



# Career and Technical Education Certificates

July 2003

DATA SPOTLIGHT

With widespread changes occurring in the economy, employers increasingly need a higher skilled workforce to remain competitive. Consequently, workers are compensated for their specific expertise. Certification programs provide a way for employees to demonstrate their competencies prior to securing a job. This Spotlight presents the value of career and technical education credentials to both the employer and the employee.

## Evolving Marketplace

Labor markets worldwide are rapidly changing, becoming higher skilled and requiring multi-tasked capabilities.

- The greatest job growth in the U.S. through 2010 is in jobs requiring an associate degree, increasing 32% (See Figure I).
- One of the next highest growth categories is for those with a postsecondary vocational award.
- Jobs requiring either an associate degree or a postsecondary award are growing 60% faster than the job market as a whole.

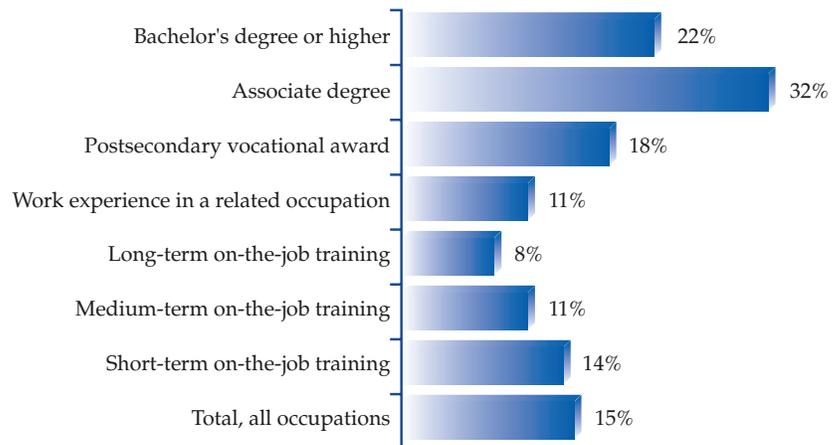
## Growing Demand for Certificates

In accordance with the growing demand for higher education and skills, industries increasingly call for vocational certificates that reflect more targeted labor market skills, are shorter in duration, and are valued in the market.

- While about 33% of U.S. adults receive a bachelor's degree, the remainder needs other means to secure technical and occupational skills and credentials to meet the demands of the workplace, according to the American Youth Policy Forum.
  - Growth in credentials is substantial; postsecondary certification awards increased 156% between 1990 and 1998 and continue to escalate.
  - The postsecondary system awarded 57% more certificates in the 1990s than in the 1980s—nearly a quarter million.
  - Certificates now represent 20-30% of all sub-baccalaureate awards.
  - Of the 90 million U.S. adult learners in 2000, only 13% were in degree programs; the remaining 78 million pursued learning simply to enhance their careers and lives.
- “An industry in need of workers can and will offer incentives, including the reduced opportunity costs of earning credentials other than college degrees—and in a much shorter period of time than that required by degrees – that lead quickly to high starting salaries” (Cliff Adelman, U.S. Dept. of Education).
- In the push to shorten the duration of certification, passing competency examinations in lieu of taking an introductory course is becoming more common.

Figure I

### Employment Growth by Education and Training Category, 2000-10



Source: Bureau of Labor Statistics

## Industry Participation and Employer Recognition

Industrial associations are increasingly collaborating with employers and program providers to create compatible certificates, curriculum, and assessments.

- The National Skills Standards Board reports approximately 4,000 nationally recognized, industry-based certifications exist.
- Over 1,600 national industry trade and professional associations now offer certificates, with the number continuing to grow.
  - As employer involvement becomes standard, all training institutions will focus programs on industry-recognized credentials.
- Increasingly, community colleges, proprietary schools, and job training institutions are replacing their programs with employer-recognized certificates.
  - The portability inherent in a certificate’s endorsement by national employer associations adds market value.
- Several national construction associations and 11 large construction companies founded the National Center for Construction Education and Research (NCCER) to address the industry’s workforce shortage and to develop standardized curriculum.
  - Individuals completing an NCCER accredited training program receive transcripts and certification through the NCCER national registry.

“Employers value the specialized career training graduates have. It’s also part of the reason that workers with an occupationally specific degree earn more than those with general, transferable degrees.”

—Olivia Crosby, Bureau of Labor Statistics

## Benefits of Certification

The employment rates and wages of those with certificates versus those without demonstrate the value of career and technical credentials to the labor market and specific employers.

