A GUIDE TO UNDERSTANDING

CAREER AND TECHNICAL EDUCATION



CAREER AND TECHNICAL EDUCATION FOUNDATION

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www.ctefoundation.org

CTSO, MEA, ACTE, ABCDEFG—what does it all mean?

With so many organizations, entities and groups, it is a daunting task learning who is who and what is what in the world of career and technical education (CTE). That is why the CTE Foundation (see below for definition) has developed this handy resource. While initially geared toward the business community, this reference is also great for new CTE instructors, news media professionals, policymakers and others who are tasked with understanding the CTE world. As a living document, it is the intent to continually update this reference to keep it relevant!

What Is CTE?

There are literally hundreds of definitions of CTE. The Association for Career and Technical Education (ACTE) has taken all those definitions and developed a paper titled "What Is Career and Technical Education?" Here are some of the key points from that document that will help to put a definition around CTE.

- CTE prepares both youths 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 twoand four-year degrees.
- The most recent Report to Congress on the Carl D. Perkins Career and Technical Education Act (Perkins) revealed that approximately 14 million students participated in secondary and postsecondary CTE programs during the 2007-2008 school year.
- According to the U.S. Department of Education's
 Office of Vocational and Adult Education (OVAE),
 almost all high school students take at least one CTE
 course, and one in four students take three or more
 courses in a single program area. One-third of college
 students are involved in CTE programs, and as many
 as 40 million adults engage in short-term post secondary occupational training.
- 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

CTE Structure

How CTE is delivered varies by state and even by district. To get started, within CTE, occupations and career specialties are often grouped into "career clusters." There are 16 of these at the national level and they are based on a set of common knowledge and skills. Not all states use all of the clusters and some have additional ones. The current national career clusters are:

- Agriculture, Food, and Natural Resources
- Architecture and Construction
- Arts, Audio/Video 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
- Science, Technology, Engineering, and Mathematics
- Transportation, Distribution, and Logistics

Further specialization is achieved through comprehensive Programs of Study, which align academic and technical content in a coordinated, non-duplicative sequence of secondary and postsecondary courses, and lead to an industry-recognized credential or certificate at the post-secondary level, or an associate or baccalaureate degree.

At the local level, CTE is delivered at the middle school, high school, adult and postsecondary levels. It may be located in:

 Comprehensive high school—school that has both academic and CTE courses; some comprehensive

- high schools are designed as CTE magnet schools
- CTE center/technical school—a separate school or center within a district or among districts where students are bussed for their CTE courses
- Community/technical colleges—for postsecondary instruction
- Four-year colleges/universities—for postsecondary instruction and teacher preparation
- Adult education/employment centers—for training for the adult population to assist in entering the workplace or upgrading skills
- Correctional facilities—to provide skills/knowledge to inmates

As an additional resource on how CTE is specifically structured in each state, ACTE has created, and continues to maintain, individual state profiles. These profiles are designed to provide clarity and context to the complex and diverse CTE systems that exist today. For more information, please visit www.acteonline.org/stateprofiles.aspx.

CTE Funding

Career and technical education programs are funded primarily by state and local resources, as is the case with most education programs. At the federal level, the Perkins Act also provides funding to states and local school districts and postsecondary institutions for program improvement and innovation.

Carl D. Perkins Career and Technical Education Act

The Perkins Act was most recently reauthorized in August 2006. The purpose of Perkins is to provide individuals with the academic and technical skills needed to succeed in a knowledge- and skills-based economy. Perkins supports CTE that prepares its students both for postsecondary education and the careers of their choice. Federal resources help ensure that CTE programs are academically rigorous and up to date with the needs of business and industry. The federal contribution to CTE, about \$1 billion annually, supports innovation and expands access to quality programs. Federal funds provide the principal source for innovation and program improvement, and help to drive state support through a "maintenance-of-effort" provision in the federal law.

