

# Career and Technical Education

“CTE has an enormous, if often overlooked impact on students, school systems, and our ability to prosper as a nation.”

– Anne Duncan, U.S. Secretary of Education

- ▶ “CTE programs offer a range of training that helps students gain employment in high-skilled, high-wage jobs and advance to postsecondary education.”
  - Division of Research and Analysis, Department of Assessment and Accountability, Texas Education Agency

## What is CTE?

- ▶ “Career and technical education (CTE) prepares both youth and adults for a wide range of careers and further educational opportunities. These careers may require varying levels of education—including industry-recognized credentials, postsecondary certificates, and two- and four-year degrees.”
- ▶ “CTE is at the forefront of preparing students to be “college- and career-ready.” CTE equips students with:
  - core academic skills and the ability to apply those skills to concrete situations in order to function in the workplace and in routine daily activities
  - employability skills (such as critical thinking and responsibility) that are essential in any career area
  - job-specific, technical skills related to a specific career pathway”
    - “What is Career & Technical Education?”, ACTE online

## Participation in CTE

- ▶ “The most recent Report to Congress on the Carl D. Perkins Career and Technical Education Act revealed that approximately 14 million students participated in secondary and postsecondary CTE programs during the 2007–2008 school year.”
  - “What is Career & Technical Education?”, ACTE
- ▶ 2009–2010 Texas
  - 1,027,435 Texas students enrolled in CTE courses
    - 77% of all high school students
  - 25,000 certificates/licensures were earned
    - Texas CTE Fact Sheet, [www.ctat.org](http://www.ctat.org)

## Why fund CTE?

- ▶ US Secretary of Education, Anne Duncan:
  - “...there’s no better data to demonstrate [the importance of funding CTE] than by identifying how many students are going on to postsecondary education and starting careers in the pathway they studied.”
  - “Rigor, Relevance, and the Future of Career and Technical Education”  
April 9, 2011

## The facts

- ▶ 41% of matriculated high school students do not pursue postsecondary education.
  - Harvard Graduate School of Education, “Pathways to Prosperity”
- ▶ “Our Workforce Development Area has around 98,000 in the labor force. Seventy to 80 percent of the positions do not require a four-year degree, but do require postsecondary education.”
  - Rogelio Trevino, Executive Director, Workforce Solutions South Texas

- ▶ The Bureau of Labor Statistics (BLS) projects that middle-skill jobs (jobs that generally require some significant education and training beyond high school but less than a bachelor's degree) will account for about 45% of all job openings projected through 2014. (BLS, *Occupational Outlook Handbook, 2010-2011 Edition*)

## State CTE Success: Texas

Year	Graduation Rate	Placement Rate	Postsecondary Credential/Certificate/Diploma
2009-2010	94.26	70.01	31.21

- ▶ The National Association of State Directors of Career Technical Education Consortium

## Annual Retention Rates 2009–2010 Texas

Group	Grade span	Retention Rate
All students	Grades 9–12	97.6%
Career and Technical Education	Grades 9–12	98.8%

- ▶ Annual Dropout Rates, by Program Participation, Student Characteristic, and Grade Span, Texas Public Schools, 2009–10
- ▶ A ratio of one CTE class for every two academic classes minimizes the risk of students dropping out of high school.
  - ▶ “Dropping Out of High School and the Place of Career and Technical Education”, Plank, S., The National Centers for Career and Technical Education, 2005

- ▶ “Texas is spending less on education both in total and per student.”
- ▶ “After adjusting for inflation, Texas per-student spending will fall to the lowest point in over a decade.”
  - Eva Deluna Castro, Center for Public Policy Priorities

## Benefits of CTE

- ▶ A ratio of one CTE class for every two academic classes minimizes the risk of students dropping out of high school. (Plank et al, "Dropping Out of High School and the Place of Career and Technical Education," 2005.)
- ▶ 81 percent of dropouts said that "more real-world learning" may have influenced them to stay in school. (Bridgeland et al, "The Silent Epidemic," 2005.)
- ▶ The more students participate in CTSO activities, the higher their academic motivation, academic engagement, grades, career self-efficacy and college aspirations. (Alfeld et al, "Looking Inside the Black Box: The Value Added by Career and Technical Student Organizations to Students' High School Experience," 2007.)
- ▶ Students who complete a rigorous academic core coupled with a career concentration have test scores that equal or exceed "college prep" students. These dual-concentrators are more likely to pursue postsecondary education, have a higher grade point average in college and are less likely to drop out in the first year. (Southern Regional Education Board, "Facts About High School Career/Technical Studies.")
- ▶ CTE students are significantly more likely than their non-CTE counterparts to report that they developed problem-solving, project completion, research, math, college application, work-related, communication, time management, and critical thinking skills during high school. (Lekes et al, "Career and Technical Education Pathway Programs, Academic Performance, and the Transition to College and Career," 2007.)
  - "What is Career & Technical Education?", ACTE

## CTE comparisons to other states

- ▶ Wisconsin's technical colleges return a public benefit of \$10.65 for every \$1 invested and fully pay back for their annual public funding after only 2.2 years.
- ▶ In Tennessee, CTE overall returns #2 for every \$1 invested. At the secondary level, CTE program completers account for over \$13 million in annual tax revenues.
- ▶ In Salt Lake City, for every dollar put into CTE programs at Salt Lake Community College there will be a return of \$4.30 to the community.
- ▶ In Connecticut, every public dollar invested in Connecticut Community Colleges returns \$16.40 over the course of the students' careers. The state's economy annually receives roughly \$5 billion in income from the colleges and their students.
- ▶ In Washington, for every dollar invested in secondary CTE programs, the state earns \$7.11 in additional tax revenues.
- ▶ Germanna Community College in Virginia contributes \$241.2 million annually to the region's economy. Each dollar the college spends on students generates a return of \$3.70 for the local economy.
- ▶ Los Angeles County's economy receives roughly \$9.1 billion in annual income from Los Angeles Community College District graduates and students. Taxpayers see a 10 percent return of their investment in the LACCD.
  - ACTE, "Investing in Career & Technical Education Yields Big Returns"