Career Tech Education
Program Recommendation

December 19, 2019

DJUSD

CTE CAREER TECHNICAL EDUCATION

DJUSD

Preparing Students for College & Careers
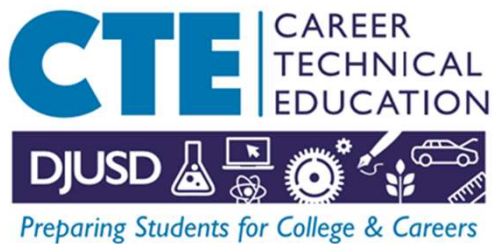
Our Approach

Coalition Building

Visioning

Program Development

Pathways Proposal

Implementation & Considerations

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Rationale

- Mission to *Ignite a Love of Learning and Prepare Students for an Evolving World*
- CA Dashboard Accountability - College and Career Readiness
- Available State Funding and Support
- Community Demand
- DJUSD Facilities Master Plan (CTE & STEM)
- Community Resources/Network (UC Davis, Chamber, Industry)
- Student Voice & Student Data

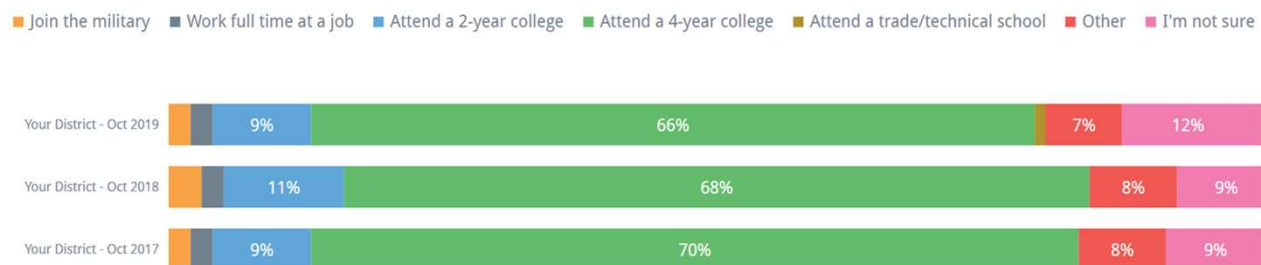## Rationale

DJUSD Career Readiness

- 67% College/Career Ready; 5% eligible through CTE Pathway Completion

College Completion Rates

- 46% of DJUSD students entering workforce without a college degree

Youthtruth: *"After you finish high school what do you expect to do next?"*

■ Join the military ■ Work full time at a job ■ Attend a 2-year college ■ Attend a 4-year college ■ Attend a trade/technical school ■ Other ■ I'm not sure

Your District - Oct 2019		9%	66%	7%	12%
Your District - Oct 2018		11%	68%	8%	9%
Your District - Oct 2017		9%	70%	8%	9%

Student Voice

YouthTruth: *"My school has helped me identify steps to have the career I want"*

Your District - Oct 2019	16%	27%	30%	21%	7%

YouthTruth: *"My school has helped me figure out which careers match my skills and abilities"*

