



**Washoe County
School District**

***Signatures* & CTE**

EDUCATION FOR THE FUTURE

College and Career Readiness: The Role of Signature Academies & CTE

Legislative Committee on Education
April 24, 2014

EXHIBIT E - COMM COLLEGESACADWORK
Document consists of 36 pages.
Entire exhibit provided.
Meeting Date: 04-24-14

Objective 1

Identify the connection between Signature Academy & CTE programs and dual credit opportunities, STEM education, and advanced placement

Objective 2

Understand how Signature Academy & CTE programs in WCSD prepare students for seamless transition to positive postsecondary options



COLLEGE AND CAREER READINESS

WHAT DOES IT MEAN?

- Adaptation and coping skills, including learning, self and environmental exploration, decision-making, and planfulness (*Savickas, 1997*)
- Ready to manage the increased pace of coursework, collaborate to solve problems, apply skills as independent, self-reliant learners...which includes draw inferences, interpret results, analyze documents, support arguments with evidence, and think deeply about concepts (*Conley, 2007*)
- Global awareness, along with the ability to think, learn, work, solve problems, collaborate, communicate, analyze and contribute effectively (*Partnership for 21st Century Skills, 2009*)
- Capacity to think, understand, investigate, innovate (*Reich, 2010*)
- Think critically, communicate, collaborate, and bring creative ideas
- (*American Manufacturing Association, 2010*)
- Demonstrated proficiency in digital literacy, cultural competency, critical thinking, teamwork, problem solving, communication, and technical skills; demonstrate qualities such as adaptability, personal responsibility, intellectual curiosity, perseverance, diverse perspective, and a strong work ethic
(*Nevada College and Career Readiness Task Force Final Report, 2012*)



ACHIEVING "READINESS"

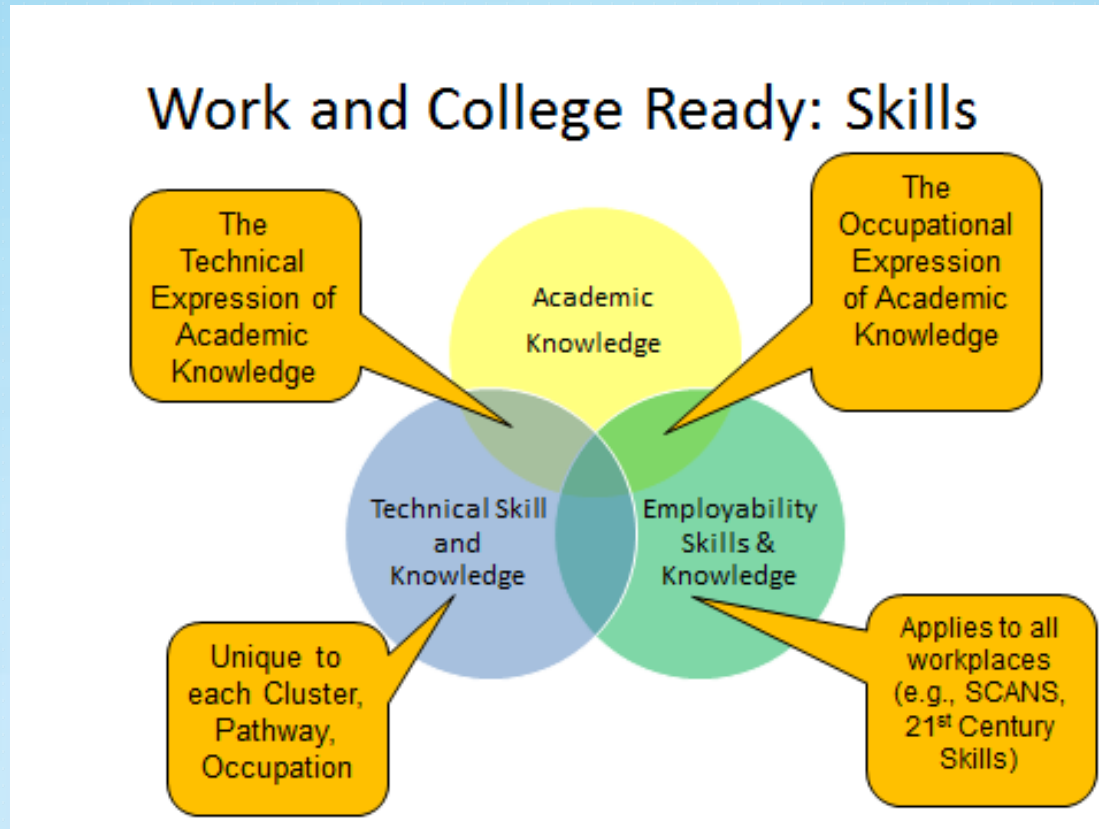
“requires that we establish the common ground between secondary and postsecondary education and between "work" and "school." Neither the American economy nor the American workforce can prosper in an environment that treats "schooling," "higher education," and "training" as separate even if equal entities.”

