The changing landscape of CTE in Nevada

A need to focus on middle-skill jobs through career pathways of promise to close the skills gap

Elements for Success and Accountability in the Design of a Standards Based System

- **Graduate from high school with demonstrated proficiency in:**
  - **Academic Content**
  - **Technical Content**
  - **Employability Skills (Workplace Behaviors)**

  …. To prepare for first-level postsecondary credentials and beyond

NEVADA CAREER CLUSTERS & PROGRAM ALIGNMENT

Agriculture, Food & Natural Resources
Agricultural Mechanics Technology
Agriculture Business Systems
Agriculture Leadership, Communication & Policy
Animal Science
Environmental Management
Floriculture Design & Management
Food Science Technology
Landscape Design & Management
Natural Resources & Wildlife Management
Ornamental Horticulture/Greenhouse Management
Veterinary Science

Business, Management & Administration
Administrative Services
Business Management
Finance
Accounting & Finance
Marketing, Sales & Services
Entrepreneurship
Marketing
Sports & Entertainment Marketing

Arts, A/V Technology & Communication
Fashion, Textiles & Design
Graphic Design
Interior Design
Photography
Radio Production
Theatre Technology
Video Production
Information Technology
Animation
Computer Science
Digital Game Development
IT Networking
IT Service & Support
Web Design & Development

AGRICULTURE & NATURAL RESOURCES

BUSINESS & MARKETING EDUCATION

INFORMATION & MEDIA TECHNOLOGIES

COLLEGE & CAREER READINESS

SKILLED & TECHNICAL SCIENCES

EDUCATION, HOSPITALITY & HUMAN SERVICES

HEALTH SCIENCE & PUBLIC SAFETY

Architecture & Construction
Architectural Design
Construction Technology
Drafting & Design
Furniture & Cabinetmaking
Heating, Ventilation, Air Conditioning. & Refrigeration
Manufacturing
Electronic Technology
Machine Tool Technology
Manufacturing Technologies
Mechanical Technology
Metalworking
Welding Technology
Science, Technology, Engineering & Mathematics
Aerospace Engineering
Architectural & Civil Engineering
Electrical Engineering
Energy Technologies
Environmental Engineering
Mechanical Engineering
Transportation, Distribution & Logistics
Automotive Service Technician
Automotive Technology
Aviation Maintenance Technician
Aviation Technology
Collision Repair Technology
Diesel Technology

Education & Training
Early Childhood Education
Hospitality & Tourism
Baking & Pastry
Culinary Arts
Hospitality & Tourism
Human Services
Cosmetology
Family & Consumer Sciences
Foods & Nutrition
Human Development

Health Science
Biomedical
Dental Assisting
Emergency Medical Technician
Health Information Management
Medical Assisting
Nursing Assistant
Pharmacy Practice
Respiratory Therapy
Sports Medicine
Law, Public Safety, Corrections & Security
Criminal Justice
Emergency Telecommunications
Fire Science
Forensic Science
Law Enforcement

Career & Technical Education Student Definitions

- Enrollee

- Participant

- **Concentrator (2 credits earned)**

- **Completer (3 credits earned - completes sequence)**

Programs of Study

Issued: 12/12/12

Information Technology	Recommended Program of Study for: IT-Networking			Learning that works for Nevada CTE
Career Cluster: Information Technology			**Career Pathway: Network Systems**	

9th Grade	10th Grade	11th Grade	12th Grade	Postsecondary
English I	English II	English III	English IV	College of Southern Nevada
Algebra I	Geometry I	Algebra II	Senior Level Math Course	Great Basin College
Biology	Chemistry or Geoscience	Junior Level Science Course	Elective[1]	Nevada State College
Health / Computer Literacy	World History	US History	US Government	Truckee Meadows Community College
Physical Education	Physical Education	Foreign Language[2] or Elective[1]	Foreign Language[2] or Elective[1]	University of Nevada, Las Vegas
IT Networking I	IT Networking II	IT Networking III	IT Networking Advanced Studies	University of Nevada, Reno / Western Nevada College

