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## The Hard Truth About Higher Education

An Express Employment Professionals White Paper  
A Comparison of Higher Education Options

A stable career doesn't always require a four-year degree. Career Technical Education can deliver what so many Americans want—a promising career at an affordable price.

– Bob Funk, CEO and Chairman of the Board, Express Employment Professionals

# Let's Defy the Conventional Wisdom

It's time to break a taboo: College isn't for everyone. For many, there's a better—but much less advertised—option: Career Technical Education (CTE).

Let's be more specific. A four-year stay at a traditional university won't be the best fit for everyone. College is right for many people—but certainly it's not right for everyone.

In today's economy, it may not be a good fit for those **who want an affordable education**.

It may not be for those **who are ready to embark on a clear career path**.

And it's not for those **who want to enter the workforce** sooner rather than later.

For those people, CTE could be the answer.

Career Technical Education, previously known as vocational-technical education, provides the skills and training needed for many careers, including:

- Mechanical Drafter
- Welder
- IT Technician
- Physical Therapist Assistant
- Biomedical Equipment Technician
- Legal Secretary
- Aircraft Mechanic
- Real Estate Appraiser

And it doesn't require tens—or hundreds—or thousands of dollars in loans. The price tag is much smaller.

At Express Employment Professionals, we believe that CTE does not get the attention it deserves in America. Well-paying, in-demand jobs require the sort of training that CTE provides.

But too many of our nation's leaders, along with private organizations, overlook it as they urge young people to go to college. Too many high schools don't make CTE options well known. Parents don't encourage their children to research it, and students, young and old, may not adequately consider it. In fact, some people just don't respect it. Although conventional wisdom wrongly suggests that a four-year degree is always better, at Express, we have a different opinion.

Here's what you need to know about Career Technical Education:

1. CTE-trained workers are in demand.
2. CTE leads to high-paying jobs.
3. CTE is affordable.
4. CTE keeps America competitive.

The research shows it. Our experiences confirm it. The following pages will explain how and why.

**“Many students find their passion in CTE programs and, in turn, develop substantially better academic performance that results in more life options for them.”**

– Robert D. Sommers, Ph.D.,  
Oklahoma Secretary of Education  
and Workforce Development State  
Director, Oklahoma Department of  
Career and Technology Education

## Real-Life Stories

“CTE was the best thing that ever happened to me.”

– Dylan Davis, Metro Technology Centers student, Oklahoma City

“This program—the licensed practical nurse—will cost three times less than what it would cost me at a college. I wish when I got to the United States I knew that I could go to a CareerTech [education center] and get my education and get into the job market.”

– Nelson Kap Kirwok, McAlester, Oklahoma (originally from Kenya)

# INTRODUCTION

## What Is Career Technical Education (CTE)?

CTE offers industry-specific training in highly skilled trades and gives students the opportunity to earn a range of credentials:

- Postsecondary certificates
- Certifications
- Licenses
- Associate degrees

According to the Association for Career and Technical Education (ACTE), “Career and technical education (CTE) prepares both youth and adults for a wide range of careers and further educational opportunities.”<sup>1</sup> CTE offers certifications, licenses and degrees in various trades and industries.

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## Learn More: What Is a Credential?

### Types of CTE Credentials, as Explained by the ACTE

#### Certificate

Certificates are awarded upon the successful completion of a brief course of study, usually one year or less but at times longer, primarily in public or private two-year institutions of higher education, university extension programs or nondegree-granting postsecondary institutions such as area career and technical education schools. Upon completion of a course of study, a certificate does not require any further action to retain.

#### Certification

Certifications indicate mastery of or competency in specific knowledge, skills or processes that can be measured against a set of accepted standards. These are not tied to a specific educational program, but are typically awarded through assessment and validation of skills in cooperation with a business, trade association or other industry group. After attaining a certification, individuals often must meet ongoing requirements to maintain the currency of the certification.