Reich, R. (1994). Creating new pathways to the middle class. *On Common Ground*, 3.



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ACHIEVING "READINESS"



Stone, J. (2011) *College and career ready: A conceptual framework for increasing engagement, achievement and transition*. Paper presented at the Education and Employers Taskforce Research Conference 2011, Warwick, UK.

CAREER & TECHNICAL EDUCATION

Carl D. Perkins Act, 2006 Reauthorization

- Improved the academic rigor of CTE by requiring integration of strong academics with demanding technical education and work-based learning opportunities for better student outcomes
- Emphasized the connection between secondary and postsecondary through sequenced programs of study (POS) that provide a structured pathway into postsecondary education and career

CAREER & TECHNICAL EDUCATION

CTE programs “prepare students to enter the workforce with the academic and vocational skills needed to compete successfully in the job market.”

Arizona Department of Education, CTE Division

Students who participate in high-quality CTE programs featuring a strong element of core academic content and career education have better learning outcomes, higher academic achievement and greater persistence in postsecondary education.

James R. Stone III and Morgan V. Lewis, College and Career Ready in the 21st Century – Making High School Matter, Teachers College Press, NY, 2012

Eighty percent of students taking a college preparatory academic curriculum with rigorous CTE met college and career readiness goals, compared to only 63 percent of students taking the same academic core who did not experience rigorous CTE.

Southern Regional Education Board, High Schools That Work 2012 Assessment

CTE plays a vital role in helping American business address the shortage of qualified workers, particularly in the areas of trade workers, engineers and IT staff, by building a competitive workforce for the 21st century.

Deloitte and The Manufacturing Institute, Boiling Point? The Skills Gap in U.S. Manufacturing, 2011; Manpower Group, Talent Shortage Survey Results, 2012.



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WCSD STRATEGIC PLAN

Goal 1

Provide Continuous **Academic Success** for Every Student

- **Objective 1.1** *Provide Rigorous, Relevant Curriculum*

1.1.1 Curricula will focus on content and skills, integrated cross-disciplinary expectations, and performance-based studies to meet the needs of 21st century learners

1.1.6 Provide more opportunities for students to participate in rigorous, relevant curriculum and enrichment programs

1.1.7 Signature programs will offer academic and career/technology choices for students among various high schools that focus on specialized, engaged student learning



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WCSD STRATEGIC PLAN

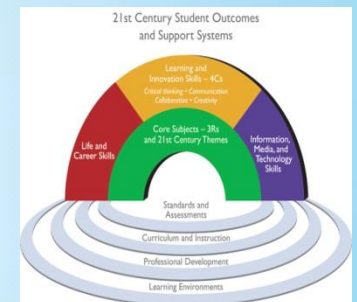
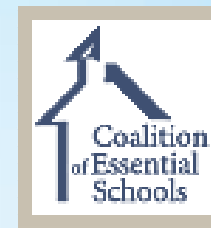
Goal 3

Engage Families and Community Partners

- **Objective 3.3** *Strengthen Strategic Community Partnerships*
 - 3.3.6 Partnership with higher education and Pre-K-12 communities will provide collaboration on strategies to ensure seamless transitions between institutions, a successful Pre-K to 16 pathway for academic success, and professional development partnerships.*

CTE & CAREER ACADEMIES

- Supported through a National agenda
- Identified outcomes in current educational research
- Connected to curriculum, community, and higher education



SUPERINTENDENT'S ACTION PLAN

Goal 1

Ensure that each high school has at least one Signature Academy open for fall 2013-14

Goal 2

Create articulation agreements between each Signature Academy and UNR or TMCC so that high schools are aligned directly into higher education



DEFINING A SIGNATURE ACADEMY

*A stylized curricular approach
that is unique to a school,
reflecting both the
schools' identity (culture) and intent.*



