

Linked Learning



**Presentation by Annie Johnston, Ed.D.
College and Career Academy Support Network
University of California, Berkeley Graduate School of Education
May 19, 2016**

About CCASN

- CCASN promotes researched-based practice to improve students' preparation for college and careers through direct support to schools, districts, and states
- Conducts practice-based research and documentation
- CCASN's website has over 20 guides, research reports, a “toolbox” of downloadable materials, a searchable career academy curriculum database, videos, and more.
- Informs local, state and national policy

<http://casn.berkeley.edu>

Objectives

- Introduce the key components of the Linked Learning movement
- Describe the instructional practices and systemic approaches to high school education in Linked Learning pathways
- Explore the challenges and opportunities of connecting career pathways from secondary to postsecondary in the health sector

Linked Learning

Linked Learning Alliance formed in 2008 to support

- programs of study that connect learning in the classroom with real-world applications outside the classroom,
- integrating rigorous academic instruction with demanding career-technical curriculum and work-based learning.

Part of a national movement to increase access to high quality career pathways and redesign high school education.



Short History of Linked Learning Pathways

- 1985 California Partnership Academies join Philadelphia and New York as initial models
- Repeated research findings: Career Academy model improves student motivation, graduation rates, and postsecondary success – over 400 CPAs funded
- 2009 James Irvine Foundation funds Linked Learning Initiative to scale up the model in 9 districts
- 2014 California Career Pathways Trust: \$500,000,000 to build pathways K-14 expands regional approaches
- 2015 CTE Incentive Grants require local matching funds, more each year. K-12 CTE integrated into district priorities and general fund.

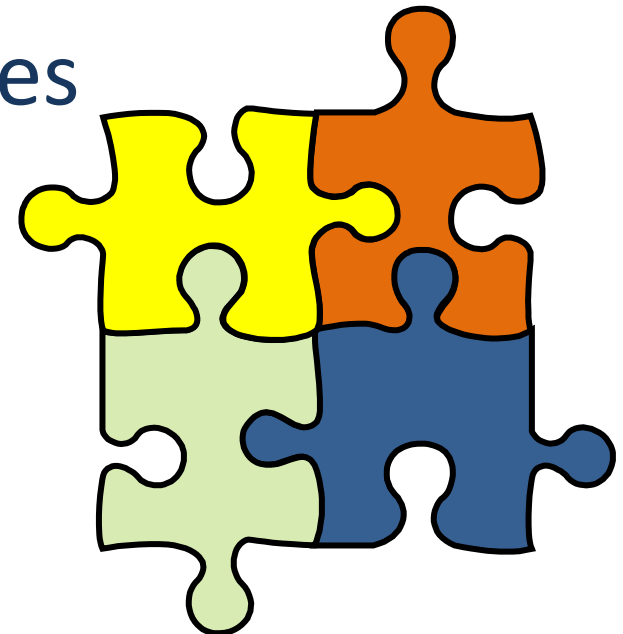
Linked Learning Organizing Principles

- Prepare students for both college and career
- Lead to the full range of postsecondary options
- Connect academics to real-world applications
- Improve equity in student achievement outcomes



Pathway Components

- A Challenging Academic Component
- A Demanding Technical Component
- A Work-based Learning Component
- Embedded Support Services



Linked Learning Pathways...

- Bring **real world relevance** to a college and career - preparatory curriculum.
- Promote **project-based** teaching and learning.
- Use **authentic assessment** methods, in which students' products or performances provide evidence of achievement.



