

Career and Technical Education within USHE

Workforce, Access, and Advocacy Committee

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Utah's Statutory Definition of CTE

"Career and technical education" means organized educational programs offering sequences of courses or skill sets directly related to preparing individuals for paid or unpaid employment in current or emerging occupations that generally do not require a baccalaureate or advanced degree (Utah Code 53B-1-101.5).

Federal Perkins Act

Definition of CTE

The term “career and technical education” means organized educational activities that—

(A) offer a sequence of courses that—

(i) **provides individuals with rigorous academic content and relevant technical knowledge and skills** needed to prepare for further education and careers in current or emerging professions, which may include high-skill, high-wage, or in-demand industry sectors or occupations, which shall be, at the secondary level, aligned with the challenging State academic standards adopted by a State under section 1111(b)(1) of the Elementary and Secondary Education Act of 1965;

(ii) **provides technical skill proficiency or a recognized postsecondary credential** which may include an **industry-recognized credential, a certificate, or an associate degree** ; and

(iii) may include prerequisite courses (other than a remedial course) that meet the requirements of this subparagraph;

(B) **include competency-based, work-based, or other applied learning** that supports the development of academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of an industry, including entrepreneurship, of an individual;

C) to the extent practicable, **coordinate between secondary and postsecondary education programs** through programs of study, which may include coordination through articulation agreements, early college high school programs, dual or concurrent enrollment program opportunities, or other credit transfer agreements that provide postsecondary credit or advanced standing; and

(D) may include career exploration at the high school level or as early as the middle grades (as such term is defined in section 8101 of the Elementary and Secondary Education Act of 1965).



USHE Institutions with a CTE Role as per R312

- Utah State University
- Weber State University
- Southern Utah University
- Snow College
- Dixie State University
- Utah Valley University
- Salt Lake Community College

