



Career and Technical Education



Serving approximately 4600 DVUSD High School Students

Campus Based Programs – 90%

Signature Programs – 4.5%

West-MEC Central Programs – 5.5 %

Strategic Goals

- Strengthen current model of campus-based offerings serving students across the continuum of career readiness
- Provide greater access to all students for satellite, signature, and West-MEC program participation
- Increase industry readiness through successful completion by students of multi-year program sequence
- Fulfill economic development needs for a high skilled, high wage, in-demand workforce
- Sustain use of newly constructed and enhanced CTE facilities

What Career and Technical Education needs to move forward successfully

- Continue partnership with West-MEC in serving community and workforce demands
- Monitor student programming needs and interests frequently
- Address limitations resulting from current staffing allocations
- Develop solutions to meet student transportation needs
- Meet the needs of program growth and facility demand at Sandra Day O'Connor and Boulder Creek High Schools

Reference Materials

- CTE Programming Snapshot
- CTE Partnerships
- CTE Funding Streams
- CTE Enhancement Projects
- CTE Program Opportunities
- CTE Unified District Comparison (within West-MEC)
- Program Information Cards



CTE PROGRAMMING SNAPSHOT



Mission and Core Values

District Mission:

It is our mission to provide extraordinary educational opportunities to every learner.

CTE Mission:

Empower students to develop leadership, academic, and technical skills needed in the global economy for continuous learning and workforce success.

A traditional four-year college education of course remains an important pathway to success. But many modern middle-income jobs will require knowledge and skills obtainable through high school CTE classes and certification and associate's degree programs in community colleges. In some cases, these degrees and credentials provide access to jobs that pay well beyond a middle-class income.

- Morrison Institute for Public Policy

CTE Core Values:

Student Centered Excellence: CTE strives to serve students across the continuum of career readiness, providing students skills to enter the workforce upon high school graduation, advance skills through post-secondary trade schools and certificate or AA programs, and pursue Bachelor's degrees and beyond in the career field of their choice.

Managing for Innovation: Implement the Joint Technical Education District Satellite model with quality and fidelity to provide industry standard facilities, equipment and classroom instruction.

Societal Responsibility: CTE student leadership organizations serve their schools and communities through both service learning and enterprising experiences.

Focus on the Future: CTE strives to narrow the workforce skills gap to meet the needs of current and future industry demands.

**Information Based on Preliminary Survey of CTE Certified Staff and High School Principals*

J. Fitzpatrick 9/21/15



CTE PROGRAMMING SNAPSHOT



Potential Needs Identified for Expansion of CTE Opportunities

- Academic Credit within the CTE umbrella
- General Career Ready Classes (Career Connections, Employability Skills and Financial Literacy)
- Additional Staffing
- Expansion/Addition of Industry Standard Facilities
- Additional Computer/Technology Offerings – Coding and Programming
- Transportation between DVUSD Campuses and DVUSD Campuses /West-MEC Northeast
- Aligned Dual Enrollment Opportunities (** Dual enrollment is part of the Federal Perkins Programs of Study mandate*)
- Community Mentorships and Internships – Increased Promotion of Internship Program
- PLTW Stem Academy offering all PLTW programs and courses
- National Academy Foundation (*Umbrella Entrepreneurship Academy*)
- Additional Budget for industry standard supplies and equipment
- Promote the vision that CTE is not vocational education. CTE is for ALL students, both college and workforce bound.