Linked Learning Programs of Study

Meet High Quality CTE Program Criteria

- Industry-specific technical skills & content
- Sequenced, and aligned to California CTE model standards, CCSS & NGSS
- Wherever possible, meeting UC/CSU “a-g” requirements
- Leading to credentials, certificates, post-secondary education, training and employment



Key Structural Features

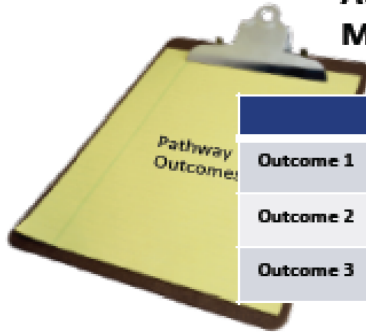
- **Interdisciplinary Teacher Team**, including the CTE and at least two academic teachers at each grade level
- At least $\frac{1}{2}$ of the student's day is in pathway classes, usually starting in grades 9 or 10
- Teacher teams have paid time to collaborate
- Teacher leadership is developed to coordinate the work
- District systems of support connect pathways with industry & postsecondary partners

Pathway Teams Collaborate to:

- Agree upon key pathway outcomes,
- Align and integrate curriculum,
- Organize student supports,
- Embed college and career education
- Integrate work based learning into both academic and CTE classrooms

Culminating Assessment System Framework

Academy Outcomes Mapped by Grade-level

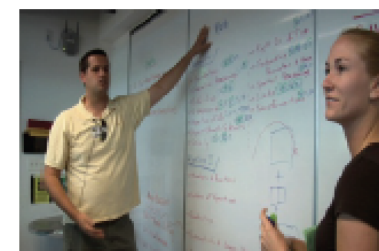


	9	10	11	12
Outcome 1	+	++	+++	++++
Outcome 2	++	++	+++	++++
Outcome 3	+	+	++	+++

Rubrics for Academy Outcomes Identified/Adapted

Item	Exemplary	Proficient	Developing	Beginning
Knowledge and understanding	Students demonstrate a deep understanding of the concepts and principles of the discipline.	Students demonstrate a solid understanding of the concepts and principles of the discipline.	Students demonstrate a basic understanding of the concepts and principles of the discipline.	Students demonstrate a limited understanding of the concepts and principles of the discipline.
Problem-solving and critical thinking	Students apply their knowledge and skills to solve complex problems and think critically.	Students apply their knowledge and skills to solve problems and think critically.	Students apply their knowledge and skills to solve problems and think critically.	Students apply their knowledge and skills to solve problems and think critically.
Communication and collaboration	Students communicate effectively and collaborate with others.	Students communicate effectively and collaborate with others.	Students communicate effectively and collaborate with others.	Students communicate effectively and collaborate with others.
Quality of work	Students produce high-quality work that is well-organized, clear, and professional.	Students produce solid-quality work that is well-organized, clear, and professional.	Students produce basic-quality work that is well-organized, clear, and professional.	Students produce limited-quality work that is well-organized, clear, and professional.

Projects and Work-based Learning Experiences Designed to Meet Outcomes



Changes in Learning and Teaching



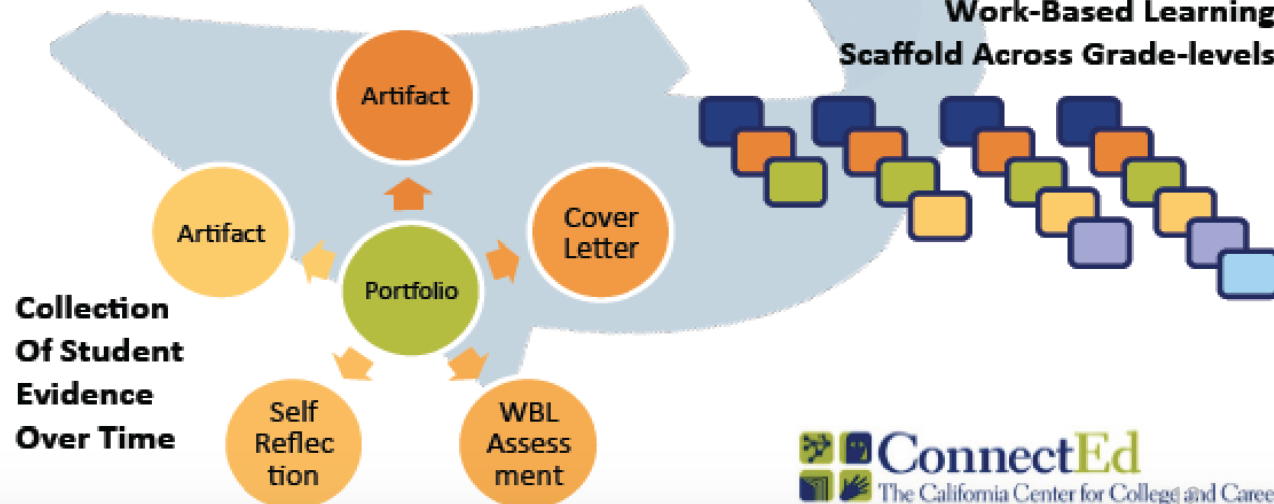
Rubric used to measure outcome attainment

