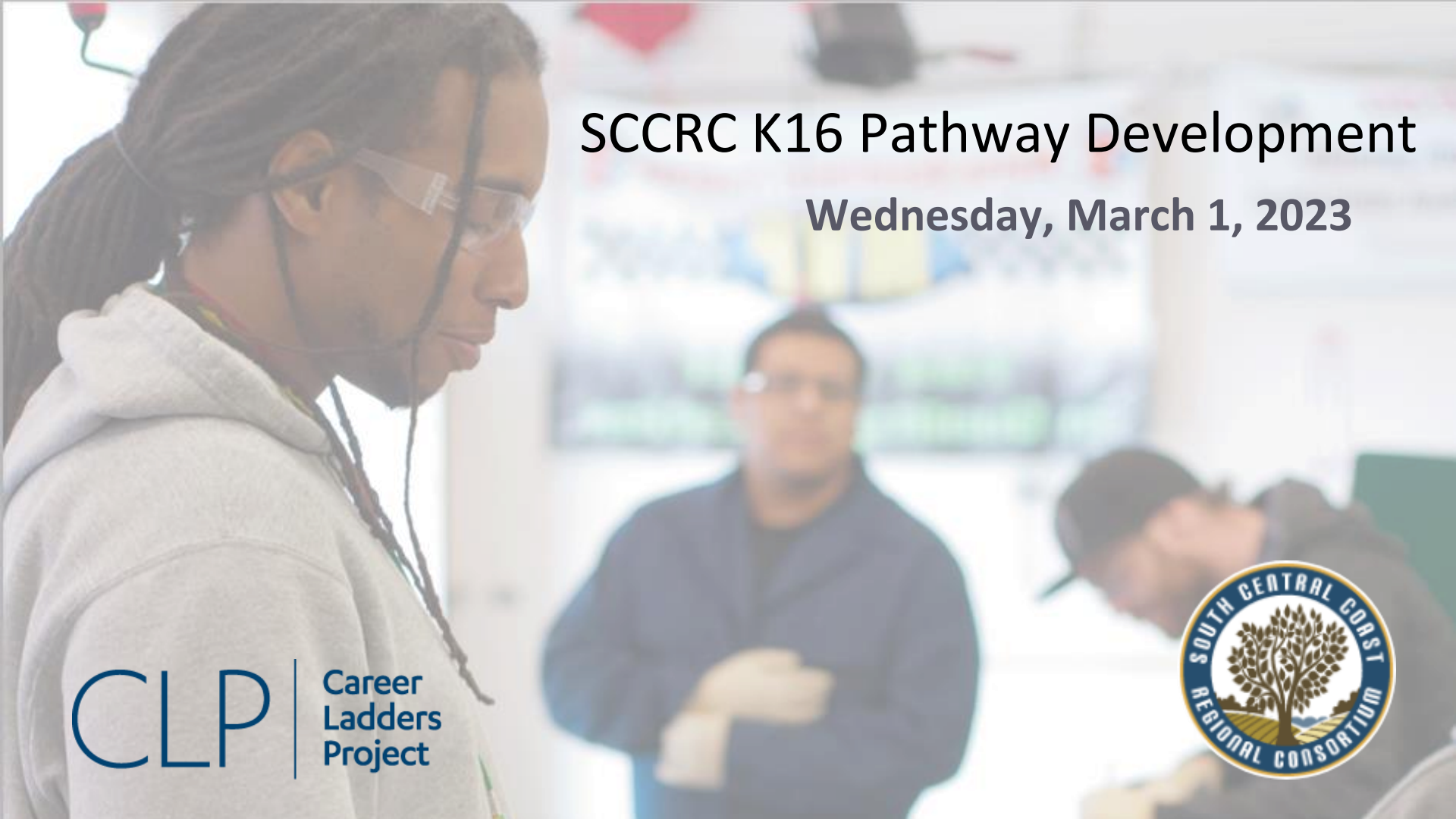

SCCRC K16 Pathway Development

Wednesday, March 1, 2023

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South Central Coast Regional Consortium

Career Ladders Project Team

Naomi Castro
Senior Director
Career Ladders Project

Sherry Shojaei
Director
Career Ladders Project

Eder Flores
Program Associate
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Welcome and Introductions

- Name & Institution
- Your first W-9 job

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Today's Agenda

- Welcome and Introductions
- High Impact Pathways
- Mapping Process
- Crowdsourcing Outreach
- Action Planning
- Policy Updates
- Next Steps