**Information Based on Preliminary Survey of CTE Certified Staff and High School Principals*

J. Fitzpatrick 9/21/15



CTE Grant and West-MEC Funding Sources



Career & Technical Education
Empowering Success

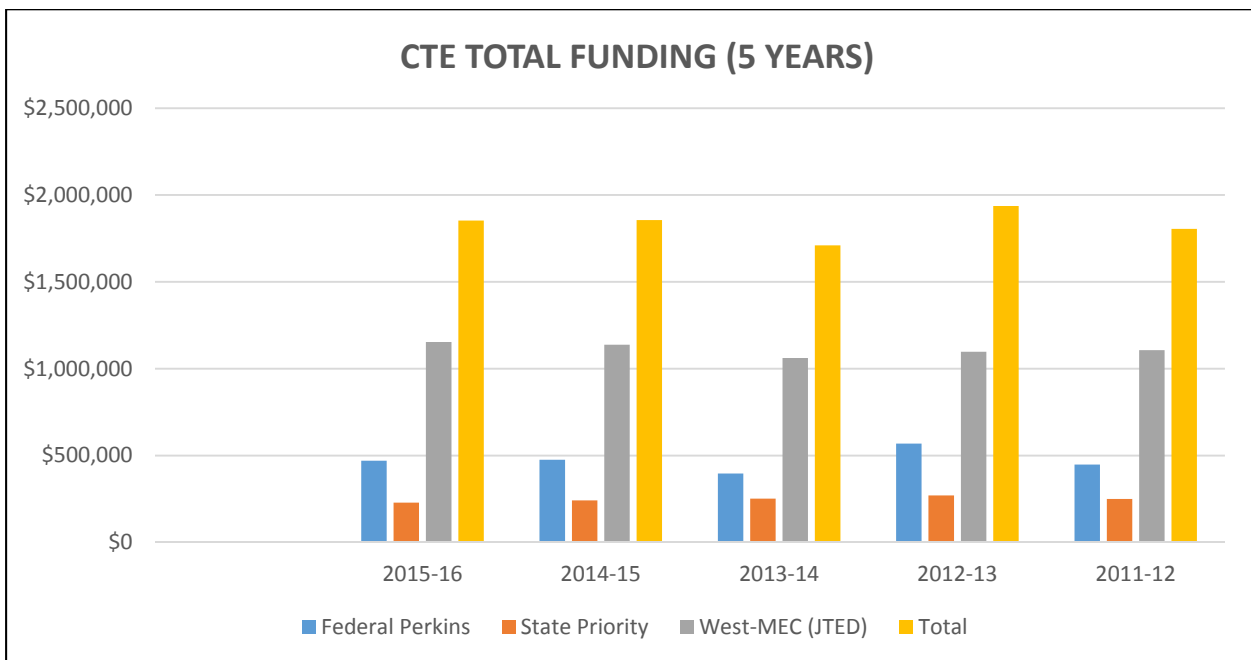
Federal Perkins Funding – The purpose of the Perkins IV Act is to develop more fully the college and career ready CTE programs for secondary and post-secondary students. The required and permissible use of funds by LEAs: Initiate, improve, expand, and modernize CTE including relevant and emerging technology.

State Priority Funding – The State Priority grant supports maintenance of effort funds that qualify Arizona for Federal Perkins funding. The two funding factors are 11th and 12th grade enrollment (based on eligible weighted count, varies annually) and related graduate placements (funding amount per placement varies annually).

West-MEC Joint Technological Education District (JTED) Funding – To provide Joint Technical Education courses, meeting criteria outlined in the IGA, operating under a satellite model with the Satellite (DVUSD) continuing to provide the instruction and facilities for these courses.

FY	School Year	Federal Perkins	State Priority <i>enrollment based</i>	West-MEC JTED <i>enrollment based</i>
2016	2015-16	\$470,008	\$228,757	\$1,154,136
2015	2014-15	\$475,919	\$242,049	\$1,137,739
2014	2013-14	\$396,620*	\$251,932	\$1,061,890
2013	2012-13	\$569,175	\$270,634	\$1,097,199
2012	2011-12	\$447,770	\$250,248	\$1,107,039

*Sequestration Year



Deer Valley Unified School District CTE Enhancement Projects*

CTE Preparation Years	High School	Project Dates		*Remodel of Existing Classrooms or Equipment Enhancements	Building Addition	CTE Programs
		Start	End			
2005 - 2007	BGHS	5/2007	11/2007	X		Enhance Culinary Arts facility, demonstration lab, and dining room to meet industry standards
2007 - 2009	DVHS	5/2009	8/2009	X		Enhance Nursing clinical lab to meet industry standards and add Hospitality lab
2009 - 2010	MRHS	5/2010	8/2010	X		Add new Engineering facility and enhance existing programs
2012-2013	MRHS	6/2013	10/2013	X		Enhance existing classroom to accommodate Engineering Production Lab
2010 - 2011	BGHS	5/2011	8/2011	X		Enhance all CTE program facilities to meet industry standards
2010 - 2011	DVHS	5/2011	8/2011	X		Enhance CTE program facilities to meet industry standards (except Nursing & Hospitality)
2012 - 2013	BCHS	5/2013	12/2013		X	Building addition for Aerospace Engineering/ Media Production
2013-2014 2013-2014	SOHS	5/2014	1/2015	X	X	Enhance Interior Design and Media to meet industry standards; Add Sports Medicine lab and classrooms.
2014-2015	BCHS	8/2015	Pending	X		Enhance CTE Engineering program through addition of laser Engraving equipment for SBE
2014-2015	SOHS	8/2015	Pending	X		Enhance CTE Graphic Design program through addition of Inkjet Apparel Printer for SBE

*Enhancement projects include CTE building additions, remodeling of classrooms and labs to industry standard, and addition of industry standard furniture and capital equipment.