Work-Based Learning	Secondary	-- Articulation --	Postsecondary	Career and Technical Student Organizations
Job Shadowing Internship / Work Experience Career Day / Fair Field Trips / Guest Speakers	IT Networking I IT Networking II IT Networking III		Up to 16 credits at College of Southern Nevada Up to 3 credits at Great Basin College (subject to change)	SkillsUSA

CTE Assessments[3]	Available Industry Certifications		High Wage - High Skill - High Demand Careers[4]	
End of Program Technical Assessment for IT-Networking Workplace Readiness Skills Assessment (for Employability Skills Standards)	**Certification** Network + CISCO Certified Networking Associate (CCNA) Microsoft Technology Associate (MTA)	**Provider** CompTIA CISCO Microsoft	Network Administrator Network Technician Information Systems Administrator	Technical Support Specialist Network Architect Security Analyst

This Program of Study is based upon the requirements needed for an Advanced Diploma. Academic course names may vary among school districts. All students must pass the high school proficiency exams to qualify for any high school diploma.

[1] Electives may include arts and humanities courses or other career and technical education courses that relate to the program of study.

[2] Foreign Language courses are recommended if a student is planning on entering a university. (See individual university admission policies)

[3] CTE Assessments will be administered during the completion level CTE course.

[4] For additional career and employment information visit http://www.nvcis.intocareers.org/ and http://www.NevadaYouth.org

Employability Skills for Career Readiness

Student knowledge and skills for proper workplace behaviors

Personal Qualities & People Skills

- ❑ Positive Work Ethic
- ❑ Integrity
- ❑ Teamwork
- ❑ Self-Representation
- ❑ Diversity Awareness
- ❑ Conflict Resolution
- ❑ Creativity & Resourcefulness

Technology Knowledge & Skills

- ❑ Job-Specific Technologies
- ❑ Information Technology
- ❑ Internet Use & Security
- ❑ Telecommunications

Professional Knowledge & Skills

- ❑ Speaking & Listening
- ❑ Reading & Writing
- ❑ Critical Thinking & Problem Solving
- ❑ Health & Safety
- ❑ Organizations, Systems, & Climates
- ❑ Lifelong Learning
- ❑ Job Acquisition & Advancement
- ❑ Time, Task, & Resource Management
- ❑ Mathematics
- ❑ Customer Service

New Program Completion Requirements
Nevada Administrative Code 389.800

- **Defined course sequences**

- **Defined end-of-program assessment upon completion of the course sequence**

- **Defined employability skill standards and state assessment**

- **State Certificate of Skill Attainment replaces requirements for local competency certificates**

- **CTE endorsement on the diploma aligned to State Certificate**

Student Credentials/Certifications
Nevada Administrative Code 389.815

- **Certificate of Skill Attainment**

- **Endorsement on diploma**

- **Certificate for passing the state assessment for employability skills**

Certificate of Skill Attainment

Information Technology-Networking

This certifies that

has successfully completed the high school program of study according
to state standards to support advancement to postsecondary education
and job training in a related career field.

This certificate issued in the year two thousand and fifteen.
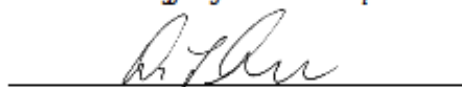
Superintendent of Public Instruction

President of the State Board of Education

Executive Director of the
Governor's Office of Economic Development

Director of the
Department of Employment, Training & Rehabilitation

CTE Endorsement on the Diploma

Employability Skills Certificate

CTE assessment Results

End-of-Program Assessment Results

	2013–14	2014–15
Completers	5,136	6,158
Participation	4,781	5,848
Participation Rate	93%	95%
Pass Rate	56.7%	55.4%

Workplace Readiness Assessment Results

	2013–14	2014–15
Completers	5,399	5,588
Participation	5,091	5,336
Participation Rate	94.2%	95.5%
Pass Rate	83.1%	83.6%

Certificate of Skill Attainment

- ❑ **3.0 GPA in core course sequence**

- ❑ **Pass the end-of-program technical assessment**

- ❑ **Pass the workplace readiness assessment**

Note

- ❑ *Certificate qualifies the student to earn the CTE diploma endorsement*

- ❑ *Certificate and endorsement qualify students for postsecondary articulated credit*