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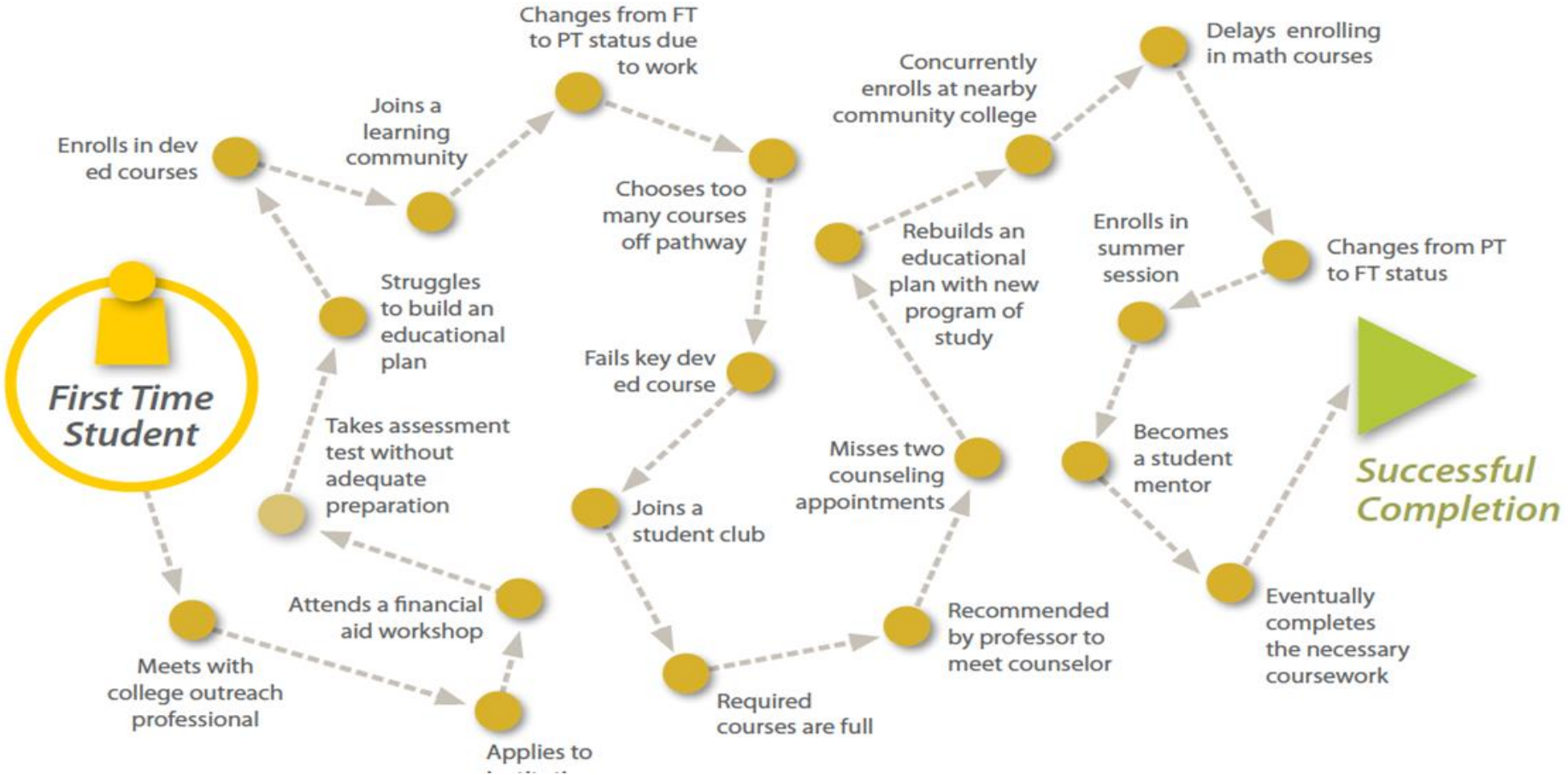
ConnectEd The California Center for College and Career

Student's experience of transition can vary…



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Students Want to Know

- What are my career options?
- What are the education paths to those careers?
- Are those careers in demand?
- Do those careers provide sustainable wages and social mobility?
- What will I need to take?

Source: Community College Research Center

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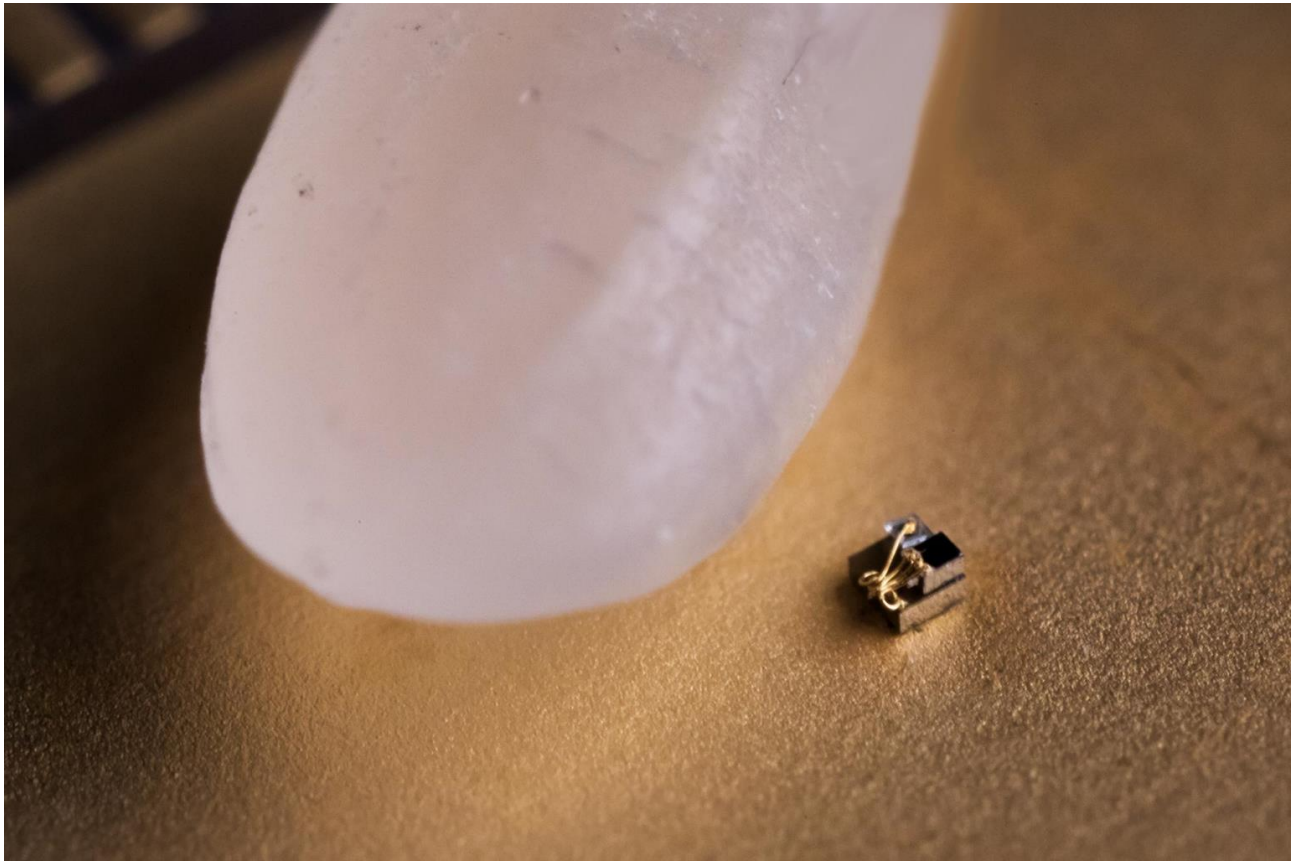

Source: University of Michigan, Michigan News, 2018

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THE ROBOTS ARE TAKING OVER!