Institutional CTE Directors

USU- Bruce Miller

WSU- Julie Snowball

SUU- Eric Freden

Snow- Mike Medley

DSU- Nancy Hauck

UVU- Kim Chiu

SLCC- Eric Heiser

Regional CTE Coordination Councils

USHE, UTech, School Districts

Bear River- USU

Unitah Basin- USU

Wasatch Front North- WSU

Wasatch Front South- SLCC

Mountainland- UVU

Central- Snow

Southeast- USUE

Southwest- SUU, DSU

CTE Options

Non-credit

Credit

Technical College Role

SLCC

USU

Snow

Typical CTE Credentials Awarded by USHE Institutions

Certificates of Proficiency

Two types

Awarded under authority of the institution

Approved by SBR, eligible for financial aid

Certificates of Completion

Associate of Applied Science Degrees

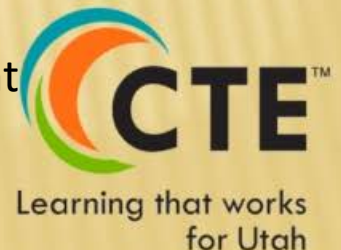
Carnevale's Report on Certificates

Carefully targeted certificates of less than one year can have economic value

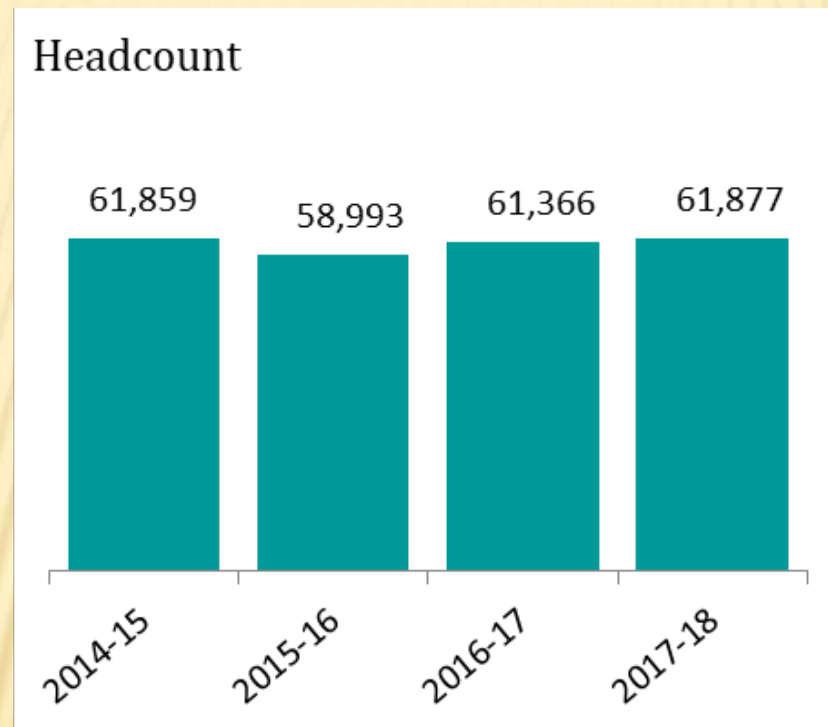
Certificates can make people more employable

Certificates add value to degrees- 6% wage premium for associate's degree, 3% wage premium for bachelor's degrees

Information taken from Certificates: Gateway to Gainful Employment and College Degrees Carnevale, Rose, and Hansen, Georgetown University Center on Education and the Workforce, July 2012.



USHE CTE Headcount Students

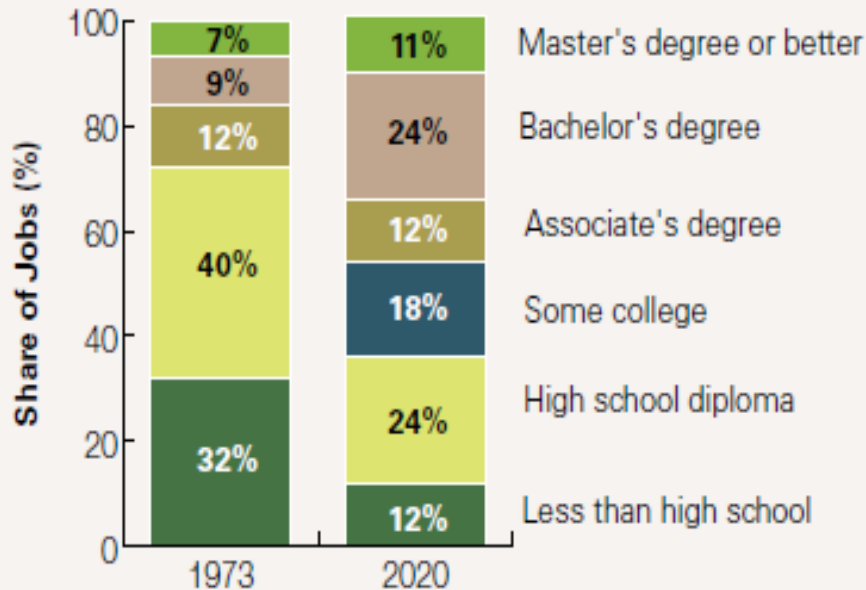


USHE CTE Student Membership Hours and Credit Hours Equivalencies

Category	2015-16	2016-17	2017-18
Non-Credit Membership Hours	260,272	262,772	316,605
Short-Term Intensive Training/Custom Fit Hours	59,453	65,664	55,410
Membership Hours Equivalent from Credit Hours (1 credit=30 hrs.)	10,537,230	10,912,140	11,865,930
Total Membership Hours	10,856,955	11,240,576	12,237,945
Full-time Equivalent-FTE (Total Membership Hours/900)	12,063	12,490	13,598

Educational Attainment for Workforce Preparation is Shifting

At least some postsecondary education or training is becoming the entry-level requirement for many jobs.



