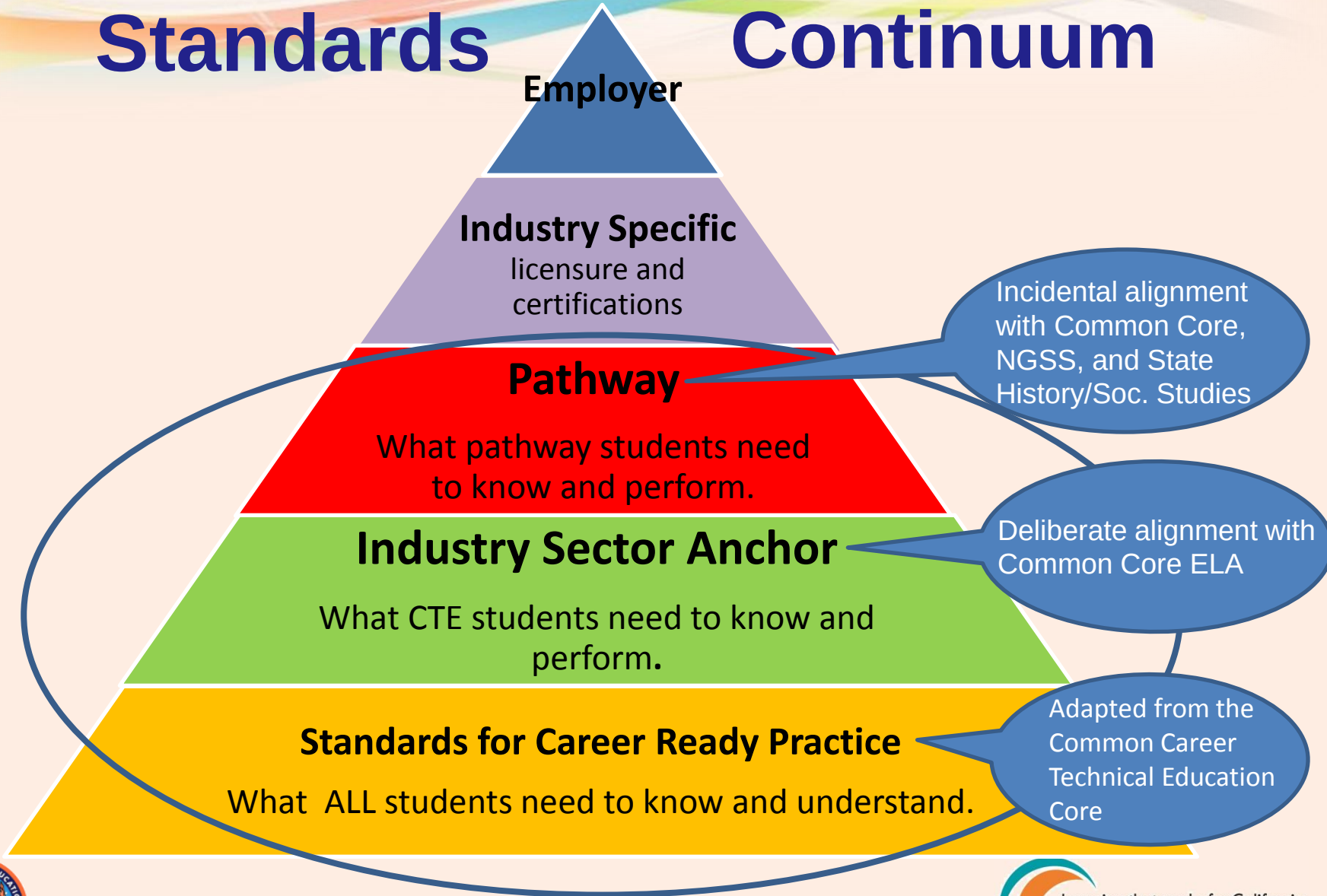


Career Technical Education Standards Continuum



Standards for Career Ready Practice

- Intended as a goal for ALL students either:
 - Prior to entering a Career Technical Education pathway
 - Integrated in a Career Technical Education pathway
 - Integrated into other coursework in preparation to meet career and college readiness
- Standards for Career Ready Practice are found on pages 11 and 12 of the California CTE Model Curriculum Standards Introduction



CTE Anchor Standards

- **Build on** the Standards for Career Ready Practice
- **Common** across the 15 industry sectors
- **Apply to all pathways** within a specific industry sector
- Anchor Standard 1: **Academics**, guides users to the sector specific core academic standards **related to each industry sector**, which are listed in the **Alignment Matrix** located at the end of each sector section.
- Anchor standards 2-10 are **deliberately aligned** to one of the **Common Core English Language Arts** standards
- Anchor Standard 11: Demonstration and Application, **highlights classroom, laboratory and workplace learning** specific to the individual sector and pathways.



Anchor Standards Alignment

Agriculture and Natural Resources

Former Foundation Standard: Communications

Students understand the principles of effective oral, written, and multimedia communications.