Item	Exemplary	Proficient	Developing	Beginning
Knowledge and understanding	Students demonstrate a deep understanding of the concepts and principles of the discipline.	Students demonstrate a solid understanding of the concepts and principles of the discipline.	Students demonstrate a basic understanding of the concepts and principles of the discipline.	Students demonstrate a limited understanding of the concepts and principles of the discipline.
Problem-solving and critical thinking	Students apply their knowledge and skills to solve complex problems and think critically.	Students apply their knowledge and skills to solve problems and think critically.	Students apply their knowledge and skills to solve problems and think critically.	Students apply their knowledge and skills to solve problems and think critically.
Communication and collaboration	Students communicate effectively and collaborate with others.	Students communicate effectively and collaborate with others.	Students communicate effectively and collaborate with others.	Students communicate effectively and collaborate with others.
Quality of work	Students produce high-quality work that is well-organized, clear, and professional.	Students produce solid-quality work that is well-organized, clear, and professional.	Students produce basic-quality work that is well-organized, clear, and professional.	Students produce limited-quality work that is well-organized, clear, and professional.

Student Defense of Outcome Attainment



PBL Tasks and Work-Based Learning Scaffold Across Grade-levels



Work-based Learning

- Includes mentoring, job shadowing, internships, school-based enterprises, service learning, virtual apprenticeship...
- Reinforces both academic and CTE standards.
- Students develop meaningful relationships with adult role models.
- Immerses students in “adult world,” leading to maturity, understanding of professional behaviors, high expectations, and career goals



Work-based Learning Continuum Characteristics & Experiences

Career Awareness

Learning **ABOUT** work.

Build awareness of the variety of careers available and the role of post-secondary education; Broaden student options.

Characteristics:

- Usually groups of students
- Builds students' awareness of a variety of careers
- Introduces students to business partners from outside the school (in-person or virtual)
- Allows students to begin identifying areas of career interest
- Relates school to the world of work by connecting careers to education.

Experiences include:

- Workplace tour
- Guest speaker
- Career fair
- Visit parents at work

Career Exploration

Learning **ABOUT** work.

Explore career options and post-secondary requirements for purpose of motivation and to inform decision-making in high school and post-secondary.

Characteristics:

- Usually individual students or small groups
- Includes direct, interactions (in-person or virtual) with industry partners
- Exposes students to the range of occupations within an industry
- Provides clear connections to course work
- Connects to students' existing interests and strengths
- Prepares students with the basic skills necessary for higher intensity work-based learning experiences such as internships

Experiences include:

- Informational interview
- Job shadow
- Virtual exchange with a partner

Career Preparation

Learning **THROUGH** work.

Apply learning through practical experience that develops knowledge and skills necessary for success in careers and post-secondary education.

Characteristics:

- Usually individual students, can be small group for projects
- Direct interaction with partners over time, **primary** direct benefit to student
- Partner is able to assess student learning at site
- Application of skills transferable to a variety of careers
- Activities have consequences and value beyond success in the classroom.
- Learning for student and benefit to partner are equally valued

Experiences include:

- Student-run enterprise with partner involvement
- Virtual enterprise
- Integrated Projects with partners
- Service Projects
- Internship

Career Training

Learning **FOR** work.

Train for employment and/or post-secondary education in a specific range of occupations.