Perkins Basic State Grant funds are provided to states that, in turn, allocate funds by formula to secondary school districts and postsecondary institutions. States have control over the split of funds between secondary and postsecondary levels. After this decision is made, states must distribute at least 85 percent of the Basic State Grant funds to local programs using either the needs-based formula included in the law or an alternate formula that targets resources to disadvantaged schools and students. States may reserve up to 10 percent for leadership activities and five percent (or \$250,000, whichever is greater) for administrative activities.

State and Local Funding

State and local funding supports the CTE infrastructure and pays teachers' salaries and other operating expenses.

Workforce Investment Act (WIA)

Congress passed the Workforce Investment Act (WIA) in 1998 as P.L. 105-220.² It replaced the Job Training Partnership Act (JTPA) in an effort to streamline and strengthen the country's job-training system. Taking full effect on July 1, 2000, WIA intended to create a locally integrated "One-Stop" delivery system of multiple employment services, job training and education programs, designed to be universally accessible to job seekers and meet local industry demands in communities across the county.

WIA mandated the participation of partner agencies that provide such services, including the Perkins program. Implementation of WIA has worked well in some local areas, but, overall, there has been a downward trend in the provision of employment services, particularly in the number of job seekers being referred to training programs. According to U.S. Department of Labor data analyzed by the Center for Law and Social Policy, there has been an approximate 66 percent drop in the number of people receiving training in the early years of WIA's implementation and the last years of JTPA. Among the reasons cited for this change includes local funds being diverted from service delivery for infrastructure development in the new One-Stop system. Additional frustrations at the local level have included limited business engagement in the system and complicated negotiations among partner agencies regarding funding and service delivery.

WIA was originally scheduled for reauthorization in 2003, but numerous delays have occurred, and a new law has not been finalized.

Key Terms

21st Century Skills/Employability Skills/Soft Skills—Skills, other than technical knowledge, needed to succeed in the workplace. Some examples include critical thinking, teamwork, problem solving and goal setting.

Academic Integration—The blending of academic and CTE curriculum. An example would be the Math-in-CTE program from the National Research Center for Career and Technical Education.

Apprenticeship—A system of training whereby workers learn their skilled trade on the job in a structured and supervised environment. The U.S. Department of Labor administers the Registered Apprenticeship Program, which aims to connect job seekers with employers. Regional offices support this activity.

Articulation Agreement—A formal link between at least two educational entities (i.e., high school and community college) designed to make a smooth student transition between entities.

Career Clusters—Groupings of occupations and broad industries. There are 16 identified national career clusters.

Career Academies—Small learning communities that are focused on a career pathway and integrate rigorous academics.

Career Pathway—According to the National Career Pathways Network, a career pathway "is a coherent, articulated sequence of rigorous academic and career and technical courses, commencing in the ninth grade and leading to an associate degree, baccalaureate degree and beyond, an industry-recognized certificate, and/or licensure. The Career Pathway is developed, implemented, and maintained in partnership among secondary and postsecondary education, business and employers. Career Pathways are available to all students, including adult learners."

Certification—A process individuals go through to illustrate their mastery of subject matter. The certification process involves individuals passing an examination and possessing certain requirements (i.e., education level or years of experience).

CTE Concentrator—As defined by OVAE, a secondary CTE concentrator is a secondary student who has earned three or more credits in a single CTE program area, or two credits in a single CTE program area, but only in those program areas where two credit sequences at the secondary level are recognized by the state and/or its local eligible recipients.

A postsecondary CTE concentrator is a postsecondary/ adult student who completes at least 12 academic or CTE credits within a single program area sequence that is composed of 12 or more academic and technical credits and terminates in the award of an industry-recognized credential, a certificate, or a degree; or completes a shortterm CTE program sequence of less than 12 credit units that terminates in an industry-recognized credential, a certificate, or a degree.

Dual Credit—A program or class through which participants earn credit in more than one area. For example, a culinary class that counts as a math class or a high school class that is eligible for college credit.