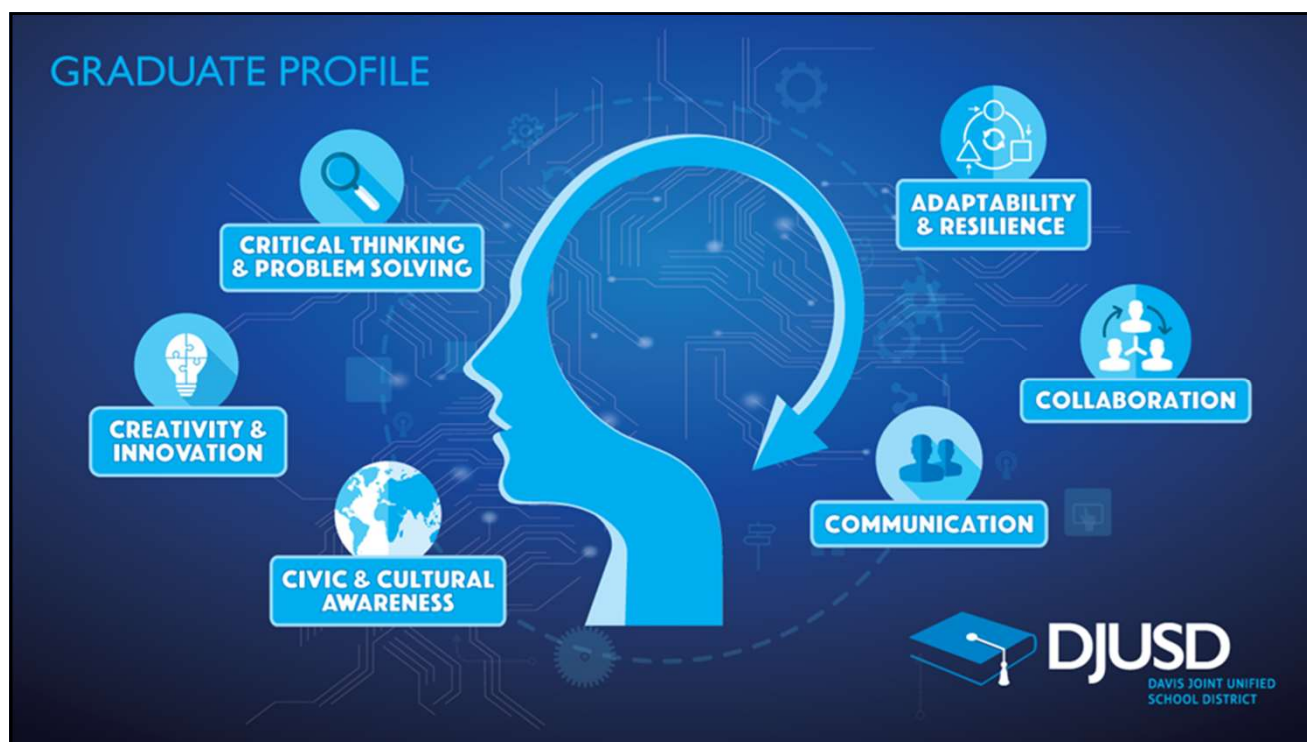| Your District - Oct 2019	14%	26%	31%	22%	7%

■ Strongly disagree ■ Disagree ■ Neither agree nor disagree ■ Agree ■ Strongly agree

2019 Student Focus Groups (109 Sophomores and Seniors)

"What one word would you use to describe school?"

1. Stressful
2. Competitive
3. Busy
4. Tiring
5. Boring

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3

Our Process

Board Presentations *(Nov. 1 2018; Feb. 21, 2019)*

Superintendent's CTE Advisory *(April 24, May 15, Sept. 4, Dec. 16)*

Community Town Hall *(Aug. 7)*

DSHS Staff, Counselors, Special Ed. Meetings

DVCA Stakeholder Outreach

King Program Research

CTE Staff Credentialing

Program & Economic Workforce Analysis

Course Development & Student Enrollment

Internship Expansion

CTE Facilities Design

BOE Recommendation *(Dec. 2019)*

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CTE Advisory Committee

Charge (February 21, 2019): Advise District staff on a recommendation for future Career Tech Education programming in DJUSD

- Develop a formal rationale for CTE programming
- Ideate Pathway opportunities
- Review data and community input
- Support prioritization of Pathway options

CTE Advisory Committee

- Students, DJUSD
- American Association of University Women
- Yolo County Office of Education
- Davis Chamber of Commerce
- Fouts Homes
- Land Based Learning
- 4H
- Kaiser Health
- Sacramento City College
- Board of Education, DJUSD
- Parents, DJUSD
- Teachers, DJUSD
- Counseling & Admin, DJUSD

- Sunpower
- Syngenta
- Toyota
- Yolo County Health & Human Services
- Adams Grain
- Pacific Livestock
- Davis Farm to School
- National Auto Sport Association
- Bayer Crop Science
- Transportation Services
- Travis Credit Union
- UC Davis (Human Resources, Engineering, Viticulture, Biological/Ag Engineering)


CTE Vision & Purpose

CTE Advisory Committee

Why: We believe all students, *particularly those who are furthest from opportunity,* should be able to engage in learning that is purposeful, aligned with their passions, and values their contributions.

How: By having hands-on opportunities for students to develop "real life skills," and develop themselves as authentic problem-solvers.

What: School structures and programs that include community connections, career pathways, and internships.