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PURPOSE & INTENT

- ▶ Provide rigorous, stimulating curriculum that engages and motivates students
- ▶ Provide opportunities for students to acquire and practice 21st century skills
- ▶ Prepare students for success in college and high-skill careers without the need for remediation



EXPECTED OUTCOMES

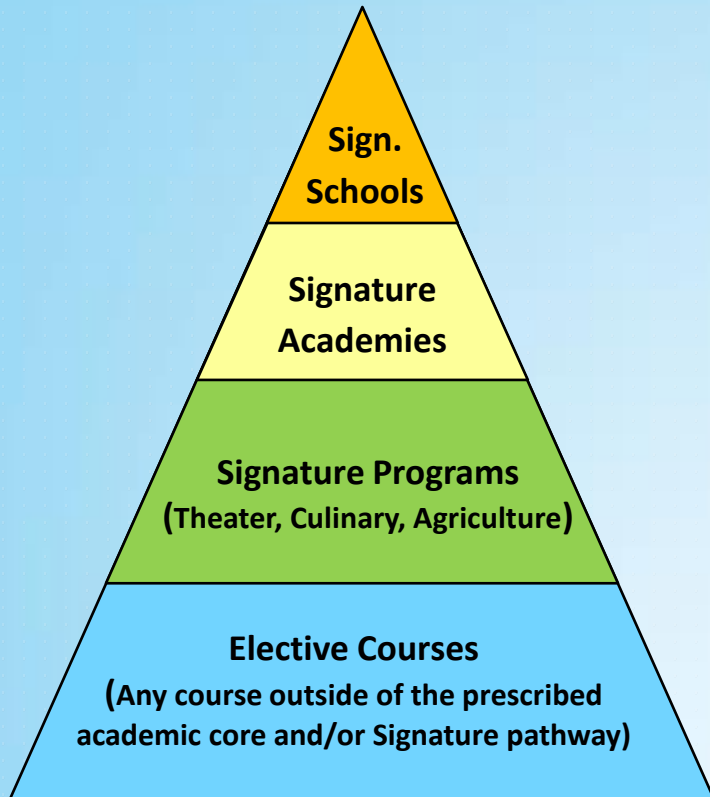
ALIGNED TO THE WCSD STRATEGIC PLAN

- ▶ Increased focus on literacy and numeracy through integrated cross-disciplinary and performance based study (1.1.1)
- ▶ Increased percentage of students earning CTE/AP/IB credits; concurrent college credit; and completing a 3- or 4-year sequence of courses leading to a postsecondary pathway (1.1.2)
- ▶ Increased opportunities for students to participate in rigorous, relevant curriculum (1.1.6, 1.1.7)
- ▶ Increased number of highly skilled teachers in non-traditional fields of study (2.2.1, 2.2.6)
- ▶ Increased participation of business, community and postsecondary education partners (3.3.1, 3.3.2)
- ▶ Increased enrollment and retention in postsecondary educational or highly skilled career programs (3.3.6)

MEASURES OF SUCCESS

- ▶ Maintaining program enrollment (thru completion)
- ▶ Academic success – GPA, HSPE performance, graduation rate, advanced/honors diplomas
 - ▶ Technical success – completion exams, dual credit
- ▶ Postsecondary enrollment/persistence and job placement

SIGNATURE STRUCTURE



Signature School: Comprehensive high school in which all students are enrolled in one or more Signature Programs through pathway completion.