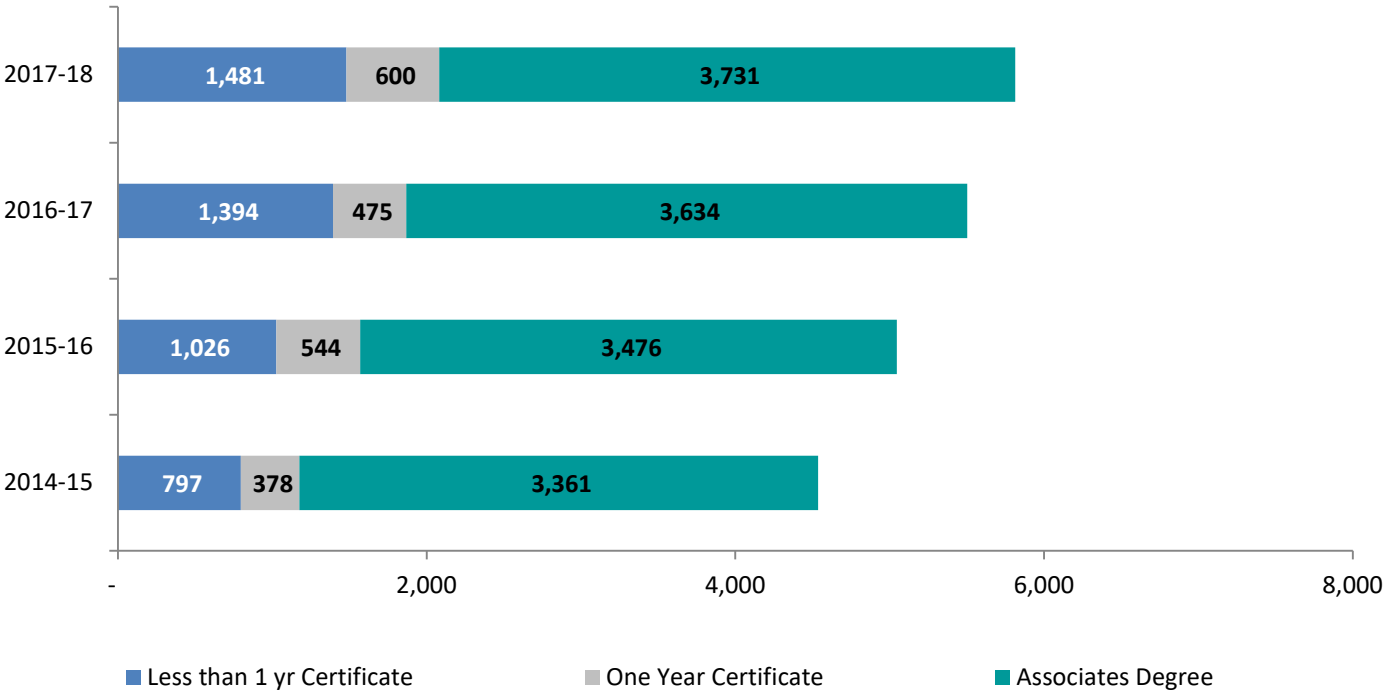
Taken from Career and Technical Education: Five Ways That Pay Along the Way to the B.A., Carnevale, Jayasundera, & Hanson, Georgetown University Public Policy Institute, September, 2012.

USHE Institutions have Developed more than 110 New CTE Certificates

Over the last several years, USHE CTE directors and other institutional leaders have:

- Assessed current CTE offerings in the region
- Identified certificates and other programs that could be offered in high-demand, high wage occupations and that are important to the region
- Identified how these credentials will stack to additional certificates and associate and baccalaureate degrees
- Identified ways these programs, or portions thereof, might be provided for delivery in high schools through concurrent enrollment
- Developed an implementation plan
- Created more than 110 new CTE certificates

CTE Credentials Awarded



Top CTE Areas of Completion FY18 Graduates

Program Categories	Less than 1 yr Certificates	1-2 yr Certificates	Associates & 2+ yr Certificates	Total	Percentage Share
Health Professions and Related Programs	408	142	1394	1944	33%
Computer and Information Sciences and Support Services	582	92	335	1009	17%
Business, Management, Marketing, And Related Support Services	119	60	624	803	14%
Engineering Technologies and Engineering-Related Fields	205	33	139	377	6%
Homeland Security, Law Enforcement, Firefighting, Related Protective Services	53	40	245	338	6%