CTE Program Vision
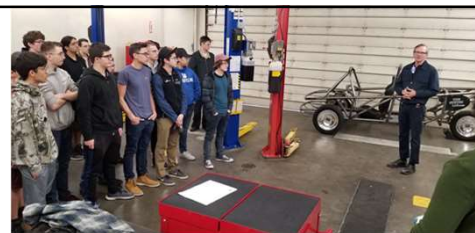
Guided by DJUSD's Graduate Profile

Pathway Model across Multiple Industry Sectors

Balance of Career and College Readiness Opportunities

Internships & Community Partnerships

Sustainable Program Structures (FTE, Schedule, Cost)

Program Design: Guiding Principles

Future Forward

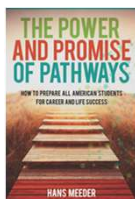**Community Demand**

Achievability

Future Forward: Workforce Analysis

Workforce - Annual Positions Open:
- Healthcare, IT, Education, Construction

Economic Development Priorities:
- Agriculture and Biotechnology
- Healthcare and Life Science
- Advanced Manufacturing

Future Forward: Regional Program Review

Comparative Analysis: Chico, Palo Alto, Rocklin, & Santa Barbara

Findings include: Robust CTE Offerings, emphasis on A-G completion, College & Career Readiness Plan, Career Exploration beginning in Middle Grades

Additional Regional Program Research

Rocklin USD	Woodland JUSD
Napa Valley USD	Winters JUSD
Elk Grove USD	Lindsay USD
Washington USD	Sanger USD
Fairfield Suisun USD	Yolo County Office of Education
Vacaville USD	

Community Demand - Town Hall

Community Demand - Student Interest

1	Health Science
2	Business/Finance
3	Arts/Media/Entertainment
4	Engineering/Architecture
5	Public Services

Achievability Factors - Program Ecosystem

- Staffing
- Facilities
- Master Schedules
- Opportunity Costs
- Credentialing
- Community Partnerships
- Student Scheduling Policies

- Resources Requirements
- Student Interest & Enrollment
- Depth vs. Breadth
- Sustainability
- Pathway Feeders
- Bell Schedules
- Graduation Requirements

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2020 Vision - Industry Sectors

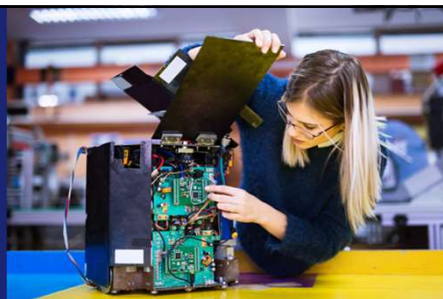|	Current Offerings	Industry Sectors
Enhance	- Agriculture - Automotive - Robotics	- Agriculture and Natural Resources - Transportation - Engineering & Architecture
Restructure	- Journalism & Art - Internet Engineering & Programming	- Arts, Media, Entertainment - Information & Communication Technologies
New		Health Science and Medical Technology

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2020 Vision - CTE Pathways Proposal

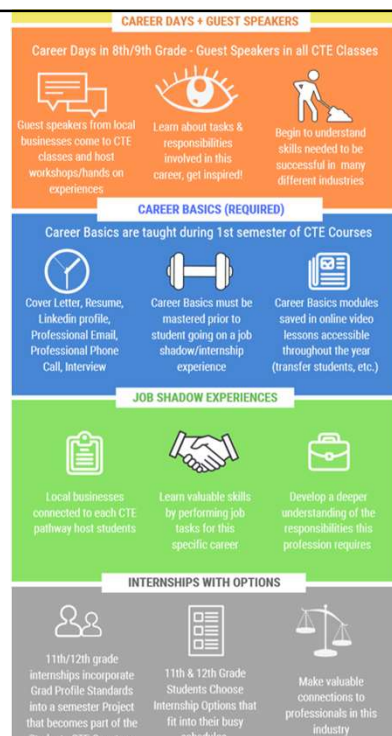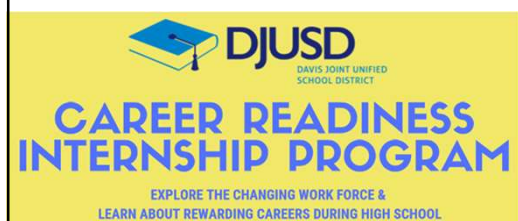| Industry Sector	DJUSD Pathways
Ag & Natural Resources	1. Animal Science 2. Agricultural Mechanics 3. AgriScience
Transportation	4. System Diagnostics, Service, Repair 5. Electric Vehicle Technology
Engineering & Architecture	6. Engineering Design (Robotics)
Arts, Media, Entertainment	7. Design, Media, & Visual Arts (Photography) 8. Design, Media, & Visual Arts (Film) 9. Design, Media, & Visual Arts (Graphic Design) 10. Design, Media, & Visual Arts (Journalism) 11. Design, Media, & Visual Arts (Digital Arts) **DVCA**
Information and Communication Technologies	12. Software & Systems Development (Computer Science) **DVCA** 13. Networking & Cyber Security
Health Sciences & Medical Technology	14. Patient Care