Externship—A program through which teachers/instructors spend time in the business environment. This helps teachers/instructors understand the workforce needs of the business community and what changes need to occur in the classroom to reflect these needs.

Industry Advisory Council (IAC)—It is required by the Perkins Act that CTE programs have industry advisory councils that meet at least once a year. Ideally, IACs help ensure that the CTE curriculum is up to date and that what is being taught in the classroom adequately prepares students for the workplace.

Industry-recognized Credentials—Those certifications, licenses or certificates that industry groups recognize as being valuable within the industry and illustrate an individual's understanding and/or mastery of subject knowledge.

Internship—An opportunity through which students receive hands-on knowledge and training while working for an entity.

Programs of Study (POS)—Federally defined in the Perkins Act of 2006 as options for students (and their parents as appropriate) when planning for and completing future coursework, for career and technical content areas that:

- (i) incorporate secondary education and postsecondary education elements;
- (ii) include coherent and rigorous content aligned with challenging academic standards and relevant career and technical content in a coordinated, nonduplicative progression of courses that align secondary education with postsecondary education to adequately prepare students to succeed in postsecondary education;
- (iii) may include the opportunity for secondary education students to participate in dual or concurrent enrollment programs or other ways to acquire postsecondary education credits; and
- (iv) lead to an industry-recognized credential or certificate at the postsecondary level, or an associate or baccalaureate degree.

State Director—The person(s) at the state level who is responsible for secondary, postsecondary and adult CTE.

Work-based Learning—Programs and opportunities that allow students to see and understand how classroom instruction connects to the world of work.

Workforce Investment Board (WIB)—WIBs are regional entities created to implement WIA. The WIB's main role is to direct federal, state and local funding to workforce development programs. WIBs oversee the One-Stop Career Centers, where job seekers can get employment information, find out about career development training opportunities and connect to various programs in their area. Services vary by state and WIB.

Affiliated Organizations

Throughout this document, you will learn about a lot of associations dedicated to the students and educators involved in CTE. There are, however, a number of other organizations, companies and entities that are within the CTE community but don't fall into those categories.

Government Agencies

Bureau of Labor Statistics³—The government entity under the U.S. Department of Labor that is responsible for measuring labor market activity.

Employment and Training Administration (ETA)4—

The agency within the U.S. Department of Labor that administers federal government job training and worker dislocation programs, federal grants to states for public employment service programs, and unemployment insurance benefits. These services are primarily provided through state and local workforce development systems.

Office of Vocational and Adult Education (OVAE)5-

OVAE administers and coordinates programs that are related to adult education and literacy, CTE, and community colleges. OVAE's CTE initiatives are designed to administer state formula and discretionary grant programs under the Perkins Act; provide assistance to states to improve program quality, implementation and accountability; and establish national initiatives that help states implement rigorous CTE programs.

National Research Center for Career and Technical Education (NRCCTE)⁶—NRCCTE is the primary agent for generating scientifically based knowledge,

dissemination, professional development, and technical assistance to improve CTE in the United States. The work of NRCCTE is funded by OVAE.

Industry Groups

Automotive Industry Planning Council (AIPC)—

AIPC is a national advisory group of industry leaders, career and technical educators and educational policymakers whose mission is to promote communication, cooperation and excellence in automotive service training programs. One of the methods they use to accomplish this is the Automotive Awards of Excellence.

National Automotive Technicians Education Foundation (NATEF)⁷—NATEF was founded to evaluate technician training programs against standards developed by the automotive industry and recommend qualifying programs for NATEF accreditation.

National Center for Construction Education and Research (NCCER)⁸—NCCER was "created to develop industry-driven standardized craft training programs with portable credentials and help address the critical workforce shortage facing the construction industry."

National Council for Agricultural Education⁹—The Council provides leadership and coordination to shape the future of school-based agricultural education. Its board of directors is made up of representatives from organizations and associations focused on agriculture education and CTE.