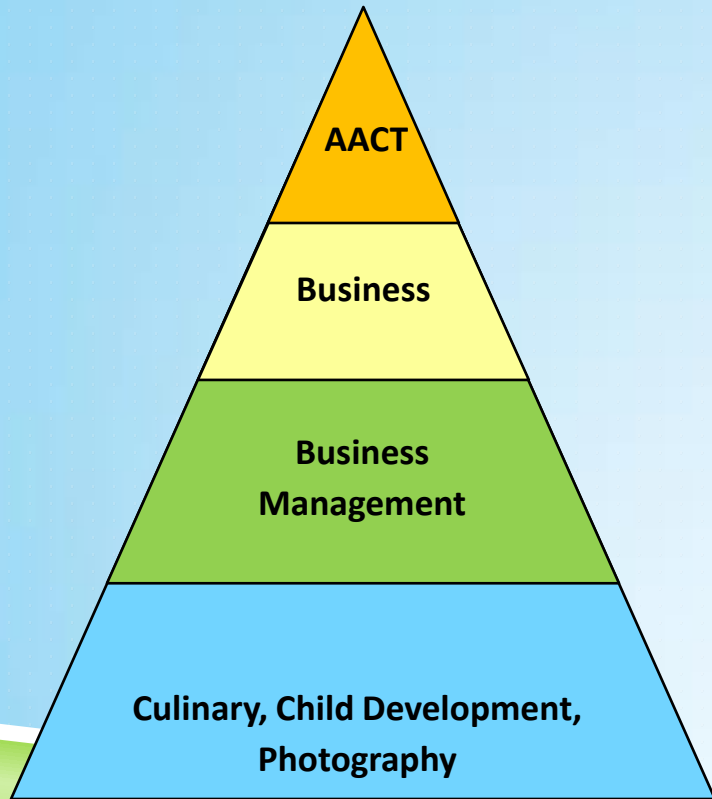
Signature Academy: One or more Signature Programs within in a school in which some of the student population of the school is enrolled through pathway completion.

Signature Program: A curricular pathway within a Signature Academy that has a specific focus or unique theme that meets a set of articulated goals.

Elective: Classes offered at the high school level that engage students in coursework with a specific focus for the purpose of enrichment.

INSTRUCTIONAL PROGRAMS & LEARNING METHODOLOGIES

Example: Signature School



Signature School: Academy of Arts, Careers & Technology

Signature Academies (7): Business, Communication Arts, Culinary & Hospitality, Education, Engineering, Medical Careers, Natural Resources & Animal Science

Example Academy: Business

Signature Program: Business Management

Pathway = Principles of Business & Marketing
Business Management I
Business Management II
Business Management Adv. Studies

Electives: Any other coursework that is not considered “core” and is not required for the pathway



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INSTRUCTIONAL PROGRAMS & LEARNING METHODOLOGIES

Example: Signature Academy

Signature Academy: Reno High Red House Project

Signature Program: Graphic Design

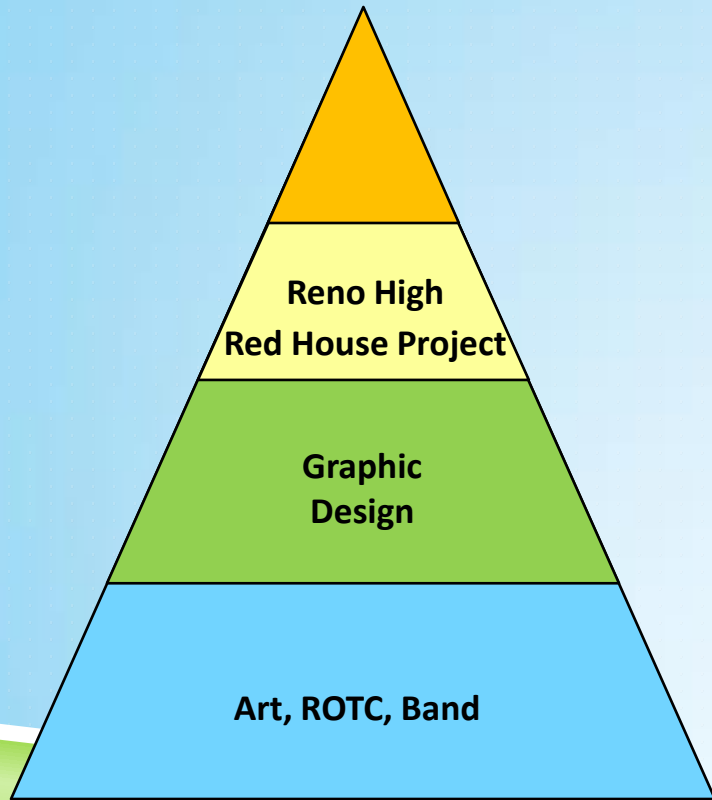
Pathway = Graphic Design I

Graphic Design II

Graphic Design III

Graphic Design Adv. Studies

Electives: Any other coursework that is not considered “core” and is not required for the pathway



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CURRENT SIGNATURE SCHOOLS & ACADEMIES