Characteristics:

- Interaction with partners over extended period of time.
- Depth of interaction with partner increases
- **Primary** direct benefit to the employer
- Develop mastery of occupation specific skills.
- Complete certifications or other requirements of a specific range of occupations.

Experiences include:

- Internship required for credential or entry to occupation
- Apprenticeship
- Clinical experience
- On-the-job training
- Work experience
- Cooperative Education

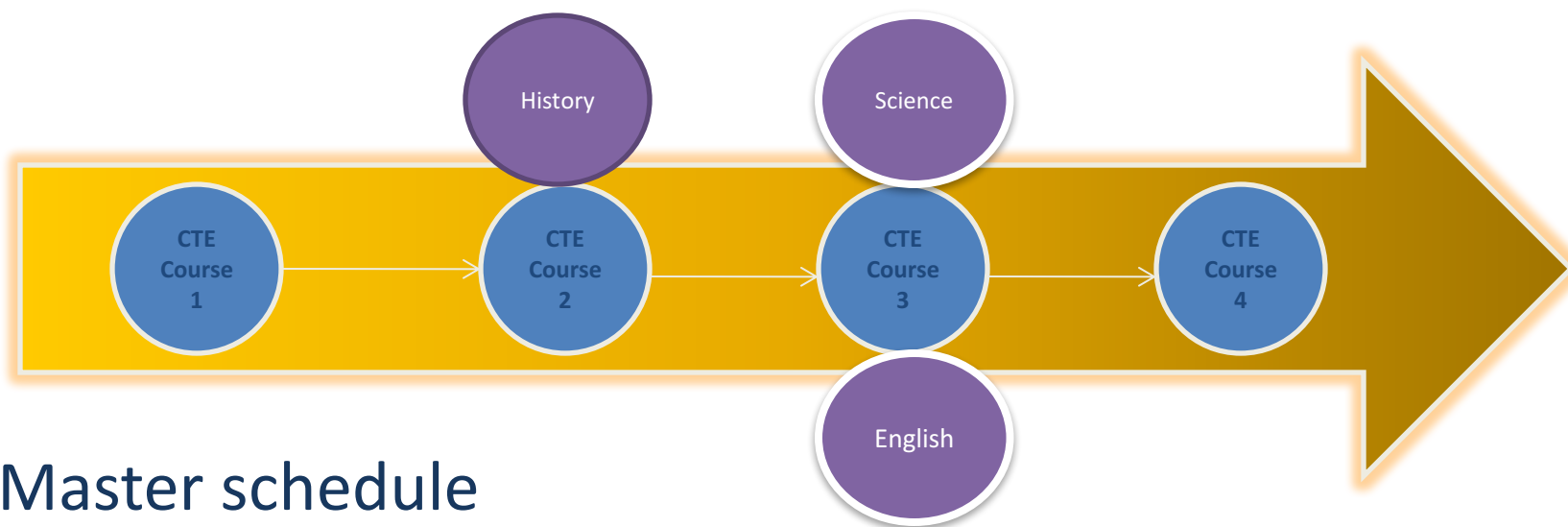
PoS Design Provides Access to the Full Range of Postsecondary Options