Curriculum/Testing Providers

ACT¹⁰—"ACT is an independent, not-for-profit organization that provides a broad array of assessment, research, information, and program management solutions in the areas of education and workforce development.

MBA Research & Curriculum Center

(MBAResearch)¹¹—MBAResearch is organized as a consortium of 37 state education departments and other organizations to support educators in the preparation of students for careers in business and marketing. It develops programs, strategies and curricula.

³ www.bls.gov

⁴ www.doleta.gov

⁵ www2.ed.gov/about/offices/list/ovae/index.html

⁶ www.nrccte.org

⁷ www.natef.org

⁸ www.nccer.org

⁹ www.teamaged.org/council/index.php/aboutus

¹⁰ www.act.org

¹¹ www.mark-ed.org/2.0/Joomla/index.php

NOCTI¹2—NOCTI is a provider of occupational competency assessment products and services to secondary and postsecondary educational institutions in the United States and around the world. A nonprofit corporation, NOCTI is governed by a consortium of states consisting of representatives from each of the 50 states and U.S. territories.

Project Lead The Way (PLTW)¹³—PLTW provides rigorous and innovative science, technology, engineering and mathematics education curricular programs used in middle and high schools. More specifically, PLTW has programs and curriculum in engineering and biomedical sciences.

Southern Regional Education Board (SREB)¹⁴—SREB is a nonprofit, nonpartisan organization that works with 16 member states to improve public pre–K-12 and higher education. Founded by the region's governors and legislators in 1948, SREB was America's first interstate compact for education.

In 1987, SREB established High Schools That Work (HSTW). HSTW uses research-proven strategies to help states transform their public high schools into places where all students learn at high levels. Member schools implement 10 key practices for changing what is expected of students, what they are taught and how they are taught.

Other

CTE Foundation¹⁵—The CTE Foundation was established to promote quality CTE through support of the programs and services of the Association for Career and Technical Education.

National Technical Honor Society (NTHS)¹⁶—NTHS is a chapter-based organization focused on honoring student achievement and leadership, promoting educational excellence, awarding scholarships, and enhancing career opportunities for its membership.

University Council for Workforce and Human Resource Education (UCWHRE)¹⁷—UCWHRE is a nonprofit organization representing the nation's leading universities. It provides leadership for teaching, research and service initiatives in CTE and human resource development. It has an institutional-based membership structure.

Career and Technical Student Organizations (CTSO)

More than 1.5 million students belong to and participate in CTSOs, which are designed to provide leadership development, motivation and recognition for students. The U.S. Department of Education recognizes the following CTSOs:

Business Professionals of America (BPA)¹⁸—BPA has a history as a student organization that contributes to the preparation of a world-class workforce through the advancement of leadership, citizenship, academic, and technological skills for students at the secondary and postsecondary levels. Through co-curricular programs and services, members of BPA compete in demonstrations of their business technology skills, develop their professional and leadership skills, network with one another and professionals across the nation and get involved in the betterment of their community through good works projects.

DECA¹⁹—DECA, a national association of marketing education students, provides teachers and members with educational and leadership development activities to merge with the education classroom instructional program.

Future Business Leaders of America—Phi Beta Lambda (FBLA-BPL)²⁰—FBLA-PBL is a dynamic organization of young people preparing for success as leaders in our businesses, government and communities.

Future Educators Association (FEA)²¹—FEA is an organization that provides students interested in education-related careers with activities and materials that help them explore the teaching profession. FEA helps students develop the skills and strong leadership traits

¹² www.nocti.org

¹³ www.pltw.org/index.html

¹⁴ www.sreb.org

¹⁵ www.ctefoundation.org

¹⁶ www.nths.org

¹⁷ www.hre.uiuc.edu/ucwhre

¹⁸ www.bpanet.org

¹⁹ www.deca.org

²⁰ www.fbla-pbl.org

²¹ www.futureeducators.org

that are found in high-quality educators and significantly contributes to the development of the next generation of great educators.