#### License

A license is legal permission, typically granted by a government agency, to allow an individual to perform certain regulated tasks or occupations. A license can be obtained by meeting certain requirements set forth by the licenser, usually by completing a course of education and/or assessments. Upon receipt of a license, ongoing requirements may be necessary to maintain the license.

#### Degree

An academic degree is an award or title conferred upon an individual for the completion of a program or courses of study over multiple years at postsecondary education institutions.

*Reproduced from “What Is a Credential?” published by the ACTE<sup>2</sup>*

## What Are Some CTE-Related Industries?

CTE provides training and coursework in 16 federally defined “career clusters” representing distinct groupings of occupations and industries:<sup>3</sup>

- Agriculture, Food and Natural Resources
- Architecture and Construction
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Education and Training
- Finance
- Government and Public Administration
- Health Science
- Hospitality and Tourism
- Human Services
- Information Technology
- Law, Public Safety, Corrections and Security
- Manufacturing
- Marketing, Sales and Service
- Science, Technology, Engineering and Math
- Transportation, Distribution and Logistics

### Ask the Express Employment Professionals Experts

“I believe we have, as a country, oversubscribed to the false notion that you need a college degree to succeed and ‘become someone.’ Our society has miscast a college degree as the only vehicle for upward mobility. There are an awful lot of sociology majors waiting tables in our market.”

– Jim Goodwin,  
Express Employment Professionals  
Franchisee, Tupelo, Miss.<sup>4</sup>

## CTE Today: A Head Start for Many Careers

An estimated 14 million Americans are currently enrolled in CTE programs nationwide, according to the National Association of State Directors of Career Technical Education. That encompasses programming at 1,300 public high schools and 1,700 two-year colleges.<sup>5</sup>

But despite the enrollment in CTE programs, credential attainment has stagnated overall. According to Georgetown University’s Center on Education and the Workforce, “Today’s generation of young workers has not obtained any more sub-baccalaureate education than their parents’ generation. In the middle part of the last century, the United States raced ahead of the rest of the world in postsecondary attainment but has stagnated in the decades since, in both the baccalaureate and sub-baccalaureate spheres.”<sup>6</sup>

That represents a missed opportunity—for both our economy and for American workers. One-third of the jobs created in America through 2018 will require an associate’s degree or a certificate.<sup>7</sup> In other words, CTE-trained workers will be well-prepared to seize the new jobs in the coming years.

One-third of the jobs created in America through 2018 will require an associate’s degree or certificate.

– The Association for Career and Technical Education (ACTE)<sup>8</sup>

## What Skills Will a CTE Student Acquire?

According to the ACTE, 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<sup>9</sup>

“High school guidance counselors recommend college for 90 percent of their graduates because it makes parents happy, and it is parents who need to wake up to the new economic reality of higher education.”

– Craig Brandon,  
author of *The Five Year Party: How Colleges Have Given Up on Educating Your Child and What You Can Do About It*, and winner of the silver prize in the education category in the 2010 Book of the Year Awards.<sup>10</sup>

# WHAT YOU NEED TO KNOW

## 1. CTE Workers Are in Demand

According to the Bureau of Labor Statistics (BLS), 14 of the 20 fastest-growing occupations in America require an associate's degree or less.<sup>11</sup> These are exactly the types of careers for which CTE provides training and credentials.

Further, BLS' predictions hold more good news for would-be CTE students. Of the 20 occupations with the most new jobs projected to be created through 2020, 90 percent will require on-the-job training, an associate's degree or a postsecondary credential.<sup>12</sup>

A 2013 survey of Express Employment Professionals franchises revealed the top 10 jobs that are hardest for Express offices to fill.<sup>13</sup> The results validated the BLS findings. Employers are having a hard time filling many jobs that require CTE credentials.