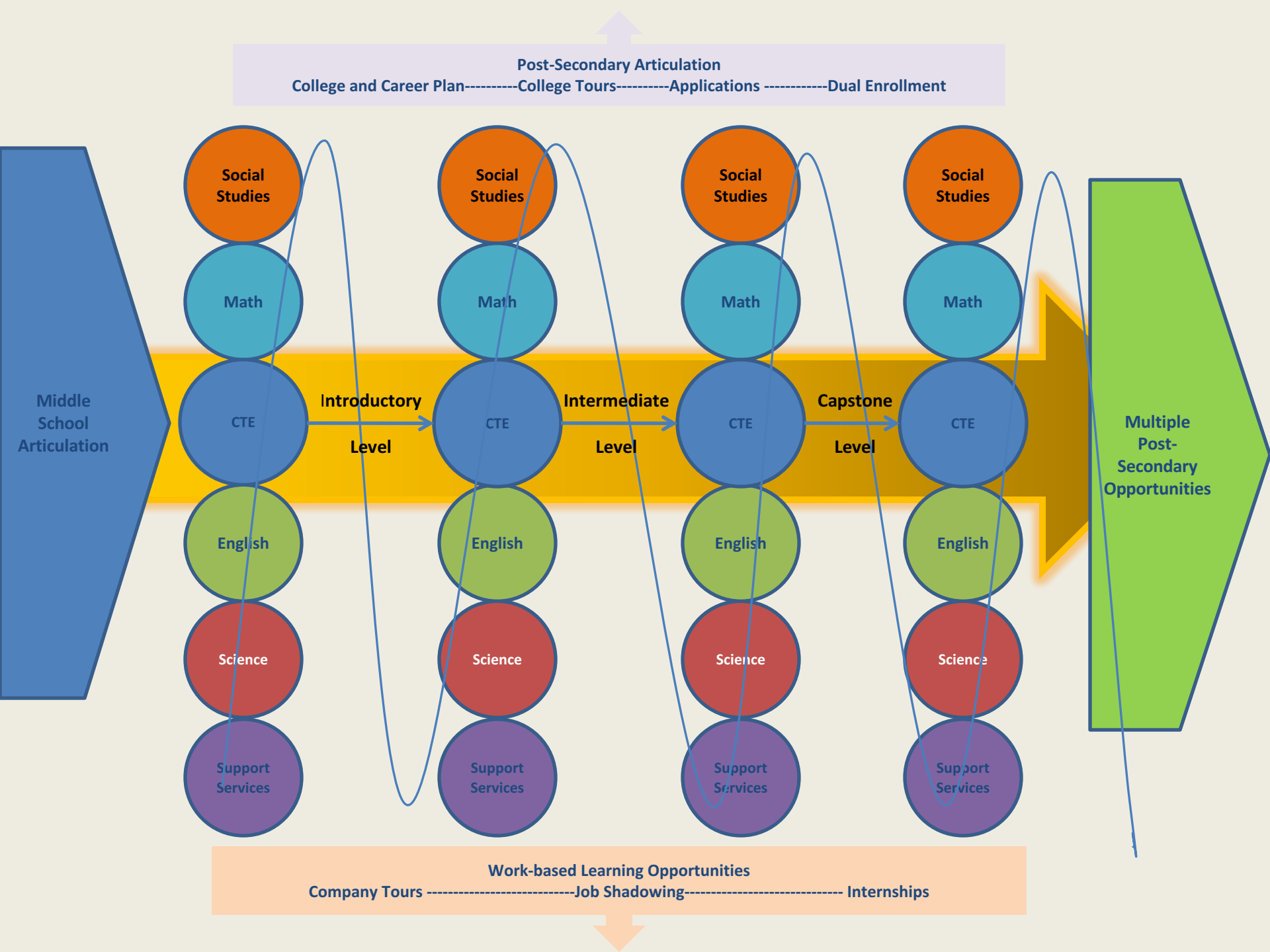
- Changing the perception of CTE as “low-track”
- CTE Leadership:
 - Strengthening CTE rigor – meeting a-g requirements
 - Pathways connected to post-secondary education
- Challenge: fitting it all in: “a-g,” full CTE sequence, ELL and other support classes, early college credit

CTE Course Sequence with Sporadic Academic Integration

- Teacher preps
- Teacher involvement



- Master schedule
- Program identity, strength
- Impact on students, ability to ensure that all students have access to the wide range of post-secondary options.



Secondary to Postsecondary Pathways

Register NOW!

Health Pathway Teacher Summer Capstone Experience



Join the Capital Region Health Pathway Community of Practice* for an end-of-summer capstone experience for health pathway teams participating in the Summer Externships.

Days 1 and 2:

Tuesday, August 16 and Wednesday, August 17

Integrating Industry Experience into Classroom Practice

This two-day workshop from ConnectEd will support teams to develop performance tasks, and performance assessments, and to embed those into integrated projects. Teachers are eligible to participate if they have completed the Summer Institute and/or an externship in the Health Pathway field. Location and other details provided upon registration.