Family, Career and Community Leaders of America (FCCLA)²²—FCCLA makes a difference in families, careers and communities by addressing important personal, work and societal issues through family and consumer sciences education. Involvement in FCCLA offers members the opportunity to expand their leadership potential and develop skills for life planning, goal setting, problem solving, decisionmaking and interpersonal communication—necessary in the home and workplace.

Health Occupations Students of America (HOSA)²³— HOSA's two-fold mission is to promote career opportunities in the health care industry and to enhance the delivery of quality health care to all people.

National FFA²⁴—FFA makes a positive difference in the lives of students by developing their potential for premier leadership, personal growth, and career success through agricultural education.

National Postsecondary Agricultural Student Organization (PAS)²⁵—PAS is an organization associated with agriculture/agribusiness and natural resources offerings in approved postsecondary institutions offering baccalaureate degrees, associate degrees, diplomas and/ or certificates.

National Young Farmer Educational Association (NYFEA)²⁶—NYFEA is the official adult student organization for agricultural education with the goal of being America's association for educating agricultural leaders. The association features leadership training, agricultural career education and community service opportunities.

SkillsUSA²⁷—SkillsUSA is a national organization serving high school and college students and professional members who are enrolled in technical, skilled and service occupations, including health occupations.

Technology Student Association (TSA)²⁸—TSA is the only student organization devoted exclusively to the

needs of technology education students who are presently enrolled in, or have completed, technology education courses.

National Coordinating Council for Career and Technical Student Organizations (NCC-CTSO)-NCC-CTSO is a council composed of representatives

from each CTSO, ACTE, the U.S. Department of Education and the National Association of State Directors of Career Technical Education Consortium.

Professional Associations for CTE Instructors

The opportunities for career and technical educators to participate in a professional association are almost innumerable. In addition to union organizations like the National Education Association and the American Federation of Teachers, there are additional professional associations for every trade or area taught within CTE. Here is a list, although not comprehensive, of many of those associations.

American Association for Agricultural Educators (AAAE)²⁹—AAAE is dedicated to studying, applying and promoting the teaching and learning processes in agriculture. It is an individual membership organization.

American Association of Family and Consumer Sciences (AAFCS)³⁰—AAFCS is a professional individual membership association for individuals with a baccalaureate degree or higher, professional-level certification, or professional-level licensure in family and consumer sciences.

Association for Career and Technical Education

(ACTE)31—ACTE is an individual membership organization dedicated to the advancement of education that prepares youth and adults for successful careers. ACTE is committed to enhancing the job performance and satisfaction of its members; to increasing public awareness and appreciation for career and technical programs; and to assuring growth in local, state and federal funding for these programs by communicating and working with

²² www.fcclainc.org

²³ www.hosa.org

²⁴ www.ffa.org

²⁵ www.nationalpas.org

²⁶ www.nyfea.org

²⁷ www.skillsusa.org 28 www.tsaweb.org

²⁹ www.aaaeonline.org

³⁰ www.aafcs.org

³¹ www.acteonline.org

legislators and government leaders. ACTE is supported by a network of state affiliated associations.³²

Association for Career and Technical Education Research (ACTER)³³—ACTER is the premier professional organization for researchers, faculty, graduate students, administrators, policymakers and all others with global interests in workforce education research, education, issues and policy. It is an individual membership organization.

Association for Skilled and Technical Sciences (ASTS)³⁴—ASTS is an individual membership organization for all instructors, administrators, teacher educators, industry representatives and others interested in the skilled trades. It was created when the National Association for Trade and Industry Educators (NATIE) and the National Association of State Supervisors for Trade and Industrial Education (NASSTIE) merged in 2006.

Association for sTEm Teacher Education³⁵—Formerly the National Association of Industrial and Technical Teacher Educators, the Association for sTEm Teacher Education advances and promotes excellence in science, technology, engineering and mathematics teacher education emphasizing the technology and engineering areas of teacher education. The association accomplishes this goal by providing opportunities for professional improvement for its members, promoting cooperation among science, technology, engineering and mathematics teacher education groups, and serving as authority on and advocate for engineering and technology teacher education. It is an individual membership organization.