According to the Express survey, the top 10 hardest jobs to fill because of the lack of qualified workers are:

1. CNC Programmers (Manufacturing Engineer)
2. Welders
3. Machinists
4. Accounting (Accountant, Auditor, Accounts Receivable/Payable)
5. Sales
6. Commercial Licensed Drivers
7. Information Technology (Technician, Web Designer, Programmer)
8. Engineers
9. Medical Professionals
10. Administrative (Office Manager, Administrative Assistants, Bookkeeper/Payroll Specialist, Legal Assistant, Data Entry Specialist, Customer Service Representative)

The inability of employers to find the right workers, even when unemployment is high, is a result of what is commonly referred to as the "skills gap" and was further explored in Express Employment Professionals August 2013 white paper "The Great Shift."<sup>14</sup>

The problem is that the available workers are not always a good fit for the available jobs. They don't have the training, experience or knowledge to fill open positions. "The Great Shift" reported that 53 percent of U.S. employers surveyed said that recruiting and filling positions is "somewhat difficult" or "very difficult."

In October 2013, Doug Oberhelman, Chairman and CEO of Caterpillar Inc., and Jay Timmons, President and CEO of the National Association of Manufacturers, penned an op-ed sounding an alarm about the skills gap and extolling the benefits of pursuing a career in manufacturing:

**"Actually, just about everyone agrees that a strong manufacturing base is key to our nation's future success. But we have a problem. We don't have the people we need. Some 82 percent of manufacturers say they can't find workers with the right skills."**<sup>15</sup>

In short, the jobs for which employers are experiencing a worker shortage are the very jobs for which CTE trains its students.

**"Instead of pushing all students down one path toward a four-year degree, shouldn't we instead focus on developing the skills and knowledge actually needed for the workforce of today and tomorrow?"**

– Doug Oberhelman, Chairman and CEO of Caterpillar Inc. and the Chairman of the Board of the National Association of Manufacturers, writing with Jay Timmons, President and CEO of the National Association of Manufacturers in U.S. News & World Report.<sup>17</sup>

### **Ask the Express Employment Professionals Experts**

**"My clients' demand for skilled workers has doubled during the past 10 years. A decade ago, companies in my region had a core of skilled workers, and due to retirement or job movement, that core is now down to a bare minimum. There are simply not enough new skilled workers to fill the demand."**

–Amy Clegg, Express Employment Professionals Franchisee, Scranton, Penn.<sup>16</sup>

## 2. CTE Leads to High-Paying Jobs

Careers available to those with CTE credentials pay well. Many workers with only a certificate will actually earn more than bachelor's degree holders and college graduates.

According to studies by Georgetown's Center on Education and the Workforce, 27 percent of young workers with licenses and certificates out-earn bachelor's degree holders,<sup>19</sup> and 31 percent of young workers with associate's degrees earn more than those with a bachelor's degree.<sup>20</sup>

A recent report from the State Council on Higher Education in Virginia and College Measures found that technical associate degree holders on average earn more than bachelor's degree holders—nearly \$2,500 more per year in Virginia.<sup>21</sup>

When you consider that an individual with a bachelor's degree invested much more time and money into his or her education, you realize that CTE can be a smart investment.

Although some national studies show that bachelor's degree holders will still earn more than recipients of an associate's degree in career/vocational fields overall, an analysis from the Oklahoma Department of Career and Technology Education shows that workers 35 years and

younger with an occupation/vocational associate's degree earn, on average, only slightly less than someone with a bachelor's degree. And they certainly earn more than all other groups of workers—those with an academic associate's degree, with some college, with only a high school diploma and without a high school diploma.

Among 26-year-old U.S. workers, the average annual earning difference appears only to be \$2,000 to \$3,000. That's much less than the added costs of the bachelor's degree and the lost income of four or more years of college.<sup>23</sup>

It should be noted, however, that the income differences are greater among older workers, but it's not clear what other factors come into play. Career Technical Education organizations would point out that CTE programs have changed significantly in recent years and that today's economy has more lucrative opportunities for young CTE-trained workers than in years past.