Day 3: Thursday, August 18

Capital Region Health Pathway Sector Convening

- Join local Community College and High School health faculty to get an overview of pathway developments in the state and their implications for our work.
- Breakout session: Teams deliver “Pitch,” sharing curriculum projects that incorporate industry specific content and skills with local community college health pathway partners and industry representatives.

INDUSTRY CERTIFICATION	B.A. Transfer		JOB'S & WAGES	advanced
Certified Medical Assistant National Council Licensure for Registered Nursing	Registered Nursing, AS	Medical Assistant , AS	Advanced Level Employment <ul style="list-style-type: none">Registered Nurse: \$35-\$54/hrMedical Assistant: \$21-\$50/hr	
Certificate				intermediate
Paramedics (private programs)	General Education		Intermediate Level Employment <ul style="list-style-type: none">Medical Assistant: \$12-\$25/hrMedical Billing and Coding: \$12-\$25/hr	
Certificate of Achievement				entry
Emergency Medical Technician: Office of Emergency Services	Emergency Medical Services, 12,5 units (Youth) Summer Bridge, 5 units		Entry Level Employment <ul style="list-style-type: none">Emergency Medical Technician: \$10-\$29/ hr	

Transition

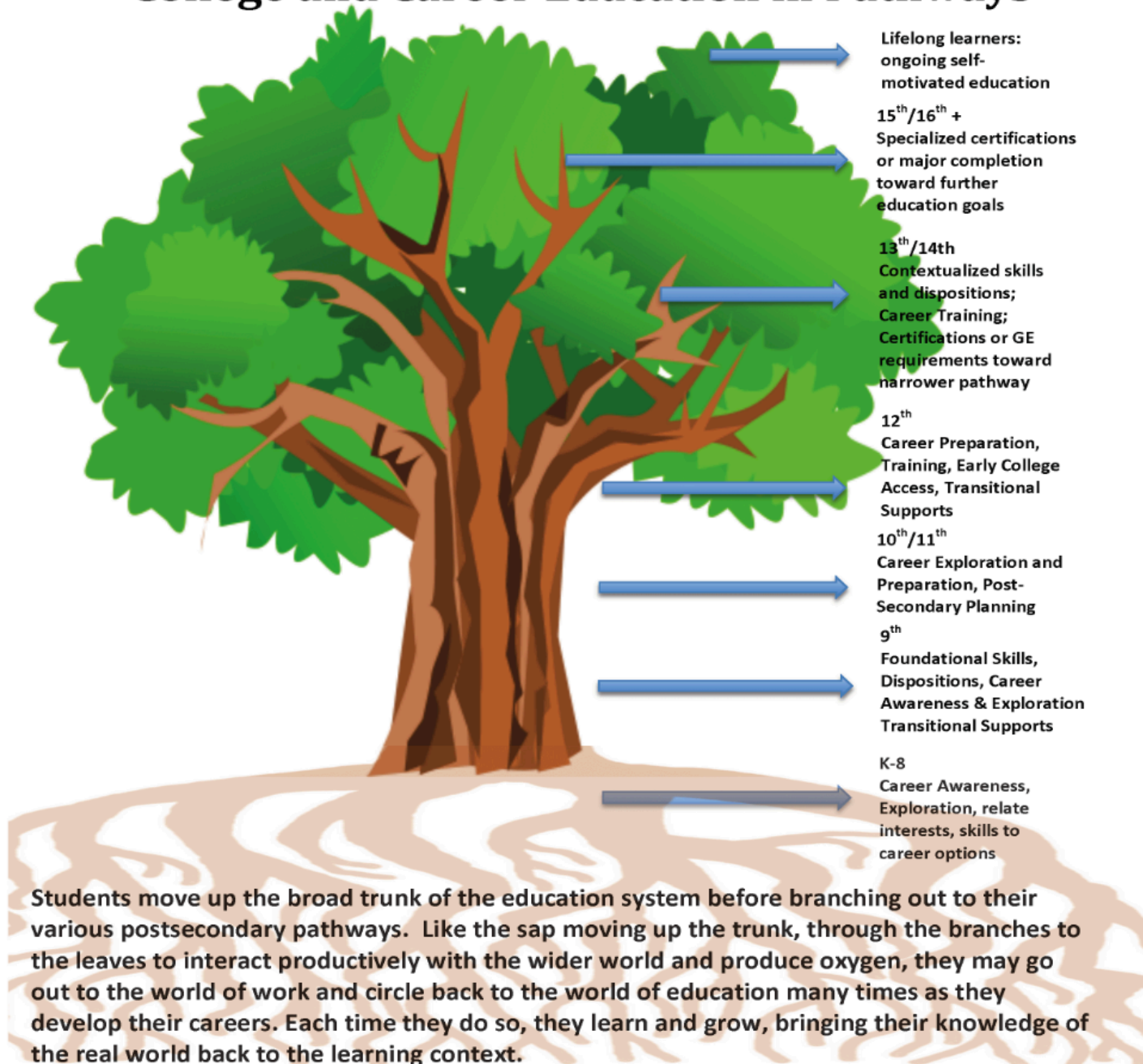
HIGH SCHOOLS	DEANZA HEALTH ACADEMY			
	INDUSTRY CERTIFICATION	Instruction	WBL	Matriculation
	Concussion Certification	Intro to Hospital Svcs. English 1A DE: Psych 103A, CNA, Health Careers, BioTech I & II	Stanford Med School Visits? CNA Nursing Home Internship	CCC Application & Early Assessment CCC Faculty visits
	CPR/First Aid Certification	BioTechnology English 1A DE: Psych 103A, CNA, Health Careers, BioTech I & II	STEM Summer Camps Dentistry Internship	CCC Career Days CCC Faculty visits
		BioMedical Science English 1A DE: Psych 103A, CNA, Health Careers, BioTech I & II	Jr. Achievement Med School Job Shadow CPR/First Aid HOSA Dept. Health Curriculum & Internship	CCC Career Days CCC Faculty visits
		Dual Enrollment (DE): Psych 103A CNA Nursing	OT-SPGH Internship, grade 7	CCC Faculty visits