Employment of USHE CTE Graduates

Classification of Instructional Program (CIP) Group	Placement Rate
Agriculture, Agriculture Operations, And Related Sciences	95.0%
Architecture and Related Services	100.0%
Business, Management, Marketing, And Related Support Services	87.8%
Communication, Journalism, And Related Programs	97.5%
Communications Technologies/Technicians and Support Services	82.9%
Computer and Information Sciences and Support Services	87.8%
Construction Trades	88.4%
Education	95.1%
Engineering	93.5%
Engineering Technologies and Engineering-Related Fields	82.7%
Family and Consumer Sciences/Human Sciences	95.2%
Foreign Languages, Literatures, And Linguistics	100.0%
Health Professions and Related Programs	93.3%
Homeland Security, Law Enforcement, Firefighting and Related Protective Services	93.7%
Legal Professions and Studies	89.5%
Mechanic and Repair Technologies/Technicians	94.3%
Multi/Interdisciplinary Studies	87.5%
Parks, Recreation, Leisure, And Fitness Studies	100.0%
Personal and Culinary Services	95.4%
Precision Production	90.2%
Science Technologies/Technicians	89.9%
Social Sciences	92.9%
Transportation and Materials Moving	80.6%
Visual and Performing Arts	93.8%
Overall Placement Rate	91.0%

FY17 Graduates



USHE CTE Completer Earnings

Type of Program	Median 1 st Year Wages	Median 5 th Year Wages	Wage Growth
CTE Program			
Certificates	\$26,917	\$35,337	\$8,420
Associate Degrees	\$37,195	\$51,200	\$14,005
Non-CTE Associate Degrees	\$27,871	\$38,399	\$10,528

Based on FY2013 Graduate Cohort Group

Return on Investment for USHE CTE Graduates

	New Credentials Awarded	Est. Work Force Participation Rate	Credentials in Workforce	Amount Earned over High School Level Median Earnings	Total Added Annual Income to Utah's Economy	Est. Additional Tax Contribution to the State (14.14%)
Certificates	2,081	78.6%	1,636	\$3,032	\$4,960,352	\$701,394
Associate Degrees	3,731	78.6%	2,933	\$15,602	\$45,760,666	\$6,470,558
Total	5,812		4,569		\$50,721,018	\$7,171,952
30 years of Employment					\$1,521,630,540	\$215,158,558
Economic Multiplier (1.2)					\$304,326,108	\$43,031,712
Value Added to Utah's Economy and Tax Base (30 Year Estimate)					\$1,825,956,648	\$258,190,270

Perkins Funding Formulas

State Level

Based on state per-capita income and population in three age cohorts (15-19,20-24, and 25-65)

Post-secondary

Based on participants in CTE courses who fall into any of the following three groups:

- PELL grant recipients

- Students who receive assistance from BIA

- Students who receive assistance from DWS

FY19 Perkins Funding Distribution by USBE (Fiscal Agent)

Total Grant Funds for Utah	14,250,065
– Adm 5%	712,503
– State Leadership 10%	1,425,007
– Districts and Post-secondary 85%	12,112,555
• Minus Reserve 112 (c)	847,879
• Net to districts and post-secondary	11,264,676
• Secondary 60%	6,758,806
• Post-secondary 40%	4,505,870
– UTech	514,841
– USHE	3,991,029

FY19 Perkins Funding to USHE Institutions

- UVU 1,183,111
- SLCC 933,995
- WSU 915,606
- DSU 322,273
- USU 217,485
- SUU 210,762
- Snow 207,797
- Total 3,991,029

Perkins Accountability

Three core metrics that measure the following:

- Technical Skill Attainment
- Completers
- Retention
- Employment
- Non-traditional Participation