

## What is the Purpose of Career and Technical Education?

- Educate students for a range of career options through 16 Career Clusters® and over 79 pathways-**ACTE**
- Fulfill employer needs in high-skill, high-wage, high-demand areas-**ACTE**
- Prepare students to be college- and career-ready by providing core academic skills, employability skills and technical, job-specific skills-**ACTE**
- Help students identify and prepare for careers that they have always wanted or perhaps never even realized were available to them-**ACTE**
- Ensure a dynamic workforce by fully developing every student's career and academic potential-**ADE CTE Vision**
- Prepare Arizona students for workforce success and continuous learning-**ADE CTE Mission**
- Provides applied learning opportunities that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, occupation-specific skills, and knowledge of all aspects of an industry, including entrepreneurship of an individual-**[Carl D. Perkins Act of 2006, Section 3(5)]**
- Added Purpose: [General education = Rigor / CTE – Relevance]  
Both parts are essential to provide students with a meaningful and well-rounded education. Dropout prevention is about providing students with purpose for the education they're receiving and CTE fills this gap where general education falls short. Both together create a well-balanced experience for our high school students.

## Who Benefits from Career and Technical Education?

*CTE: Learning that works for:*

<b>Business and Industry</b>	<b>Economy</b>	<b>Student Achievement</b>
Baby Boomer Exit 10,000 turning 65 every day for the next 19 years	Generates higher personal income through lifelong education and preparation for high-skill, high-demand and and high-paying positions.	Students in CTE programs have a higher-than-average graduation rate. Students concentrating in CTE programs is 90.18% compared to average national freshman graduation rate of 74.9% (Insert AZ information here)
Preparing highly-skilled workforce with technical expertise and employability skills to remain globally competitive (Insert areas of industry specific growth in AZ)	Better-educated, better paid workforce which leads to a more robust economy across the nation. (Insert AZ information here)	CTE students outperform their peers in reading and math at both secondary and postsecondary level. (Insert CAR report performance level and target level data here)
Internships, apprenticeships, teacher externships, work-based learning opportunities, and cooperative education programs are putting students and potential employers together and driving innovation and world-class performance (Insert information about collaboration with business and industry in AZ)	CTE provides a positive return on investment for students, businesses and the economy: <ul style="list-style-type: none"> <li>• Students who earn a CTE-related associate’s degree or certificate can make an average of \$9,000 more per year than their peers who graduate with a humanities or social science focus</li> <li>• For high-demand fields such as healthcare, students can make \$20,000 more per year.</li> </ul>	CTE students surpassed state target performance levels in secondary reading/language arts, secondary mathematics, and in both secondary and postsecondary technical skill attainment (Insert AZ CAR report data)
Students in postsecondary CTE programs are more likely to be employed within five years than those in an academic field of study. Armed with technical knowledge, employability skills and an industry-recognized credential in their field of study, CTE students are finding success in the workplace and employers are recognizing the value being added to their companies		High-risk students in CTE programs are 8 to 10 times less likely to drop out of high school in 11th or 12th grades (Insert state specific information here)
		CTE courses help students understand the relevance and value of their core academic courses in math, science, English and social studies and apply them to real-world problems. A more engaged and meaningful educational experience. (Insert state CTSO activities, student success stories)
		Through CTSOs, students learn the workplace employability skills-important skill set to be successful in the workplace. (Insert CTSO activities and student success stories here)

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**Source: Presentation Resources-CTE Talking Points NASDCTEc**