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RETAIL ARMAGEDDON!

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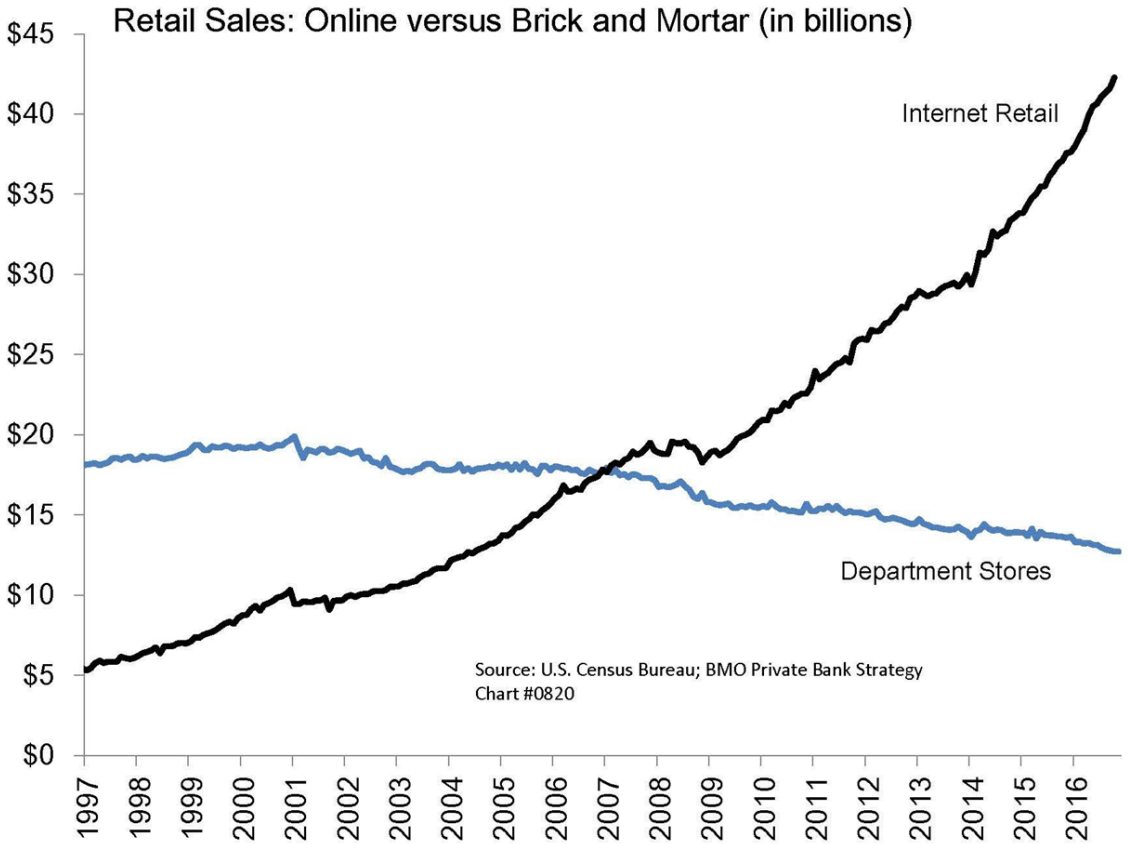

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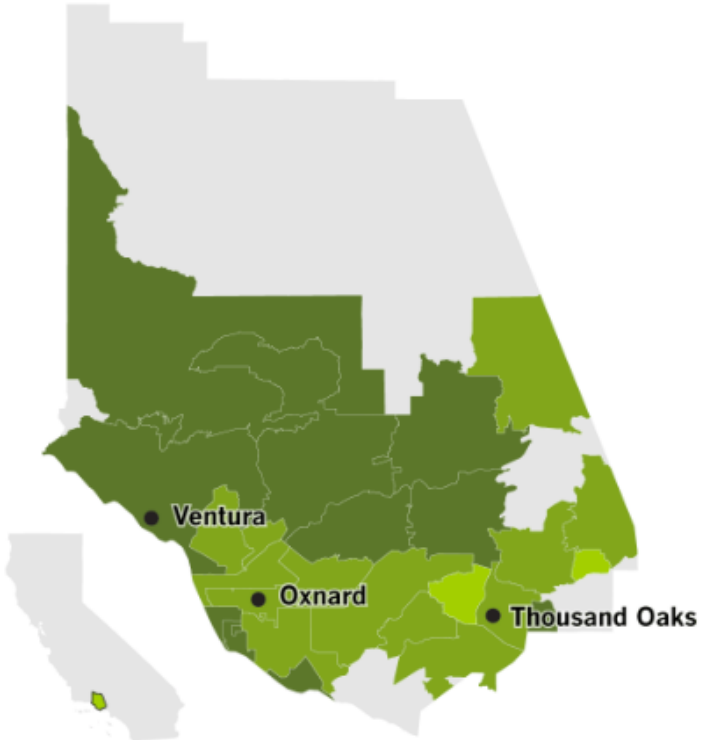
In the **Oxnard-Thousand Oaks-Ventura** area, approximately **60%** of jobs are at risk of automation by 2035.

Percent of jobs at risk of automation

< 50% | 50-55% | 55-60% | 60-65% | 65%+



Most at-risk jobs

- Bookkeeping, accounting and auditing clerks
- Cashiers
- Office clerks, general
- Secretaries and administrative assistants
- Waiters and waitresses

Least at-risk jobs

- First-line supervisors of mechanics, installers and repairers
- Physicians and surgeons
- Recreation workers
- Computer systems analysts
- Medical and health services managers

Source:The LA Times, The Next California, Part IV: Work, October 2018

One-third

of the U.S workforce could be out of a job by 2030

Source: McKinsey Global Institute, January 2017

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Chip Act

$280 billion in new funding to boost domestic research and manufacturing for semiconductors in the U.S.