Career and Technical Education Equity Council

(CTEEC)³⁶—The purposes of CTEEC are to promote and support CTE, to support equitable and full participation of all students and employees in technical education, to encourage professional growth and development of its members, and to support the goals/objectives of the Administration Division of ACTE. It is an individual membership organization that first requires ACTE membership.

Council of Health Occupations Teachers (COHOT)—COHOT is a national individual membership organization for all secondary and postsecondary classroom

health occupations teachers. The purpose of COHOT is to provide relevant, updated teaching techniques and curricula for its members.

Epsilon Pi Tau³⁷—As an academic and professional honors group for technology programs in higher education, workforce development programs, and professionals in practice, Epsilon Pi Tau provides honor and distinction to members, institutions, programs and individuals throughout the world.

Health Occupations Supervisor and Teacher Educator Council (HOSTEC)—HOSTEC strives to improve cooperation among those engaged in preparing and improving teachers and other workers in career, technical, technology and health occupations education. HOSTEC is active in legislative advocacy for CTE programs. The Council edits and publishes the *Journal of Health Occupations Education* and sponsors and assists with the National Curriculum and Research conference held every other year. It is an individual membership association that also requires ACTE membership.

International Vocational Education and Training Association (IVETA)³⁸—IVETA is an organization and network of vocational educators, vocational skills training organizations, business and industrial firms, and other individuals and groups interested or involved in vocational education and training worldwide. IVETA is dedicated to the advancement and improvement of high-quality vocational education and training wherever it exists and wherever it is needed. It is an individual membership organization.

Marketing Education Association (MEA)³⁹—The purposes of MEA are to foster the growth and development of marketing education; encourage and support the professional development of marketing educators; encourage understanding of and support for marketing education; and maintain an efficient and effective association. It is an individual membership association.

National Association of Agricultural Educators (NAAE)⁴⁰—NAAE is a federation of state agricultural educators associations. Currently NAAE is focusing on three areas: advocacy for agricultural education; professional development for agricultural educators; and re-

cruitment and retention of current agriculture educators.

³² www.acteonline.org/content.aspx?id=200

³³ www.public.iastate.edu/~laanan/actermain/home.shtml

³⁴ www.astsonline.org

³⁵ www.astemte.org

³⁶ www.cteec.org

³⁷ www.epsilonpitau.org

³⁸ www.iveta.org/members/index.php

³⁹ www.nationalmea.org

⁴⁰ www.naae.org

National Association of Secondary School Principals (NASSP)⁴¹—NASSP is an individual membership organization of principals, assistant principals and aspiring school leaders at the middle and secondary school levels.

National Association of State Administrators of Family and Consumer Sciences (NASAFACS)⁴²—The vision of NASAFACS is to empower individuals and families across the life span to manage the challenges of living and working in a diverse global society. Its unique focus is on family, work and their interrelationship. It is an individual membership organization that is an affiliate of ACTE.

National Association of State Directors of Career Technical Education Consortium (NASDCTEc)⁴³— NASDCTEc represents the state and territory heads of secondary, postsecondary and adult CTE across the nation. NASDCTEc, through leadership, advocacy and partnerships, aims to support an innovative CTE system that prepares individuals to succeed in education and their careers, and poises the United States to flourish in a global, dynamic economy. In cooperation with the National Career Technical Foundation (NCTEF), NASDCTEc provides leadership and support for the National Career ClustersTM Framework.

National Association of Supervisors of Agricultural Education (NASAE)⁴⁴—NASAE is a professional organization established to provide members with information essential for planning and conducting quality agricultural education programs. It is an individual membership organization.

National Association of Supervisors of Business Education (NASBE)⁴⁵—NASBE is an organization of business education supervisors who are direct employees of a state, region or local education agency, and has as its purpose furthering the cause of business education and the welfare of the field and professional members. It is an individual membership organization.