State Certificates of Skill Attainment

3-Year Comparison for Certificates Earned

	2012-13*	2013-14	2014-15
Students Eligible	2,924	5,136	6,158
Certificates Awarded	706	2,051	2,433
Certificate Award Rate	24.2%	39.9%	39.5%

*Assessment system under development

Policy Changes for CTE College Credit
(Tech Prep Articulated Credit)

- **Aligns articulated credit to the complete program**

- **Aligns articulated credit to the Certificate of Skill Attainment and endorsement on the diploma**

- **Statewide articulation agreements = 102 to date**

	College of Southern Nevada	Great Basin College	Truckee Meadows CC	Western Nevada College
State Agreements	37	24	30	11

Secondary CTE Outcomes

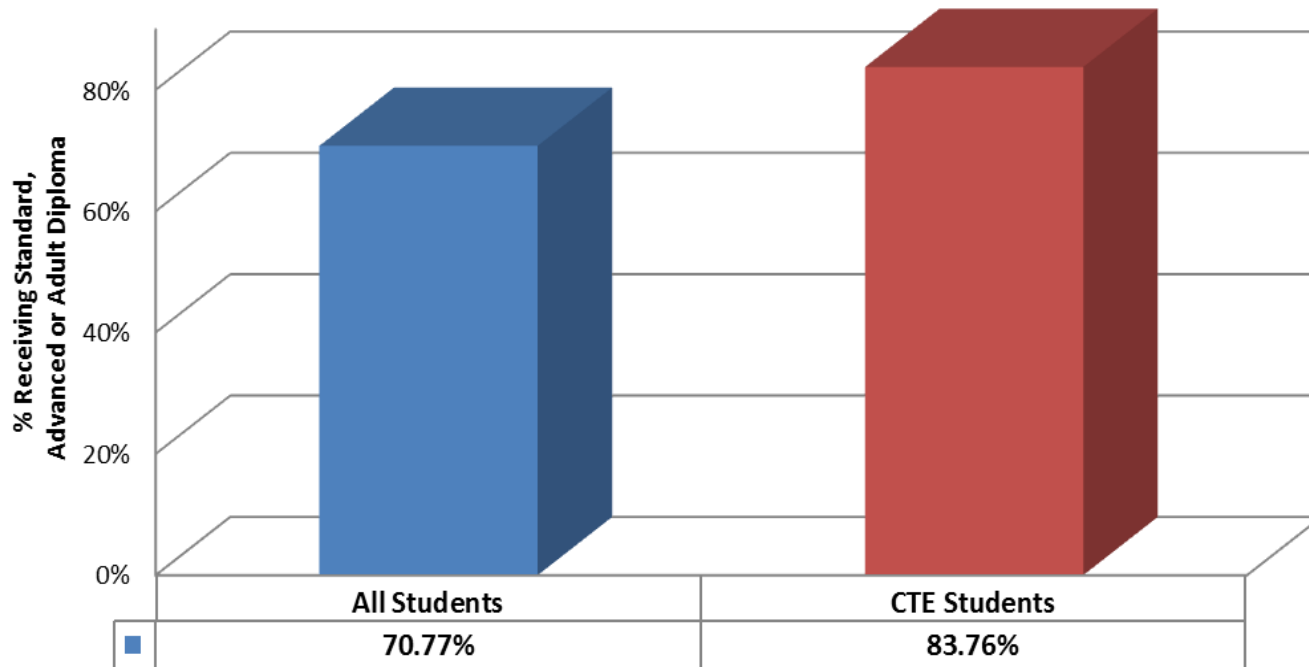## Office of Career Readiness, Adult Learning & Education Options

Strategic Goal:

By 2020, 11,000 students will complete a CTE program of study and 50% of the completers will earn the Nevada Certificate of Sill Attainment

Year 1: 6,208	Year 2: 7,139	Year 3: 8,209	Year 4: 9,440	Year 5: 10,856

Importance of CTE Program Completers

Nevada High School Cohort Graduation Rate for all Students and for CTE Students, Graduating Class of 2015

	All Students	CTE Students
■	70.77%	83.76%

A foundation to build upon

❖ **Program completion defined in measurable terms**

❖ **Program completion is incentivized through recognition and CTE College Credit**

❖ **Postsecondary credentials more clearly articulated**

❖ **State-level linkages to business and industry and economic development are growing**