Source: NPR, February 28, 2023

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Rethinking Education and Work

1. DEVELOP NON-COGNITIVE SKILLS

1. PROVIDE EXPERIENTIAL LEARNING OPPORTUNITIES

1. CREATE PATHWAYS THAT BUILD SKILLS & LEAD INTO NON REPETITIVE, IN-DEMAND JOBS

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Industry Certifications

- Certifications can provide a more precise screening tool to identify qualified talent

- Validating a clearly defined set of knowledge and skills

Source: Burning Glass, The Narrow Ladder

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Entry and Exit Points

DOOR OPENERS are certifications that create standardized access to entry-level jobs in an industry

CAREER ESCALATORS are certifications that help workers advance by validating the knowledge and skills of experienced workers

Source: Burning Glass, The Narrow Ladder - January 2017

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"Training centers and community colleges are likely to be the front-line defense against a changing labor landscape."

Source: :The LA Times, The Next California, Part IV: Work, October 2018

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Educators Want to Know

- What are industry sectors are in demand locally and regionally?
- What are the different salary wages within that pathway?
- Are those careers in demand?
- Do those careers provide sustainable wages and social mobility?
- How can we guide students towards these careers?

Source: Community College Research Center

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MAPPING CLP Career Ladders Project

Pathway(s): Advanced Manufacturing and Welding
Community College(s): College of the Canyons

LEGEND
★ Early College Credit Opportunities
*Aspirational

COLLEGE OF THE CANYONS

INDUSTRY CERTIFICATIONS

ADVANCED LEVEL
-NIMS Level 2

MID LEVEL
-NIMS
-American Welding Solciety AWS EG 3.0

ENTRY LEVEL
-NIMS
-FMA - Precision Sheet Metal Operator (PSMO)
-PMP(project management)

WORK BASED LEARNING

ADVANCED LEVEL

MID LEVEL

ENTRY LEVEL

BA/BS Degree/Transfer

- **B.S. Mechanical Engineering**
- **B.S. Electrical Engineering**
- **B.S. Industrial Engineering**

AA./A.S Degree/Transfer

AS - Welding Technology - Pipe Welding (30 units)
WELD-101A Introduction to Shielded Metal Arc Welding (2.5 units)
WELD-101B Intermediate Shielded Metal Arc Welding (2.5 units)
WELD-101C Advanced Shielded Metal Arc Welding (2.5 units)
WELD-104 Introduction to Gas Tungsten Arc Welding (2 units)
WELD-105 Advanced Gas Tungsten Arc Welding (2 units)
WELD-165 Pipe Welding Fundamentals (3 units)
CWE-188WELD Cooperative Work Experience Education (1 - 4 units)

AS - Welding Technology - Metal Fabricator/Welder (30 units)
WELD-092 Introduction to Metal Fabrication (2 units)
WELD-093 Intermediate Metal Fabrication (2 units)
WELD-094 Advanced Metal Fabrication (2 units)
WELD-101A Introduction to Shielded Metal Arc Welding (2.5 units)
WELD-104 Introduction to Gas Tungsten Arc Welding (2 units)
WELD-105 Advanced Gas Tungsten Arc Welding (2 units)
CWE-188WELD Cooperative Work Experience Education (1 - 4 units)

AS - Welding Technology - Industrial Welder (30 units)
WELD-120 Industrial Welding I (5 unit)
WELD-122 Industrial Welding II (5 units)
WELD-124 Industrial Welding III (5 units)
WELD-114A Introduction to Robotic Welding Automation (2.5 units)
WELD-114B Intermediate Robotic Welding Automation (2.5 units)
WELD-114C Advanced Robotic Welding Automation (2.5 units)

AS - Welding Technology - Laddered Specialization (30 units)
WELD-101A Introduction to Shielded Metal Arc Welding (2.5 units)
WELD-101B Intermediate Shielded Metal Arc Welding (2.5 units)
WELD-101C Advanced Shielded Metal Arc Welding (2.5 units)
WELD-114A Introduction to Robotic Welding Automation (2.5 units)
WELD-114B Intermediate Robotic Welding Automation (2.5 units)
WELD-114C Advanced Robotic Welding Automation (2.5 units)
Required Electives:
WELD-080 Non-Destructive Testing (3 units)
WELD-130 Welding Metallurgy (3 units)
WELD-132 Blueprint Reading for Welders and Fabricators (3 units)
MFGT-090 Measurements and Computations (3 units)
ENGL-094 Introduction to Technical Reading and Writing (3 units)
OR
ENGL-204 Technical Report Writing (3 units)
Recommended Electives:
WELD-096 Welding Certification and License Preparation (3 units)

General Education

Mid Level Certificate

Certificate of Specialization - Manufacturing Technology - Automated Machining (12 units)
MFGT-121 CNC 1: Operation and Manual Programming (3 units)
MFGT-122 CNC 2: Concepts and Programming (3 units)
MFGT-131 CAD/CAM I (3 units)
MFGT-132 CAD/CAM II (3 units)

Community and Contract Education Opportunities:
Project Management
Softworks
Welding

Certificate of Specialization - Welding Technology - Robotic Welding Automation (16.5 units)
WELD-114A Introduction to Robotic Welding Automation (2.5 units)
WELD-114B Intermediate Robotic Welding Automation (2.5 units)
WELD-114C Advanced Robotic Welding Automation (2.5 units)
Required Electives:
WELD-080 Non-Destructive Testing (3 units)
WELD-130 Welding Metallurgy (3 units)
WELD-132 Blueprint Reading for Welders and Fabricators (3 units)

Entry Level Certificate

Certificate of Speciliazation- Manufacturing Technology - CATIA (6 units)
MFGT 141 CATIA I (3 units)
MFGT 142 CATIA II (3 units)

Certificate of Specialization - Manufacturing Technology - CAD/CAM (6 units)
MFGT 131 CAD/CAM I (3 units)
MFGT 132 CAD/CAM II (3 units)