- ▶ **AACT Signature High School** – 7 Academies – *Business, Communication Arts, Culinary & Hospitality, Education, Engineering, Medical Careers, Natural Resources & Animal Science*
- ▶ **Damonte Ranch Performing Arts Center (PAC):**
Theater, Instrumental Music, Choir
- ▶ **Galena STEM Academy:** Project Lead the Way, Aeronautical Engineering
 - ▶ **Hug Health Sciences Academy:**
Medicine and Human Services
 - ▶ **McQueen Global Studies Academy:**
Language Studies, International Relations
- ▶ **North Valleys Center for Agricultural Science & Engineering (CASE):** Agricultural Engineering, Ag Business Systems

CURRENT SIGNATURE SCHOOLS & ACADEMIES

- ▶ **Reed *Enterprise Project*:**

Biomedical, Civil & Environmental Engineering, Culinary

- ▶ **Reno *Red House Project*:**

Video Production, Graphic & Web Design

- ▶ **Spanish Springs *C3Media Academy*:**

Video Production, Graphic & Web Design

- ▶ **Sparks *Information Technology Academy*:**

Microsoft IT

- ▶ **Wooster Signature High School *International Baccalaureate*:**

Diploma, Certificate, and
Career-related Certificate (Energy Technology)

ENROLLMENT GOALS

- ▶ 75% of Academy openings for zoned school students
- ▶ 25% of Academy openings for variance students

5-Year Goal Enrollment Goal

- ▶ 25-30% of school population participating in Academy



INSTRUCTIONAL COMPONENTS

- ▶ Project-based, real-world, applied learning opportunities
- ▶ Integration of academics in Signature coursework, including math, science, history and English,
- ▶ An associated work-based or extended/research study experience
- ▶ Active affiliations with co-curricular organizations or ancillary requirements that reinforce rigor, relevance and community networking through:
 - ▶ Involvement with business and industry or higher education
 - ▶ Organized and structured local, state and national competitions
 - ▶ Leadership training
 - ▶ Community service
- ▶ Focus on 21st Century skills acquisition and application
- ▶ Defined postsecondary pathway through 4-year university with associated college credit opportunities during high school
- ▶ Recommended supplemental core academic courses that include at least one AP or IB course
- ▶ Standards based curricula and instruction
- ▶ Assessment tools and systematic methods for gathering annual student performance data

SAMPLE SIGNATURE PROGRAM

Reed High School Civil & Environmental Engineering Program of Study

	English	Math	Social Stud	Science	Academy	Academy	Academy
9 th	English 1-2 English 1-2 (H)	Algebra Geometry Frml Geometry Algebra 2	PE	Biology Biology (H)	Health AND (.5) elective	Metals I or Auto I	CADD I
10 th	English 3-4 English 3-4 (H)		W. History W. History (H)	Chemistry Chemistry (H)	PE	Metals I or Auto I	Renewable Energy Tech (RET) I
11 th	English 5-6 AP English 5-6	Alg 2 Prob/Stats Trig/Pre-Calc	U.S. History AP U.S. Hist.	Physics AP Physics AP Enviro	Auto II & Lab Or Metals II & Weld I (concurrent)		Pre-Engineering
12 th	English 7-8 AP English 7-8 Early College	Prob/Stats Trig/Pre-Calc AP Calculus Early College	Government AP Gov't		Auto III & Lab Or Metals III & Advanced Studies		Auto AS, Work Exp., RET II or ENG 100 (@ TMCC/UNR – Dual Credit)



COMMUNITY ENGAGEMENT

Signatures must have a goal of working successfully with parents, community, businesses, and postsecondary education.

- ▶ Adopt marketable, brand-able Academy names that reflect the unique nature of the associated programs and the postsecondary pathway
- ▶ Maximize the appeal and attractiveness of the facilities associated with the Academy to communicate credibility and district commitment
- ▶ Manage and maintain strong, purposeful advisory committees for Signature and CTE pathways
- ▶ Develop strong connections with postsecondary to ensure seamless transitions from high school
- ▶ Better utilize existing system of internships to engage more employers



FOUNDATION FOR SUCCESS OF SIGNATURES & CTE



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NDE CTE STRUCTURE

- ▶ CTE State Catalog with Course Sequences
- ▶ Standards for all courses – developed collaboratively
- ▶ Employability (21st Century) skills are embedded
- ▶ Competency is measured against national measures (CTECS)
 - ▶ Technical skills
 - ▶ Employability