How do students coming from high school health pathways differ from students coming from other onramps into the community college system?

HIGH SCHOOLS	RICHMOND HEALTH ACADEMY			12
	Instruction	WBL	Matriculation	
	Psych 103A BioSci 172 Medic 100	Concussion Certification	CCC Application & Early Assessment CCC Faculty visits	12
	Psych 103A BioSci 172 Medic 100	STEM Summer Camps	CCC Faculty visits	11
	Psych 103A BioSci 172 Medic 100	DMC Internship Red Cross Internship Project SEED Internship CPR/First Aid	CCC Faculty visits	10
		Red Cross Club OT-SPGH Internship, grade 7	CCC Faculty visits	9



College and Career Education in Pathways



Lifelong learners:
ongoing self-
motivated education

15th/16th +
Specialized certifications
or major completion
toward further
education goals

13th/14th
Contextualized skills
and dispositions;
Career Training;
Certifications or GE
requirements toward
narrower pathway

12th
Career Preparation,
Training, Early College
Access, Transitional
Supports

10th/11th
Career Exploration and
Preparation, Post-
Secondary Planning

9th
Foundational Skills,
Dispositions, Career
Awareness & Exploration
Transitional Supports

K-8
Career Awareness,
Exploration, relate
interests, skills to
career options

**What
transition
challenges
are specific
to the
health
field?
How can
secondary
and post-
secondary
connect to
tackle those
challenges?**

Who do we need to engage?



Strategic Conversations

Approximately $\frac{1}{4}$ of all California high school students are in pathways that aspire to this approach, according to estimates from the Linked Learning Alliance.

What are the most important conversations to have when bringing pathway faculty together across the secondary – postsecondary divide to strengthen pathway programs of study?