National Association of Teacher Educators of Family and Consumer Sciences (NATEFACS)⁴⁶—NATEFACS is a national organization of teacher educators whose purpose is to improve and strengthen teacher education

in family and consumer sciences. It is an individual membership organization.

National Association of Teachers of Family and Consumer Sciences (NATFACS)⁴⁷—NATFACS is an individual membership organization that provides for group expression and group action dealing with problems of national importance to family and consumer sciences.

National Business Education Association (NBEA)⁴⁸—NBEA is devoted exclusively to serving individuals and groups engaged in instruction, administration, research, and dissemination of information for and about business. NBEA is devoted to the recognition that business education competencies are essential for all individuals in today's fast-changing society. It is an individual membership organization.

National Career Academy Coalition (NCAC)⁴⁹—NCAC provides technical assistance, training and support to career academies. NCAC also evaluates career academies based on the National Standards of Practice.

National Career Pathways Network (NCPN)⁵⁰—NCPN is an individual membership organization for educators and employers involved in the advancement of career pathways and related education reform initiatives.

National Consortium on Health Science Education (NCHSE)⁵¹—NCHSE is a membership organization composed of those who support the mission, purpose and goals of the consortium. Representation on the current board of directors is a contingency of local education agencies, state education agencies, postsecondary education representatives, professional associations, health care partners, publishing companies and others who create health science education curriculum and products.

National Council of Local Administrators (NCLA)⁵²—The purpose of NCLA is to provide leadership and advocacy in the promotion and development of CTE in the secondary and postsecondary school systems of the United States and its territories. NCLA is an individual membership organization that requires ACTE membership.

⁴¹ www.nassp.org

⁴² www.doe.in.gov/octe/facs/NASAFACS/NASAFACS.html

⁴³ www.careertech.org

⁴⁴ www.teamaged.org/nasae

⁴⁵ www.nasbe.us

⁴⁶ www.natefacs.org

⁴⁷ www.natfacs.org

⁴⁸ www.nbea.org

⁴⁹ www.ncacinc.com

⁵⁰ www.cord.org/ncpn-index.cfm

⁵¹ www.healthscienceconsortium.org

⁵² www.ncla-cte.org

Additional CTE Facts/Talking Points

CTE Increases Student Achievement:

- 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 post-secondary education, have a higher grade point average in college and are less likely to drop out in the first year. (SREB, "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.)

CTE Meets Individual and Community Economic Needs:

- According to the Bureau of Labor Statistics, of the 20 fastest-growing occupations, 10 require an associate degree or less. Furthermore, of the 20 occupations with the largest numbers of new jobs projected for 2018, 13 require on-the-job training or an associate degree.
- More than 80 percent of respondents in the 2005
 National Association of Manufacturer's Skills Gap
 Report indicated that they are experiencing a shortage of qualified workers overall—with 13 percent
 reporting severe shortages and 68 percent indicating
 moderate shortages. CTE plays a vital role in helping
 American business close this gap by building a
 competitive workforce for the 21st century.
- A person with a CTE-related associate degree or credential will earn an average of between \$5,000 and \$15,000 more a year than a person with a humanities or social sciences associate degree—and those with credentials in high-demand fields such as health care can average almost \$20,000 more a year. (Jacobson et al, "Pathways to Boosting the Earnings of Low-Income Students by Increasing Their Educational Attainment," 2009.)
- According to the state of Washington, for every dollar spent on secondary CTE students, federal and state governments will receive seven dollars back in Social Security, Medicare, and federal and state taxes. (Washington State Workforce Training and Education Coordinating Board, Workforce Training Results-2006, January 2007.)

Resources:

www2.ed.gov/about/offices/list/ovae/pi/cte/vso.html www.okcareertech.org/whoweare/dictionary.pdf www.acteonline.org/cte_info.aspx