Certificate of Specialization - Manufacturing Technology - Machining/CNC (6 units)
MFGT 121-CNC 1 Operation/Manual Programming (3 units)
MFGT 122-CNC 2 Concepts and Programming (3 units)

Community and Contract Education Opportunities: Center for Applied Competitive Technologies (CACT) located on-site at Aerospace Dynamics International (ADI)

Certificate of Speciliazation- Mechanical Drafting (9 units)
ENGR 110 - Intro to AutoCAD (3 units)
ENGR 114 - Solids Modeling for Mechanical Drafting (3 units)

PLUS 3 Units from the following:
MFGT 121 - CNC 1: Operation/Manual Programming (3 units)
MFGT 131 - CAD/CAM 1 (3 units)

Community and Contract Education Opportunities:
Project Management
Softworks
Welding

Certificate of Specialization - Welding Technology - Shielded Metal Arc Welding (16.5 units)
WELD-101A Introduction to Shielded Metal Arc Welding (2.5 units)
WELD-101B Intermediate Shielded Metal Arc Welding (2.5 units)
WELD-101C Advanced Shielded Metal Arc Welding (2.5 units)
Required Electives:
WELD-080 Non-Destructive Testing (3 units)
WELD-130 Welding Metallurgy (3 units)
WELD-132 Blueprint Reading for Welders and Fabricators (3 units)

Bridge: Nuts and Bolts and Thingamajigs

STUDENT SUPPORTS

ADVANCED LEVEL

MID LEVEL
-Career Center & Industry *
-Application Interview Prep*
- Counselor and Academic Advisors specialized to Pathway
-Student Success Teams

ENTRY LEVEL
-Integrate Support Services*
-Tutoring TLC*
-Friendly Face*
-Student Success Team*
-Career Coach
-Counselor
-Student

JOBS AND WAGES

ADVANCED LEVEL
-Welding Inspector, -Welding Technician/Fitter, $14.84-25.13/hr
-Pipe Fitter, $18.92-35.73/hr
-Metal Fabricator, $14.03-24.24/hr

MID LEVEL
-Welder, $14.84-25.13/hr
-Mechanical Drafter, $20.97-35.28/hr

automotive, aerospace, and manufacturing entry level designer or drafter

ENTRY LEVEL
-Mechanical Drafter (CAD/CAM), $20.97-35.28/hr
-Woodworking Machine Setters, Operators and Tenders. May operate CNC equipment, $10.51-16.85/hr
-CNC Lathe Operator, $13.06-21.75/hr
-CNC/production machinist $19.49