***CTE: Learning that works for:***

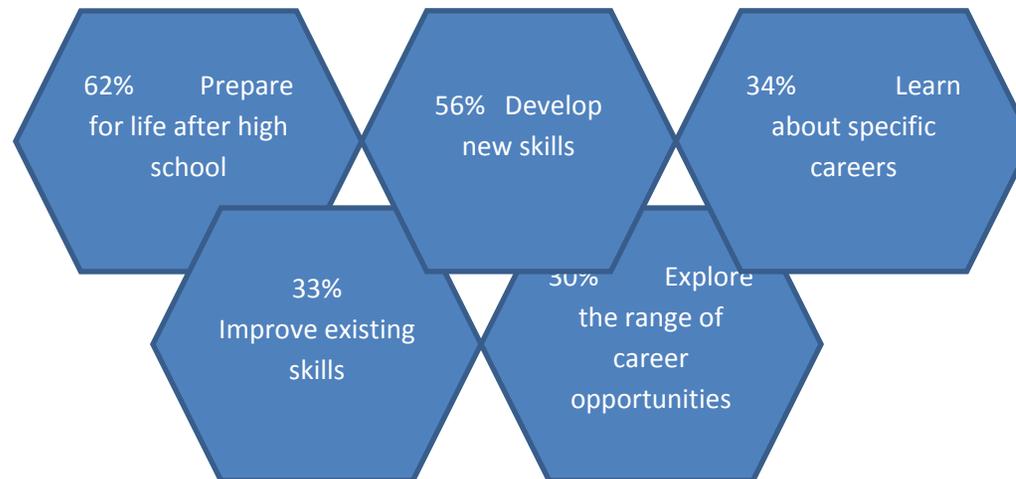
<b>Career and College Readiness</b>	<b>Schools and Colleges</b>	<b>Communities</b>
Students concentrating on CTE programs in high school are more likely to attend college and stay there to graduate. 79% of CTE concentrators enrolled in postsecondary education within two years of high school graduation (Insert AZ information here)	CTE programs at the secondary and postsecondary levels are improving the rates of college attendance and increased attainment of degrees and credentials.	CTE improves the return on our investment in education at the local, state and federal levels--developing a more highly-educated workforce with better skills, technical expertise and great ideas.
70% of students concentrating in CTE stayed in postsecondary education or transferred to a 4-year degree program (compared to overall average state target of 58%)--and transitioned to postsecondary education or employment by December of the year of graduation from high school (Insert AZ information here)	Using Career Clusters as the national framework, CTE programs are being transformed to drive American competitiveness and innovation.	CTE is developing our next generation of skilled workers, technology innovators, entrepreneurs, and community leaders in America's rural, suburban and urban communities.
As CTE students attain degrees and credentials, we are preparing a highly educated workforce ready for the high demand, high skill jobs that will keep America at the forefront of the global economy (Insert types of industries and careers expected to grow in AZ here)	From dual-credit courses to career academies, CTE programs are finding new, exciting ways to enhance student experiences and further integrate secondary and postsecondary education to create a strong pipeline that leads to success.	Through CTE, students become more aware of the many career options available to them, including starting their own enterprises. (Insert any examples of successful entrepreneurial CTE students in AZ here)
Comprehensive career guidance and counseling, including the use of personalized learning plans, is an important component of CTE. CTE students are more informed and more focused when they enter postsecondary education. Saves tuition money and accelerates entry into workforce.	Accelerated learning opportunities, such as dual credit, give high school students confidence that they can succeed at the college level--and many times save money on tuition.	CTE provides the "know how" and the "how to" for America's future--from coast to coast, from border to border. (Insert examples of high performance CTE programs in AZ here)
Career Clusters™ is a national framework that helps secondary students identify career areas that match their interests and talents--and the educational pathways in high school and college needed to achieve their goals (Insert AZ implementation of career clusters here)	Theme-based high schools may concentrate on a specific career area, giving students a head start on their future college classmates.	
	CTE helps secondary students understand if their career choice is a good match before they invest time and money in college (Insert examples of innovation and effective CTE in AZ here)	

## How is CTE Different from the Past?

<b>THE PAST</b> <b>Traditional Vocational Education</b>	<b>THE FUTURE</b> <b>New Career and Technical Education</b>
For specific students	For all students
Limited program areas offered	16 Career Clusters, 79 Career Pathways
Separate “track” with a focus on technical education	Integrated with academics in a rigorous and relevant curriculum
High school focused	High school and postsecondary partnerships providing pathways to employment and/or associate, bachelor’s and advanced degrees
Students trained with focus on specific occupational skill set	Progression of foundational, pathway, occupational and 21 <sup>st</sup> century skills

Source: ACTE

## Why Do Students Choose CTE Courses?



Researchers estimate that over 16 million jobs created by 2020 will require some post-secondary education or a two year associate degree. Many of these jobs will be in CTE fields such as the skilled trades, health care, manufacturing, IT, business and marketing, among others, including many occupations that employers find hard to fill. **Source: ACTE-CTE Works! 2014 Results from a national Survey myCollegeOptions**

