level of institution: Selected years, 1997 through 2006

Control and level of institution	1997	2000	2003	2006
Distribution of institutions				
Total	100.0	100.0	100.0	100.0
Public 2-year	30.9	30.9	30.3	29.4
Public less-than-2-year	5.7	6.6	6.7	5.7
Private not-for-profit 2-year	7.9	6.7	5.6	5.1
Private not-for-profit less-than-2-year	2.2	1.9	3.0	2.3
For-profit 2-year	19.5	20.5	20.2	21.8
For-profit less-than-2-year	33.8	33.3	34.2	35.8
Distribution of credentials				
Total	100.0	100.0	100.0	100.0
Public 2-year	58.5	53.2	58.4	58.4
Public less-than-2-year	7.4	9.5	4.8	3.1
Private not-for-profit 2-year	3.0	2.7	2.4	1.9
Private not-for-profit less-than-2-year	0.9	0.6	1.3	1.1
For-profit 2-year	12.4	15.0	14.1	16.6
For-profit less-than-2-year	17.9	19.1	19.0	18.9

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Completions and Institutional Characteristics (IC) data files, various years (e.g., report year 2006 uses IC 2006-07 and Completions 2005-06).

Figure 2. Number of career/technical education subbaccalaureate credentials awarded by less-than-4-year Title IV postsecondary institutions, by control and level of institution: 1997 through 2006



SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Completions and Institutional Characteristics (IC) data files, various years (e.g., report year 2006 uses IC 2006-07 and Completions 2005-06).

Summary

Overall, the number of less-than-4-year institutions offering CTE increased 3 percent from 1997 to 2006, and the total number of subbaccalaureate CTE credentials awarded increased 24 percent. One notable change over this period was the shift in CTE-offering institutions and credentials awarded from public 2-year institutions to for-profit 2-year and less-than-2-year institutions. However, although the number of credentials awarded by for-profit institutions grew at a faster rate than at public 2-year institutions, the latter still awarded most subbaccalaureate CTE credentials in 2006 (58 percent), while for-profit 2-year and less-than-2-year institutions combined awarded 35 percent.

In sum, the for-profit 2-year and less-than-2-year institutions experienced increases across all four measures—the number of institutions offering CTE, their share of all CTE-offering institutions, the number of subbaccalaureate CTE credentials awarded, and their share of all such credentials awarded (from 30 to 36 percent). Conversely, public 2-year institutions experienced a decline in the number of institutions offering CTE, but an increase in the number of subbaccalaureate CTE credentials awarded; these institutions represented a smaller proportion of all CTE-offering institutions in 2006 than in 1997, and their share of all subbaccalaureate CTE credentials declined from 59 to 58 percent.

Endnotes

¹ Carl D. Perkins Career and Technical Education Act of 2006, Section 3(5)(A)(ii).

² CTE is defined here to include all career-related areas of study: agriculture and natural resources; business management; business support; communication and design; computer and information sciences; consumer services; education; engineering, architecture, and science technologies; health sciences; manufacturing, construction, repair, and transportation; marketing; protective services; and public, legal, and social services. For further details on the CTE areas of study, view http://www.nces.ed.gov/surveys/ctes/tables/postsec_tax.asp.

³ Less-than-4-year Title IV postsecondary institutions are institutions that confer at least a 2-year formal award (certificate or associate's degree) or have a 2-year program creditable toward a baccalaureate degree, or have programs lasting less than 2 years that result in a terminal or occupational award or are creditable toward a degree at the 2-year level or higher, and that participate in federal Title IV Higher Education Act, Part C, financial aid programs. Public 2-year institutions are generally community colleges, while institutions in the for-profit sector are often proprietary schools that provide training in specific occupational areas.

⁴ Beginning in 1996, NCES began classifying institutions as "Title IV postsecondary institutions," rather than as "institutions of higher education." Because the two definitions yield slightly different groups of institutions, only data from 1997 and beyond are used in this report. The IPEDS counts reported here may differ from those in other NCES documents because this report excludes institutions that offered only graduate or first-professional credentials, institutions for which the highest level of offering was not specified, and administrative units.

⁵ Additional data on trends in postsecondary CTE, including data on 4-year institutions and academic credentials, are available on the CTE Statistics website at <http://nces.ed.gov/surveys/ctes>.

The remaining three sectors accounted for 6 percent of all subbaccalaureate CTE credentials awarded in 2006, down from 11 percent in 1997. Among these sectors, their share of CTE-offering institutions declined from 16 percent in 1997 to 13 percent in 2006.

References

Hudson, L. and Carey, E. (2005). *Trends in Undergraduate Career Education* (NCES 2005-012). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC.

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