DRAFT: 2/17/2017

Industry Certifications

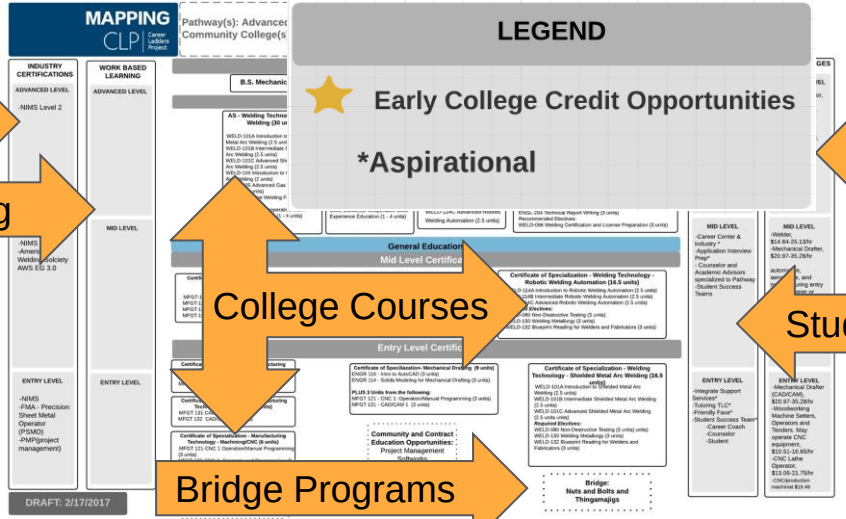
Work Based Learning

College Courses

Bridge Programs

Jobs and Wages

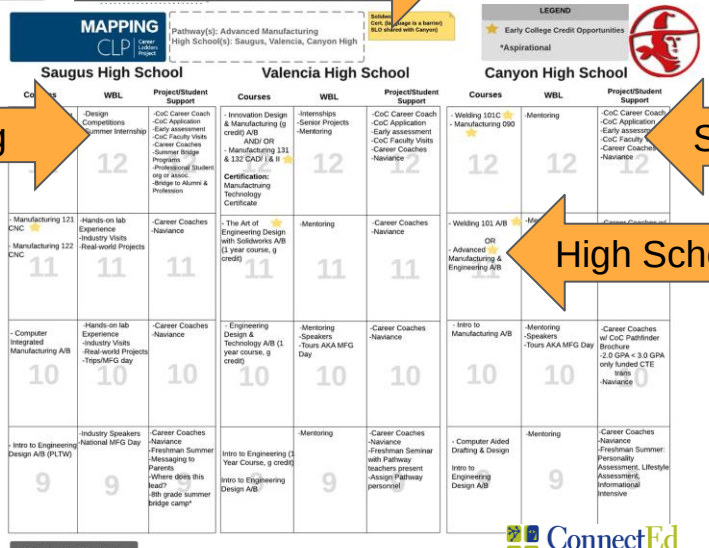
Student Supports



Work Based Learning

Student Supports

High School Courses



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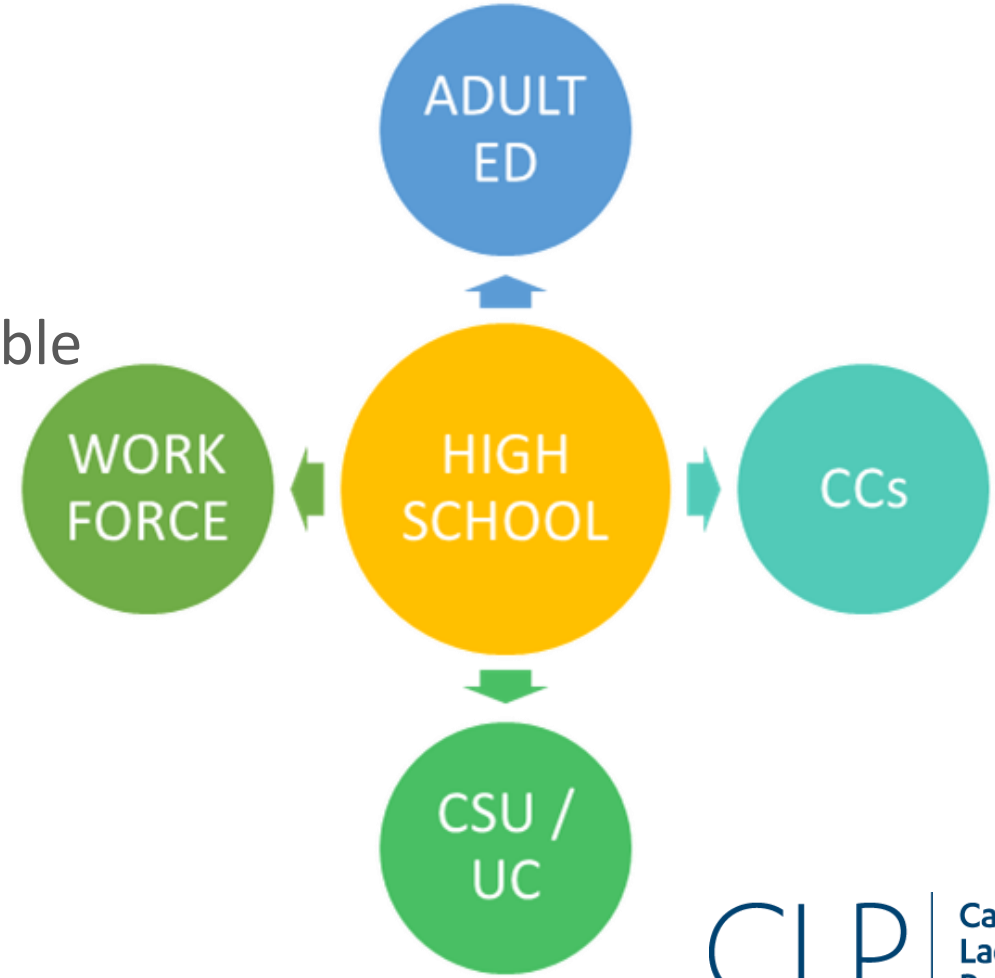
Pathway Maps

- Middle School Accessible
- Current Information
- English & Spanish
- Dynamic Interface



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Pathway Maps

HIGH SCHOOL	COMMUNITY COLLEGE	ADULT & CONT. ED	CSU / UC	WORKFORCE
• CTE Pathway Sequence • A-G approval • Articulation OR Dual Enrollment • Industry Credential • Internship / Work Based Learning	• Sector Alignment • Program Link	• Sector Alignment • Program Link	• Sector Alignment • Program Link	• Career Videos • Jobs and Wages • Labor Market Data

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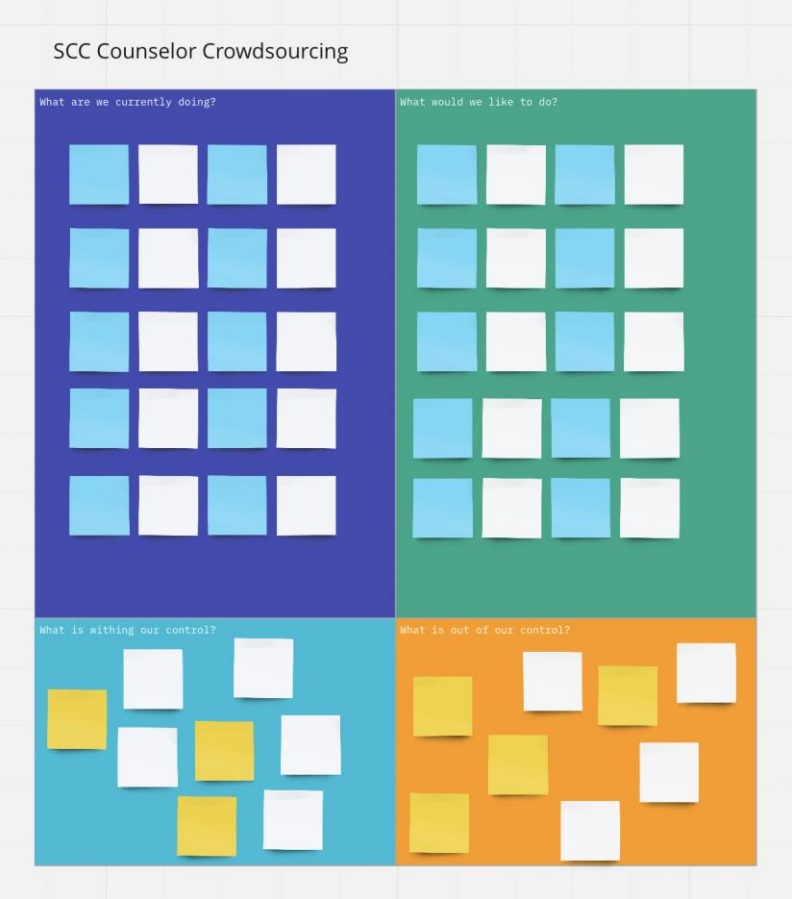
Crowdsourcing Outreach