Pathway Descriptions

Industry Sector: Information and Communication Technologies
Pathway: Software and Systems Development
Sean Glantz (CTE credential)

Introductory Course: *Computer Science Discoveries*

Concentrator*: AP Computer Science Principles*

Capstone*: Project Invent*
[Pending BOE Approval]

Out of High School: web design computer and information systems manager, computer user support specialist, entrepreneur

Out of Program/Trade/Two year: full stack web development, digital marketing, information security analysis

Four year: software engineer, software developer, data analyst, systems developer

Industry Certifications: CompTIA IT Fundamentals, PCEP - Certified Entry-Level Python Programmer PCAP - Certified Associate in Python Programming

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Industry Sector: Health Science and Medical Technology
Pathway: Patient Care
Helke Farin (CTE Credentialed)

Introductory Course: *Principles of Biomedical Sciences*
[Pending BOE Approval]

Focus: *Human Body Systems*
[Pending BOE Approval (2021-22)]

Capstone: *Medical Interventions & Innovation*
[Pending BOE Approval (2022-23)]

Out of High School: medical transcriptionist, nursing assistant/orderly, home health aide, personal trainer

Out of Training Program/Trade/Two year: emergency medical technician licensed practical nurse, medical assistant, phlebotomist, laboratory technician, radiologic technician, paramedic

Four year/Four year plus: nurse practitioner, therapist, pharmacist, physician, optometrist, registered nurse, physician assistant

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Internship Program Features

1. Career Exploration Events
2. Career Basics Curriculum
3. Job Shadowing & Internships
4. Interest Aligned (Trades, Services)

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DAVIS JOINT UNIFIED SCHOOL DISTRICT
CAREER READINESS INTERNSHIP PROGRAM
EXPLORE THE CHANGING WORK FORCE &
LEARN ABOUT REWARDING CAREERS DURING HIGH SCHOOL

CAREER DAYS + GUEST SPEAKERS
Career Days in 8th/9th Grade · Guest Speakers in all CTE Classes

Guest speakers from local businesses come to CTE classes and host workshops/hands on experiences

Learn about tasks & responsibilities involved in this career, get inspired!

Begin to understand skills needed to be successful in many different industries

CAREER BASICS (REQUIRED)
Career Basics are taught during 1st semester of CTE Courses

Cover Letter, Resume, Linkedin profile, Professional Email, Professional Phone Call, Interview

Career Basics must be mastered prior to student going on a job shadow/internship experience

Career Basics modules saved in online video lessons accessible throughout the year (transfer students, etc.)

JOB SHADOW EXPERIENCES

Local businesses connected to each CTE pathway host students

Learn valuable skills by performing job tasks for this specific career

Develop a deeper understanding of the responsibilities this profession requires

INTERNSHIPS WITH OPTIONS

11th/12th grade internships incorporate Grad Profile Standards into a semester Project that becomes part of the Students CTE Capstone

11th & 12th Grade Students Choose Internship Options that fit into their busy schedules

Make valuable connections to professionals in this industry

Implementation & Next Steps

	Spring 2020	Summer 2020	Fall 2020	Winter 2020 - 2021
Course Approvals & Catalogue	●———			●———————
Student Recruitment	●————		●——————————	
Master Scheduling		●——————————		
New Pathways Implementation			●——————————	
Professional Development	●——————————————————————————			
Elementary/JHS Feeder Planning		●—————————		
Standing DJUSD CTE Advisory	●		●	
Internship Expansion	●——————————————————————————			
Structure & Policy Review/Revision				●—————

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Recommendation

Adopt the six industry sectors and related pathway descriptions described in the presentation using the noted achievability factors to guide and sustain the CTE and Career Readiness Internship programs.