Barry Goldwater High School

Converting large classroom to Culinary Arts demonstration lab

Modernizing Student Store – new front windows, display millwork

New Architectural Drafting Lab

Enhancing CTE Programs – Marketing, Information Technology, Graphic Design, Media Productions

Boulder Creek High School

Building addition to accommodate:
Aerospace Engineering classroom and lab facility

Media Productions Classroom and Studio to meet industry standards

Convert existing Media Productions Lab to Graphic Design Lab

Deer Valley High School

Converting existing Graphic Design Lab to Media Production Lab with Studio

Adding new Information Technology Lab to accommodate new program

Enhancing CTE Programs – Marketing, Graphic Design, Nursing

PENDING: 2016-17 – Project Lead the Way Computer Science program in existing CTE Lab

Mountain Ridge High School

Converting existing classrooms to new Engineering classroom/lab to accommodate new program

Enhancing existing classroom to accommodate Engineering Production Lab

Enhancing CTE Programs – Marketing, Graphic Design, Information Technology

PENDING– 2016 – Media Productions Remodel to accommodate Lab and Studio

Sandra Day O'Connor High School

Building Addition for Sports Medicine

Enhance Media Production and Interior Design to meet industry standards



CTE PROGRAM OPPORTUNITIES

DVUSD, West-MEC and Metro-Tech



Metro Tech - PUHSD
(Not a JTED member)

CTE Program

Trade/Industrial Focus

Academic Focus

Programs below offer industry certification, licensure, credentials, and/or an industry validated skills transcript.

Programs below offer Dual enrollment credit, honors credit, academic credit, or industry requires a degree.

CTE Program	Trade/Industrial Focus	Academic Focus	Barry Goldwater HS	Boulder Creek HS	Deer Valley HS	Mountain Ridge HS	O'Connor HS	West-MEC Northeast (within DVUSD Boundaries)	West-MEC Other	Metro Tech - PUHSD (Not a JTED member)
Accounting	X	X								
Aesthetician	X									
Architectural Drafting	X	X								
Automotive Collision	X									
Automotive Technology	X									
Aviation Maintenance Technology	X									
Avionics	X									
Banking and Finance		X								
Biomedical Science										
Business Management & Administrative Services		X								
Business Operations	X	X								
Climate Control Technician	X									
Cosmetology	X									
Culinary Arts*	X									
Early Childhood Education	X	X								
Education Professions	X	X								
EMT	X	X								
Engineering	X	X								
Entertainment Marketing		X								
Entrepreneurship		X								
Fashion	X									
Fire Science	X	X								
General Construction Technology	X									
Graphic Design	X	X								
Hospitality Management	X									
Information Technology	X	X								
Interior Architectural Design	X									
Law Enforcement	X									
Media Productions (Film & TV)	X	X								
Medical Assisting	X									
Medium Heavy Diesel Technology	X									
Nursing	X									
Pharmacy Technician	X									
Precision Manufacturing	X									
Software Development/Coding		X								
Sports Medicine	X	X								
Technical Theater	X									
Veterinary Sciences	X									

DVUSD CTE Programs offered in grades 9-12 in most programs

West-MEC CTE Programs offered to 11th and 12th graders

Metro Tech - Offers Career and Technical Exploration Course to all 9th graders

Metro Tech - Offers Metro Career Connections (MCC) Course to all 10th graders

Metro Tech CTE Programs offered to 11th and 12th graders

All Career pathways represented at DVUSD except for Environmental and Agricultural Systems due to program demand. 2016-17 availability at West-MEC Southwest campus.