## What is CTE's Impact?

### The Facts

- CTE leads to fewer dropouts-CTE concentrators are far less likely to drop out of high school than the national average, a difference estimated to save the economy \$168 billion each year
- CTE creates personalized pathways to success-shattering the outdated perception that CTE students are training to take a low-skill job out of high school, recent studies indicate that over 75 percent of CTE concentrators pursue postsecondary education after graduating high school
- CTE integrates business and industry perspectives-A core component of the Vision for CTE outlined in Reflect, Transform, Lead: A New Vision for Career Technical Education is aligning CTE programs with workforce needs.
- CTE trains students for high-growth industries-Most projections of upcoming changes in the labor market indicate that not all sectors will grow equally in the short-or mid-term. The largest projected growth will likely take place in the healthcare industry where CTE has been rapidly expanding for years.
- CTE introduces students to the world of work-Providing work-based learning opportunities like job shadowing and internships is a core pillar of the CTE Vision and high-quality CTE programs.
- CTE closes the skills gap-even as middle skill jobs (requiring more than a high school diploma, but less than a baccalaureate degree) comprise 54 percent of the labor market today, only 44 percent of workers fall into the middle skill cohort
- CTE allows professionals to advance-84 percent of adult CTE concentrators went from CTE study to further education or employment within six months of completing their program
- CTE represents a positive net investment for society-CTE is a system focused on data and accountability that prizes business sense and practical thinking. Studies indicate that CTE generates an enormous long term return on investment for participants and for society as a whole. One study focused on apprenticeship programs indicated that states would reap \$35 in tax receipts for every dollar invested in internships over the career of an apprentice.

- There is public demand for CTE-87% of Americans-and 89 percent of public school parents—agree that students should receive more education about career choices while in high school.

Source: [careertech.org](http://careertech.org)

## What are the Key Terms People Should Know?

### CTE Vocabulary

(I think we need a list of key terms used in CTE. I have started one here)

**Career and Technical Education (CTE)**-organized educational activities that offer a sequence of courses that provides individuals with coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in current or emerging professions, provides technical skill proficiency, an industry-recognized credential, a certificate, or an associate degree, may include prerequisite courses (other than a remedial course) that meet other requirements; and include competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, occupation-specific skills, and knowledge of all aspects of an industry, including entrepreneurship of an individual.

**CTSOs**-Career and Technical Student Organizations are recognized by the U.S. Department of Education and charged to provide programs of career and leadership development, including motivation and recognition for students enrolled in career and technical education programs. Generally, participation in a student organization is voluntary and students elect to participate. However, in some instances, teachers may require participation in the student organization as part of class activities.

Student organizations can supplement skills learned in the classroom. These CTOS offer opportunities for your teen to interact with peers and teachers in a less formal and more social atmosphere. Such interactions help him/her develop important employment skills such as self-confidence, decision making, and problem solving with peers. CTOS promote career exploration by allowing your teen to visit and shadow in local business and industry. These opportunities allow him/her to make more realistic and informed decisions about his/her career.

**CONCENTRATOR** –A concentrator is a secondary student who has transcribed two (2) or more Carnegie Units/credits in a state-designated sequence in an approved Career and Technical Education Career Preparation program. The Carnegie Units/credits must be in a single Career Preparation program as outlined in the CTE Handbook. A concentrator is not counted in performance measures until they leave school (graduate, drop out, etc). Transfers are not counted.

**INTERNSHIP** – A CTE Internship is a method of work-based experience to connect classroom learning to work activities. It follows the sequence of courses in an approved CTE program. It provides students an opportunity to engage in learning through participation in a structured work experience that involves the application of previously developed CTE knowledge and skills. The internship must be directly related to the CTE program where

the credits were earned and offers both paid and unpaid work experience.

CTE Internships **may** also have concurrent classroom learning based on CTE program standards, but it is not a requirement. Internships differ from cooperative education in that the latter requires classroom learning. CTE Internships are designed for students who are classified as seniors (12<sup>th</sup> grade) and at least 16 years of age. They require the teacher to have a valid CTE certificate in any program area. Additional information is available at: [www.azed.gov/career-technical-education/certification/](http://www.azed.gov/career-technical-education/certification/).

**PARTICIPANT** – A secondary student who has earned one or more transcribed Carnegie Units/credits in the same CTE program in the reporting year.

**PROGRAM OF STUDY** –A Program of Study is a comprehensive approach for delivering academic and career and technical education to prepare students for postsecondary education and career success.

**WORK-BASED LEARNING**—A coherent sequence of job training and work experience that involves actual work experience and connects classroom learning to work activities.