Please use the Miro link in the chat

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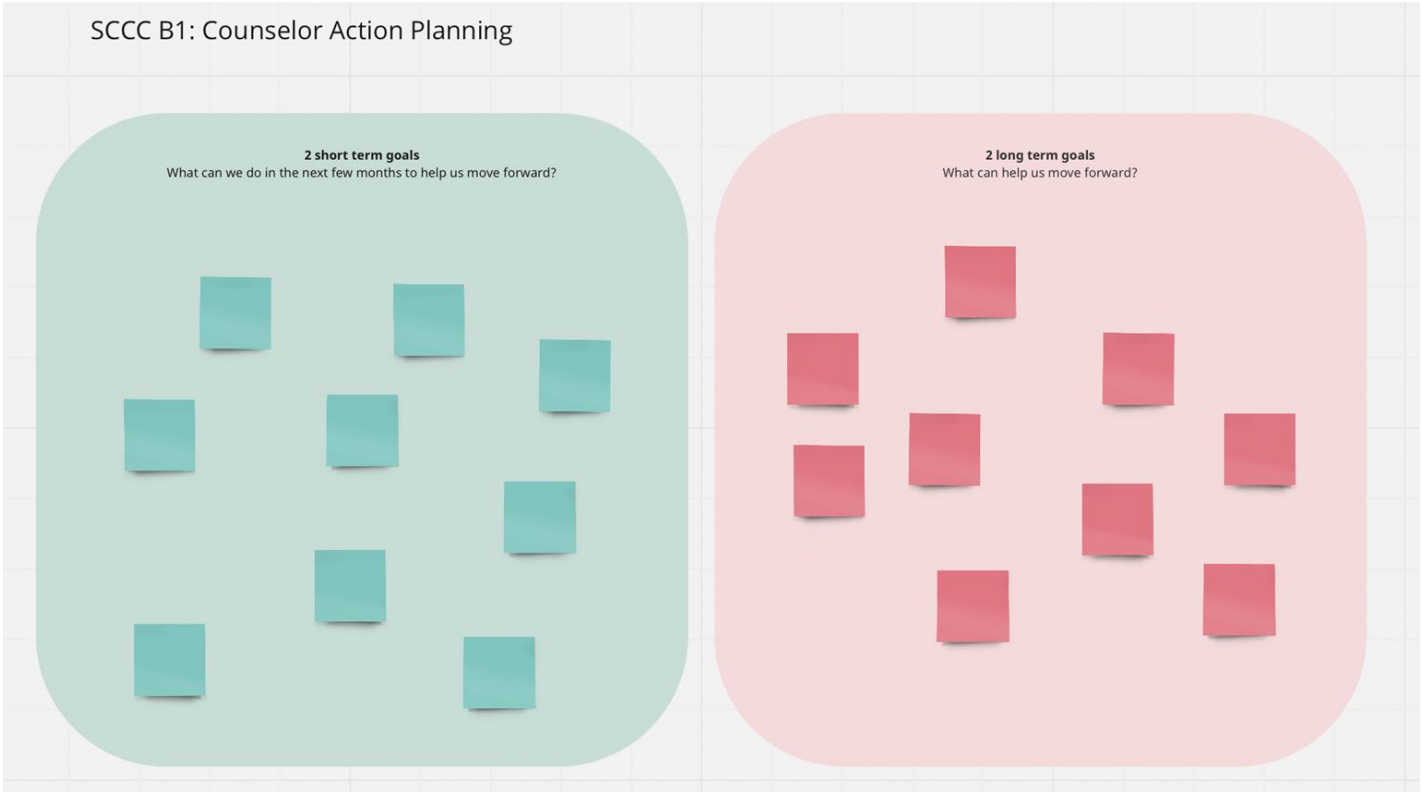
Action Planning - how can we move this work forward?