- This year, the unemployment rate for those with less than a high school diploma increased from 8.5% in January to 9.2% in May, and the rate for those with a high school diploma went from 5.1% to 5.5%. Meanwhile, the rate for those with some college experience held steady at 4.8%.
- Individuals with some college, but no degree (including certificate holders) earn 14% more on average than those with only a high school diploma or GED, with median weekly earnings of \$568 compared to \$497.
- Table I shows the earnings premium of those with additional education, including certification, for various occupations.

Occupation	High school graduate or equivalent		Some college, no degree (includes certificates)		
	Percent of workers	Median weekly earnings	Percent of workers	Median weekly earnings	Earnings premium over high school
All occupations	31%	\$497	20%	\$568	14%
Automobile mechanics	47%	\$571	17%	\$610	7%
Carpenters	48%	\$599	17%	\$666	11%
Computer operators	33%	\$509	30%	\$589	16%
Construction trades	45%	\$624	18%	\$712	14%
Electricians	43%	\$685	24%	\$787	15%
Nursing aides, orderlies, and attendants	44%	\$362	27%	\$391	8%
Plumbers, pipefitters, and steamfitters	50%	\$683	17%	\$840	23%
Secretaries	42%	\$459	30%	\$489	7%

Source: Crosby, 2002-03, Bureau of Labor Statistics

## Certificates that Count

Certificates in general lead to higher wages and employment and increased career mobility. Below are a few examples of the many certification programs and how they fit in the marketplace.

### Information Technology

- From its start, the IT industry required a skilled labor force. In response, a secular, competency-based certification system developed.
  - Corporate vendors and industry associations have created over 300 discrete certifications since the first in 1989.
  - Roughly 1.6 million individuals worldwide had earned about 2.4 million IT certificates by early 2000.
- The IT industry has found:
  - The proportion of certificate holders without bachelor's degrees is rising (from 19% in 1996 to 37% in 1998).
  - The percentage of certification candidates seeking their first certificate was 31% in 1999, dropping from 56% in 1994.
  - For now, many employers do not require certification, but instead reward it, still calling for experience and traditional credentials.
  - About one in eight postings for entry and mid-level IT positions now mention certificates as a plus, compared with one in five that mention a degree is required.

### Automotive Service Technician

- Applied academics are integral to success as an automotive service technician. These jobs call for strong math, reading, communication, and computer skills in addition to a mechanical aptitude.
- Given the broad requirements, "most employers regard the successful completion of a vocational training program in automotive service technology as the best preparation for trainee positions" (U.S. Dept. of Labor).
  - Formal training is replacing apprenticeship programs popular in the past.
- The National Institute for Automotive Service Excellence (ASE) certifies training programs based on standards set by the National Automotive Technicians Education Foundation.
  - The certification is voluntary, but it signifies that a program meets industry and training standards.
- Job opportunities are expected to be very good for those holding related certificates, while those without formal training are likely to encounter competition for jobs.

### Medical Assistant

- Although certification is not required for employment as a medical assistant, most employers prefer graduates of formal training programs.
- A medical assistant is one of the fastest growing occupations, but job prospects should be best for those with certification.
- The Commission on Accreditation of Allied Health Education Programs (CAAHEP) and the Accrediting Bureau of Health Education Schools (ABHES) accredit training programs throughout the U.S.
  - Graduates of CAAHEP accredited programs are eligible to take the Certified Medical Assistant exam.
  - Individuals completing a certified ABHES program can take the Registered Medical Assistant exam.

**The rapidly rising expectations for career and technical programs to focus on employer recognized credentials is driving vocational training toward certifiable standards. We run the risk of wasting time and investment in programs that lack these characteristics. As industry and employer involvement in the certification process grows, meeting the needs of the marketplace is increasingly straightforward and viable.**

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Today's labor market places greater value on individuals with employer-recognized vocational certificates. Thus, the formal vocational training leading to certification must be aligned with the needs of industries and employers. Recognizing the importance of this issue, the MTC Institute has dedicated the July issue of the Data Spotlight to "Career and Technical Education Certificates."

**Management & Training Corporation (MTC)** is an international private contractor that manages and operates Job Corps centers and correctional facilities.

**MTC Institute** is dedicated to examining data and projecting trends relevant to job training and corrections programs.

**The Data Spotlight** is a periodic publication highlighting issues that impact the future of young people and inmates.

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