**“Welders, CNC programmers and operators, electricians, pipefitters, machinists—to cite a few examples—are highly skilled. And the jobs pay well. The average manufacturing worker earns roughly \$77,000.”**

– Doug Oberhelman, Chairman and CEO of Caterpillar Inc. and the Chairman of the Board of the National Association of Manufacturers, writing with Jay Timmons, president and CEO of the National Association of Manufacturers in U.S. News & World Report.<sup>18</sup>

**A recent report in Virginia found that technical associate's degree holders, on average, earn more than bachelor's degree holders—nearly \$2,500 more per year.**

– Report from the State Council on Higher Education in Virginia and College Measures<sup>22</sup>

### SPOTLIGHT:

### Grand Rapids Express Employment Professionals Office

In the last year, The Express office in Grand Rapids, Mich., alone placed 77 skilled and technical workers. The salaries for these jobs range from \$44,000 to \$85,000 annually:

- 65 Maintenance Positions
  - 4 Controls Engineers: \$58,000 - \$85,000
  - 2 Maintenance Managers: \$60,000 - \$80,000
  - 2 Maintenance Supervisors: \$50,000 - \$60,000
  - 13 Maintenance Electricians: \$45,000 - \$60,000
  - 44 Maintenance Technicians: \$44,000 - \$58,000
- 8 Machinists: \$18.00 - \$20.00 per hour
- 1 CNC Programmer: \$50,000
- 1 Plastic Process Technician: \$45,000
- 2 Tool & Die Makers: \$45,000



## Spotlight on the Lone Star State: CTE in Texas

According to the Career & Technology Association of Texas, CTE is aligned with the fastest-growing careers in the Lone Star State.

In their words, “CTE career pathways prepare students for the fastest-growing Texas occupations.”<sup>24</sup>

### FASTING-GROWING CAREERS IN TEXAS

CAREER	GROWTH RATE	ANNUAL SALARY
1. Physical Therapy Assistant	46.1%	\$51,589
2. Occupational Therapy Assistant	42.9%	\$51,764
3. Surgical Technologist	41.9%	\$37,286
4. Cardiovascular Technician	41.8%	\$44,461
5. Skin Care Specialist	41.5%	\$27,100
6. Veterinary Technician	40.3%	\$25,271
7. Dental Hygienist	38.6%	\$63,225
8. Respiratory Therapist	37.8%	\$47,659
9. Registered Nurse	37.8%	\$59,714
10. Interpreter/Translator	34.9%	\$42,630

SOURCE: [http://ctat.org/images/uploads/CTE\\_Fact\\_Sheet.pdf](http://ctat.org/images/uploads/CTE_Fact_Sheet.pdf)



### 3. CTE Is Affordable

The average 2012 graduate owed \$29,400 in student loans upon graduation, which doesn't account for interest. According to Forbes magazine, student loans now account for the second-highest form of consumer debt and represent six percent of the overall national debt.<sup>27</sup>

In total, Americans owe around \$1 trillion in student loan debt—a number so great that analysts say it has slowed down the country's economic recovery, which in turn has slowed job creation.<sup>28</sup> And for some student loan borrowers, that means bearing the financial burden of a college education well into the middle of their lives and delaying other life events like buying a home, starting a family or opening a business.

CTE is not for everyone, but for many people CTE is a bargain.

The average tuition and fees for a two-year degree at an in-state school are roughly \$6,400.

Contrast that with the average bachelor's degree tuition and fees of more than \$35,000 for a public in-state institution. These costs are even greater for a public out-of-state school or for a private school at \$110,000 and \$118,000, respectively.<sup>29</sup> These costs exclude room and board charges.

With so many college graduates working in a field they don't want to be in, the high cost of a four-year degree is reason enough to think carefully before overlooking CTE.