WCSD ADVISORY COMMITTEES

- ▶ Council for Career & Technical Education & 7 Subcommittees
 - ▶ Purpose
 - ▶ Provide guidance for programs and curriculum; evaluate effectiveness
 - ▶ Promote, gain support for, and connect Signatures/CTE with the community
 - ▶ Identify and provides resources to support programs
 - ▶ Provide insight for problems presented by the district
 - ▶ 2013-14 Annual Goals:
 - ▶ Improve student achievement on employability skills assessments through active involvement with schools, teachers & students
 - ▶ Promote Signatures & CTE in the community
 - ▶ Employability Matrix Project
 - ▶ Aligning Nevada Employability Skills for Career Readiness standards to needs of employers to create a classroom tool for students and teachers
 - ▶ Over 100 educators, students and industry representatives from all sectors provided input and feedback



TECH PREP, DUAL CREDIT, AND ADVANCED PLACEMENT COURSES

- ▶ **Tech Prep: Advanced Technical College Credit**
 - ▶ Restructuring - in process at the NDE and TMCC
 - ▶ Rebranding name – call it what it is
 - ▶ Reviving importance – in the WCSD Pathway to Graduation alongside AP & IB credits
- ▶ **Dual Credit Transition Courses**
 - ▶ Identifying courses for certifications and degree programs
 - ▶ Creating accessibility
 - ▶ Supporting student success
- ▶ **Advanced Placement Academic Courses**
 - ▶ AP and IB courses identified and recommended for all Signature Academy programs



TEACHER PROFESSIONAL DEVELOPMENT

- ▶ Teaching to standards
- ▶ Aligning instruction with CCSS, Employability, Articulation Agreements
- ▶ Common expectations across the district
- ▶ Monthly professional development for all
- ▶ Professional Learning Communities that include postsecondary & industry
- ▶ Collaboration with industry experts and postsecondary professors



WCSD IMPLEMENTATION PROGRESS



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SUPERINTENDENT'S ACTION PLAN

Goal 1

Ensure that each high school has at least one
Signature Academy open for fall 2013-14

Outcome, 2013-14:

Signature Academies in 9 Comprehensive High Schools

Two Signature Academy Schools (one CTA, one full IB)



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SUPERINTENDENT'S ACTION PLAN

Goal 2

Create articulation agreements between each Signature Academy and UNR or TMCC so that high schools are aligned directly into higher education

Outcomes, 2013-14:

- Seventeen (17) of 20 CTE completion pathways are associated with 6-20 Tech Prep articulated college credits
- Remaining 3 CTE completion pathways have been aligned with postsecondary and articulation agreements are in process
- Non-CTE completion pathways are being examined for possible articulation
- College transition courses to certification and/or degree programs have been identified for three of the six state programs areas (Health, Skilled & Technical, IT & Media)



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ENROLLMENT DATA

▶ **Signature Academy Enrollment**

- ▶ 2013-14: 1823
- ▶ 2013-14 Projected: 2288 (25% increase)

▶ **CTE Enrollment, 2013-14: 7177**

▶ **CTE Students completing a Program of Study**

- ▶ 2012-13: 179
- ▶ 2013-14: 315 (78% increase)
- ▶ 2014-15, projected: 550



2013-14 SUCCESSES

- ▶ **First CTE concentrator to be recognized as a National Merit Scholarship finalist**
- ▶ **WCSD Culinary facility received accreditation from American Culinary Federation (ACF) and chef inducted into the ACF American Academy of Chefs**
- ▶ **First WCSD IB Career-related Certificate program approved**
- ▶ **Engineering students won first place in international NASA Human Exploration Rover Competition in Huntsville, Alabama**
- ▶ **Implementation of MOU between TMCC and WCSD for college professors to provide specific professional development for IT & Media teachers**
- ▶ **Signature/CTE Facility Improvement Completed, In Progress, and Planned**
 - ▶ Six schools completed renovations
 - ▶ Two schools currently in planning and construction phases of renovation
 - ▶ \$8.5 million approved for major upgrades to 5 schools
- ▶ **Over 425 students participated in co-curricular leadership and skills competitions**
 - ▶ 100 earned medals or recognition as the top 3 in their event,
 - ▶ 28 earned a first place win or gold medal
 - ▶ 3 students were elected as state officers in their student organization
- ▶ **KNPB will host a 30 minute discussing the value of CTE in strengthening the Nevada economy (Friday, April 25th)**



FOR MORE INFORMATION

Signatures & CTE Department

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