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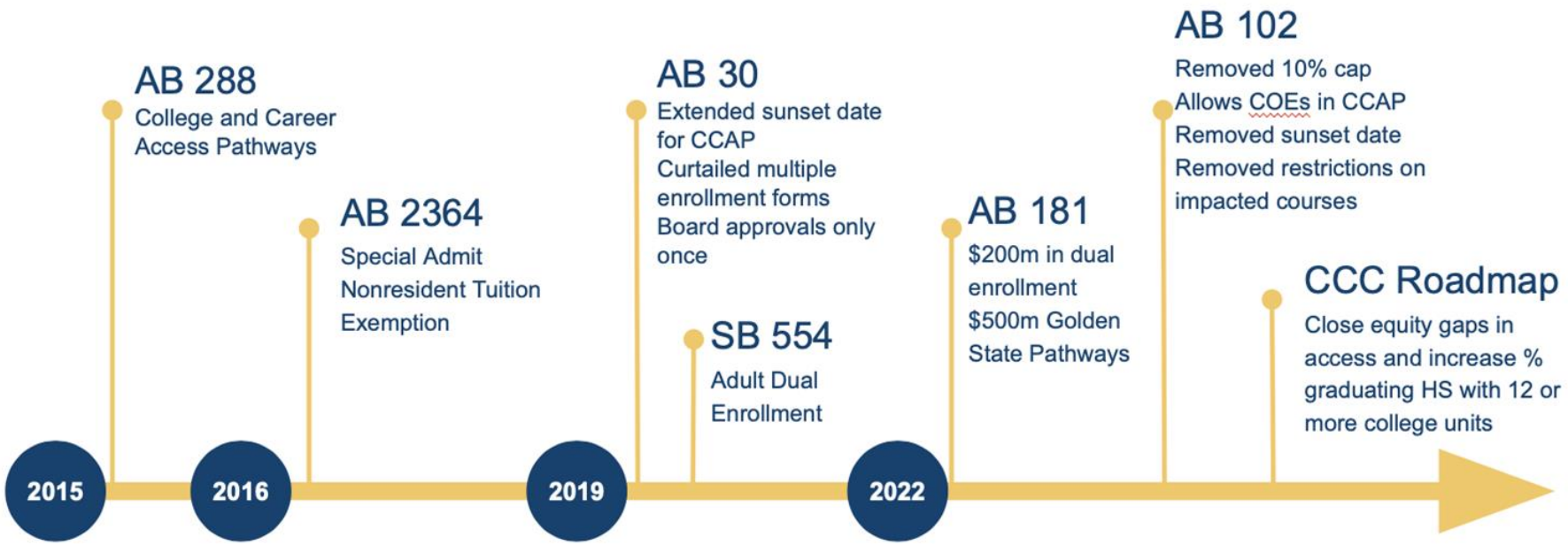
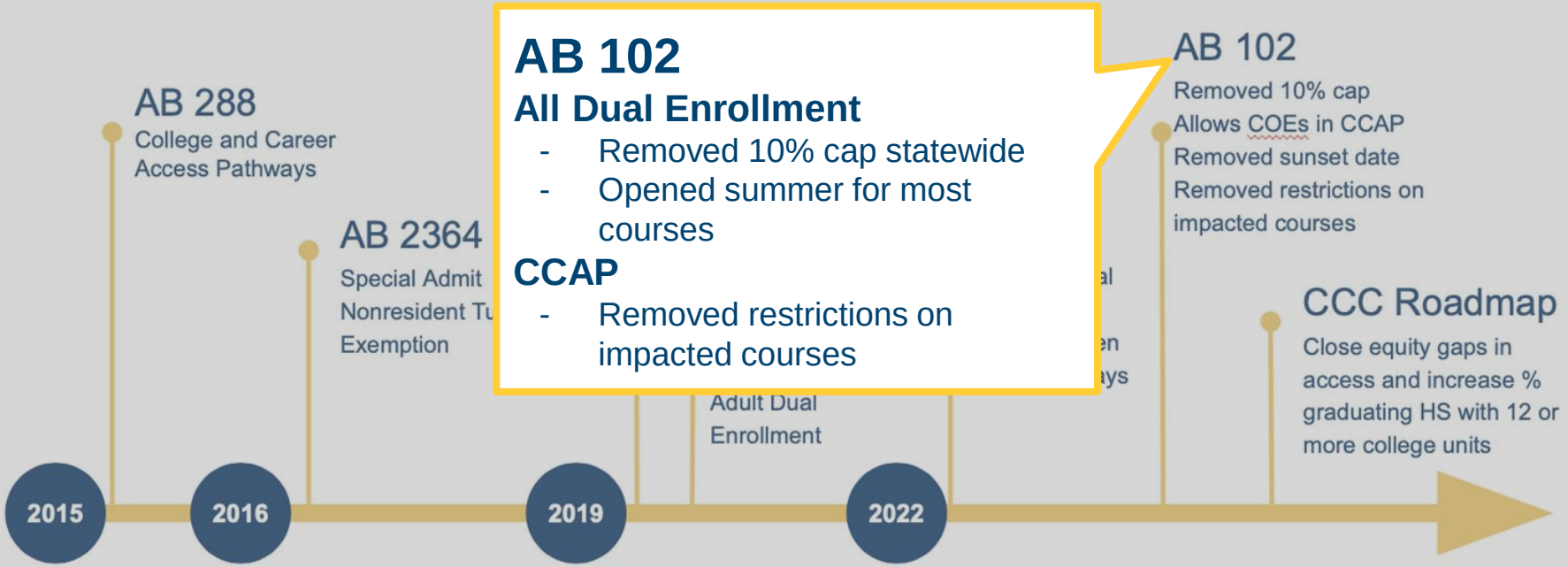
Dual Enrollment Policy Timeline



Dual Enrollment Policy Timeline



Funding Opportunities

- 200m dual enrollment
  - 100m for for CCAP expansion (100k ea)
  - 100m for Early or Middle College High School (250k ea)

- 500m Golden State Pathways
  - Partnerships secondary, post-secondary, employers, CBOs etc
  - Priority pathways- Education, Healthcare, Technology, and STEM/Climate Related Fields
  - Integrated - college *and* career
  - 12 units of early college credit
  - Work-based learning
  - Quality standards like Linked Learning

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Dual Enrollment Opportunities

- **$100m for College and Career Access Pathways (CCAP) $100k awards**
  - **New** CCAP agreements
  - **Expand** to serve more students w/in a school or expand to a new high school in a district
  - **Expand** to include robust pupil advising, student success support services, and outreach campaigns to promote dual enrollment.

- **$100m for Middle Colleges and Early Colleges (MCEC) $250k awards**
  - **New** MCECs either autonomous
  - **Expand** MCECs to serve more students
  - **Expand** to include robust pupil advising, student success support services, and outreach campaigns to promote dual enrollment.

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User's Guide for ATB and Adult Dual Enrollment

CLP | Career Ladders Project

February 2023

Transitioning Adult Learners to College

A User Guide for Ability to Benefit and Adult Dual Enrollment

By Career Ladders Project

CLP
Career Ladders Project

Next Steps Together

1. **March - April 2023**
   - LucidChart Map Finalization
2. **April - June 2023**
   - SCCRC's K12 & CC Counselors / Advisors Community of Practice
3. **May 2023**
   - CTE Map Focus Groups
4. **July 2023**
   - CTE Mapping Website Launch & presentations

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careerladdersproject.org
Naomi Castro - ncastro@careerladdersproject.org
Sherry Shojaei - sshojaei@careerladdersproject.org

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Why Does it Work?

I was very scared [in dual enrollment] I really thought I was not smart enough to do this … but luckily I had amazing staff and counselors and teachers that were always by my side to support me.

A lot of them were on me “like Zurrie you can do this math class” “you got it” and *just having that support really helped me believe that I could do it*, and now I’m here and I'm so happy and thankful for that.

Zurrie Addo Boateng
Design Science High School, FUSD
Future Medical Doctor

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Why Does it Work?

Starting off in geometry … I didn't really think I was going to do that well in math … I didn't really understand many of the concepts. But as soon as I got in Algebra II everything clicked, and then I went through trig, and then went through calculus and that's when I really started to like math a lot … now I'm in Calculus IV

Growing up both my parents were field workers. The highest grade they went to was second grade. Throughout elementary and middle school I would end up helping them in the fields which put a huge strain on us because we needed money but I also wanted to do good in school.

Alexis Meneses
Design Science High School, FUSD
Future Mathematics Professor

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