**“Community colleges and technical schools give you time to figure things out at a more affordable cost. I can't imagine where I would have landed without one.”**

– Mike Rowe, profoundlydisconnected.com and host of “Dirty Jobs”<sup>30</sup>

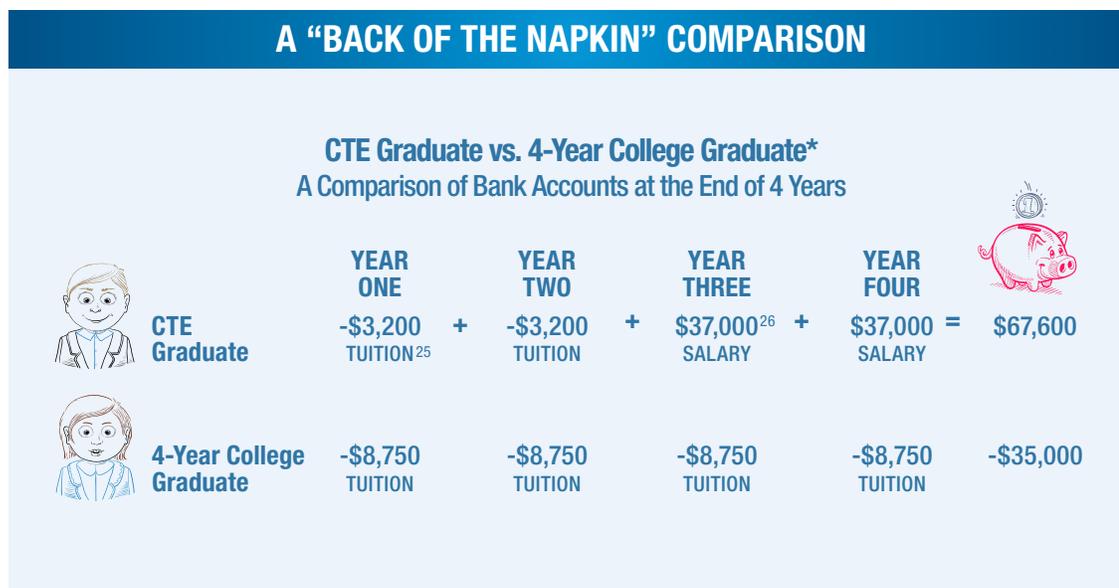
#### Ask the Express Employment Professionals Experts: *What's the Biggest Misconception About CTE?*

The biggest misconception is that a college degree has higher earning potential than a career tech credential. It is my personal observation that many of the candidates who have college degrees cannot find a job in their field. However, the career tech graduates are offered well-paying positions immediately upon graduation.

– Amy Clegg,  
Express Employment Professionals  
Franchisee, Scranton, Penn.<sup>31</sup>

Some people mistakenly believe career tech positions provide jobs, not careers. This is just not true. We work with about 20 locally based suppliers of a global automotive company that recently opened a major plant in our market. All of these companies are successful and growing, and they offer long-term career tracks for people with hands-on knowledge of industrial equipment and technology. You might start on a second shift and by getting your hands dirty; in a few years you'll be managing people and processes, and you'll be a leader in the company.

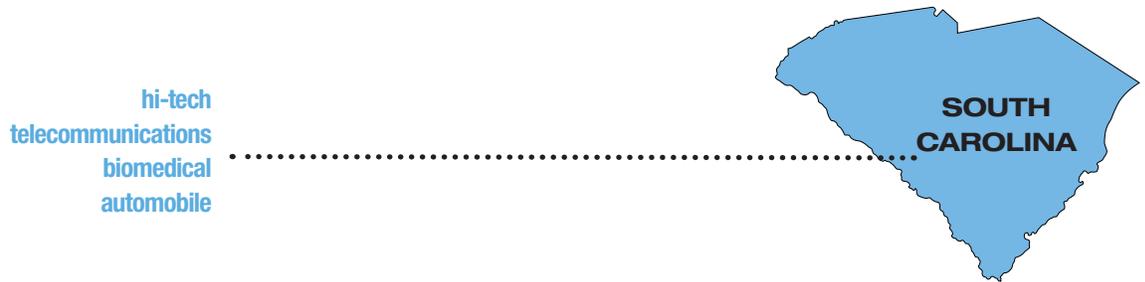
– Jim Goodwin,  
Express Employment Professionals  
Franchisee, Tupelo, Miss.<sup>32</sup>