*DVUSD Culinary Arts offers an after school entry level job training program for Special Needs students since 2012



CTE SATELLITE PROGRAM COMPARISON - UNIFIED DISTRICTS

CTE Program	Deer Valley Unified School District	Paradise Valley Unified School District	Peoria Unified School District
Accounting	Green	Yellow	Blue
Agriscience	Green	Yellow	Blue
Architectural Drafting	Green	Yellow	Blue
Automotive Technology	Green/Orange	Yellow/Orange	Blue/Orange
Bioscience	Green	Yellow	Blue
Business Management & Administration	Green	Yellow	Blue
Business Operations	Green	Yellow	Blue
Computer Maintenance	Green	Yellow	Blue
Construction Technologies/Building Trades	Green/Orange	Yellow/Orange	Blue/Orange
Culinary Arts	Green	Yellow	Blue
Desktop Publishing/Photojournalism	Green	Yellow	Blue
Early Childhood Education	Green	Yellow	Blue
Education Professions	Green	Yellow	Blue
Engineering	Green	Yellow	Blue
Entertainment Marketing	Green	Yellow	Blue
Entrepreneurship/Marketing	Green	Yellow	Blue
Fashion Design and Merchandising	Green	Yellow	Blue
Financial Services	Green	Yellow	Blue
Fire Science	Orange	Orange	Blue/Orange
Forensics/Law & Public Safety	Green	Yellow	Blue
Graphic Design	Green	Yellow	Blue
Hospitality Management	Green	Yellow	Blue
Information Technology	Green	Yellow	Blue
Interior Design and Merchandising	Green	Yellow	Blue
JROTC	Green	Yellow	Blue
Magazine Production	Green	Yellow	Blue
Medical Assisting	Green/Orange	Orange	Blue/Orange
Multimedia/ Film&TV Production	Green	Yellow	Blue
Networking	Green	Yellow	Blue
Nursing	Green	Yellow	Blue
Photography/Digital	Green	Yellow	Blue
Software Development/Programming	Green/Orange	Yellow	Blue/Orange
Sound Engineering	Green	Yellow	Blue
Sports Medicine and Rehabilitative Services	Green	Yellow	Blue
Technical Theater	Green	Yellow	Blue
Welding Technology	Green/Orange	Yellow/Orange	Blue/Orange

20 Programs District-Wide

21 Programs District-Wide

22 Programs District-Wide

Individual High School Program Numbers based on Total Quality Indicators Site Visits 2013-2015

Legend	
	DVUSD Satellite Program
	PVUSD Satellite Program
	PUSD Satellite Program
	West-MEC Central Program

Barry Goldwater HS	7 programs	Horizon HS	5 programs	Cactus HS	11 programs
Boulder Creek HS	8 Programs	North Canyon HS	10 programs	Centennial HS	13 programs
Deer Valley HS	8 Programs	HS (Star Tech and Crest)	18 programs	Ironwood HS	11 programs
Mountain Ridge HS	8 Programs	Pinnacle HS	6 programs	RS Kellis HS	10 programs
Sandra Day O'Connor HS	8 Programs	Shadow Mountain HS	5 programs	Liberty HS	12 programs
				Peoria HS	12 programs
				Sunrise Mountain HS	11 programs

*Crest houses 3 programs
Transportation to PVHS is provided*

*Transportation is determined at each site
CTE Graduation endorsements offered*

CTE Partnerships



Business and Industry Partnerships

Businesses listed below have worked with CTE Programs on an ongoing basis in the capacity of providing work-based learning opportunities, advisory council service, recruitment into the field opportunities and as classroom speakers and mentors.

Abrazo Health –Arrowhead Hospital
Aioli Burger
Arizona First Things First
BSB Design
Discover Card
DLR Group
Goodwill
Pono Construction

T-GEN
The Gardens at Sun City (Long Term Care Facility)
Theater Works
Treasures Jewelers
Vistar
Vivid CGD
W.L. Gore Engineering

Education Partnerships

Institutions listed below have partnered with CTE programs to provide dual enrollment opportunities, post-secondary validated and recognized curriculum, training opportunities, recruitment opportunities, and professional development for educators and students.

C-CAP
Embry Riddle University
Glendale Community College
Grand Canyon University
Maricopa Workforce Connections
Project Lead the Way
Rio Salado College
West-MEC

Community

Community members below have made significant advisory council contributions to CTE Programs including program recommendations from industry, classroom mentoring, and work with student organizations and enterprises.

Joe Banko, Engineer
Rafal Chudzik, Biomedical Engineer
Vicki Foster, Engineer, Cal Poly
Cindy Rosbrook, Event Planner