\* Based on two individuals not gainfully employed during their time in either a Career Technical Education program or an in-state college.

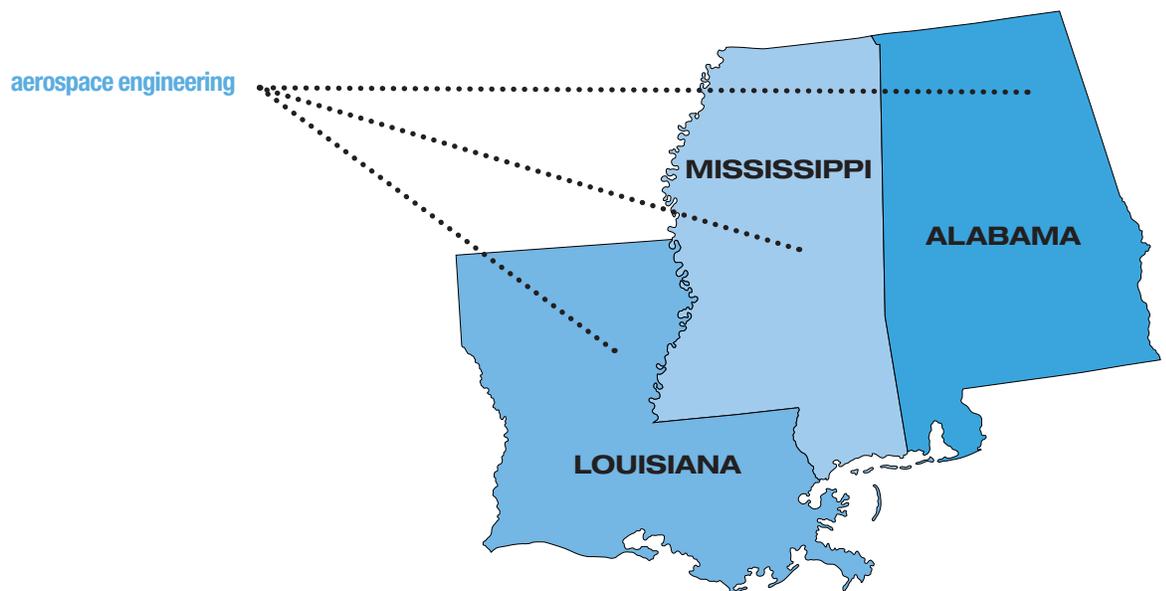
## Spotlight on the South: Partnering With Industry

Many states have partnered with industries to align CTE offerings with current and future industry needs and to make their states globally competitive. South Carolina, Alabama, Mississippi and Louisiana are among them.<sup>33</sup>



South Carolina has focused on building connections between CTE and companies in the hi-tech, telecommunications, biomedical and auto industries. Industry partners in South Carolina include BMW, CISCO, Oracle and Boeing.<sup>34</sup>

Alabama has promoted collaboration between secondary and postsecondary institutions and aerospace engineering companies. In addition, the state co-founded the Aerospace Alliance with Mississippi and Louisiana to develop a high-skilled workforce through CTE and to attract job opportunities to the state.<sup>35</sup>



These states' efforts and investments have led international companies to establish local operations, creating jobs for their residents—especially those who took advantage of CTE to jump-start their careers.

## 4. CTE Keeps America Competitive

Finally, as a country, we would do well to invest and promote career education for the good of our economy and our workforce as a whole.

The US ranks second in the world in attainment of bachelor's degrees.<sup>36</sup> In stark contrast, the US is number 16 in CTE attainment. That should be cause for concern. A competitive and diverse workforce requires high education attainment rates at all levels.

With CTE jobs in such high demand, it's troubling that we, as a country, are falling behind.

According to Deloitte and the Manufacturing Institute, "CTE plays a vital role in helping American business close this gap by building a competitive workforce for the 21st century."<sup>37</sup>

The Manufacturing Institute reported in 2011 that 67 percent of manufacturers surveyed said they experienced a shortage of qualified workers.<sup>38</sup> And that was at a time when unemployment was even higher than it is today—when even more workers were looking for jobs.

If American manufacturers can't hire, America can't manufacture, and those jobs could go where work is available: overseas. More CTE would mean more qualified workers—and more American jobs.

Although college has clear benefits for some people, traditional college just isn't preparing enough of today's students for tomorrow's careers.

A 2013 survey by the academic company Chegg Inc. analyzed the student skill index and reported that while only half of college students said they were adequately prepared for jobs in their fields, even fewer employers, 39 percent, thought recent college graduates were adequately prepared.<sup>39</sup>

What's more, many college graduates, whether they believe they are prepared or not, are taking jobs that don't align with their degrees or that don't provide full-time work. The difficult truth is their diplomas aren't landing them good jobs. A recent report from the Federal Reserve Bank of New York found that roughly 44 percent of working recent college graduates were in jobs that did not require their degrees.<sup>40</sup>

Time Business & Money's Rana Foroohar explains, "...even young college grads are suffering from high rates of what's called 'mal-employment'—meaning, they are doing things that are much more menial than what their education trained them to do."

Nearly four out of 10 young people ages 20 through 24 are underemployed. "[H]umanities and liberal-arts graduates [have] fared the worst as a group," according to Foroohar.<sup>41</sup>

To make America more globally competitive and to better prepare the next generation of workers, the country needs to recognize the importance of CTE.

**"Political scientists are working as bartenders, and English graduates are doing time as retail clerks. Channel one of the plotlines from 'Girls', and you've got the idea."**

— Rana Foroohar,  
Time Business & Money<sup>42</sup>

**"As a country, we should value people that work hard—the people that create, build, fix and innovate. Instead we value CEOs over machinists, celebrities over craftsmen. We have a serious problem in America: We have our value system upside down."**

— Robert D. Sommers, Ph.D.,  
Oklahoma Secretary of Education  
and Workforce Development State  
Director, Oklahoma Department of  
Career and Technology Education

## Recommendations

Career Technical Education will play a critical role in the future of our country. There are many career opportunities waiting for American workers young and old, and employers are eager to hire CTE-trained employees.

CTE deserves a more prominent role in America, and Americans should give greater consideration to CTE as they plan for their futures. Choosing CTE over college could be a good career move. Or, choosing CTE before college could make college more rewarding and productive down the line.

We have three recommendations for job seekers and students:

- Weigh the costs and benefits of a four-year university and a CTE credential.
- Consider the growing CTE-related careers available to you.
- Explore the business-education partnerships in your area.

We also have three recommendations for policymakers and stakeholders:

- Promote business-education partnerships.
- Inform middle school and high school students about CTE opportunities.
- Advocate for CTE.

It's time to dispel the conventional wisdom. College isn't for everyone. Likewise, CTE isn't either.

**“Career Technical Education can deliver what so many Americans want—a promising career at an affordable price. It baffles me that more people aren't seizing the opportunity. College is not—and should not be—for everyone. I see who's getting hired in the modern economy, and it's clear career tech can lead to not only a job, but a successful career.”**

– Bob Funk, CEO and Chairman of the Board, Express Employment Professionals



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