ELA Common Core Standard: Listening & Speaking

Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the career and college readiness level (LS 11-12.6)

New Anchor Standard 2: Communications

Acquire and use accurately, Agriculture and Natural Resources sector terminology and protocols at the career and college readiness level for communicating effectively in oral, written, and multimedia formats. (Deliberate Alignment)



Anchor Standards Alignment

Energy, Environment, and Utilities

ELA Common Core Standard: Writing Standard

Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback including new arguments and information

CTE Anchor Standard 5: Problem Solving and Critical Thinking

Use existing and emerging technology to investigate, research, and produce products and services, including new information, as required in the Engineering and Architecture sector workplace environment. (Direct alignment to WS 11-12.6)



Knowledge and Performance Anchor Standards

Performance
Indicators
2.1, 2.2, 2.3 . . .

Anchor
Standard 2.0

2.0 Communications

Acquire, and use accurately, Building and Construction protocols at the career and college reading written, and multimedia forms that align to LS 9-10,

- 2.1 Recognize the elements of communication using a sender-receiver model.
- 2.2 Identify barriers to accurate and appropriate communication.
- 2.3 Interpret verbal and nonverbal communications and
- 2.4 Demonstrate elements of written and electronic communication including spelling, grammar, and format.
- 2.5 Communicate information and ideas effectively to multiple audiences using a variety of media and formats.
- 2.6 Advocate and practice safe, legal, and responsible use of digital media information and communications technologies.



Customized Performance Indicators

Arts, Media, Entertainment

Arts, Media, and Entertainment Knowledge and Performance Anchor Standards

6.0 Health and Safety

Demonstrate health and safety procedures, regulations, and personal health practices and determine the meaning of symbols, key terms, and domain-specific words and phrases as related to the Arts, Media, and Entertainment sector workplace environment. (Direct alignment with RSTS 9-10, 11-12.4)

- 6.1 Locate, and adhere to, Material Safety Data Sheet (MSDS) instructions.
- 6.2 Interpret policies, procedures, and regulations for the workplace environment, including employer and employee responsibilities.
- 6.3 Use health and safety practices for storing, cleaning, and maintaining tools, equipment, and supplies.
- 6.4 Practice personal safety when lifting, bending, or moving equipment and supplies.
- 6.5 Demonstrate how to prevent and respond to work-related accidents or injuries; this includes demonstrating an understanding of ergonomics.
- 6.6 Maintain a safe and healthful working environment.
- 6.7 Be informed of laws/acts pertaining to the Occupational Safety and Health Administration (OSHA).

Construction Trades

Building and Construction Trades Knowledge and Performance Anchor Standards

6.0 Health and Safety

Demonstrate health and safety procedures, regulations, and personal health practices and determine the meaning of symbols, key terms, and domain-specific words and phrases as related to the Building and Construction Trades sector workplace environment. (Direct alignment with RSTS 9-10, 11-12.4)

- 6.1 Interpret policies, procedures, and regulations for the workplace environment, including employer and employee responsibilities.
- 6.2 Use health and safety practices for storing, cleaning, and maintaining tools, equipment, and supplies.
- 6.3 Set up a work area, or shop, to avoid potential health concerns and safety hazards, including but not limited to electrical (shock), wires (tripping), fumes (lung health), noise (hearing loss), fire (burns), and so forth, incorporating ergonomics.
- 6.4 Practice personal safety when lifting, bending, or moving equipment and supplies.
- 6.5 Demonstrate how to prevent and respond to work-related accidents or injuries; this includes demonstrating an understanding of ergonomics.
- 6.6 Maintain a safe and healthful working environment.
- 6.7 Be informed of laws/acts pertaining to the Occupational Safety and Health Administration (OSHA).
- 6.8 Report hazards found on the job site to supervisor/teacher.
- 6.9 Locate, and adhere to, Material Safety Data Sheet (MSDS) instructions.
- 6.10 Maintain proper use of safety apparel at all times, including but not limited to, eye protection, hearing protection, skin protection, head protection, footwear and protection from airborne particulate matter.
- 6.11 Comply with the safe handling, storage and disposal of chemicals, materials and adhesives in accordance with local, state, and federal safety and environmental regulations (OSHA, Environmental Protection Agency [EPA], Hazard Communication [HazCom], Material Safety Data Sheets [MSDS], etc.).
- 6.12 Demonstrate the proper care and safe use of hand, portable and stationary power tools.



Pathway Standards Alignment Process

- Identify pathway standards that have a substantial and natural alignment to a core curriculum standard
- Determine if the pathway standard will enhance, reinforce or apply a specific core subject standard
- Developed an alignment matrix at end of each Industry Sector



Academic Alignment Matrix

BUSINESS AND FINANCE	PATHWAYS		
	A. Business Management	B. Financial Services	C. International Business
Statistics and Probability – S-CP – Conditional Probability and the Rules of Probability			
<i>Understand independence and conditional probability and use them to interpret data</i>			
1. Describe events as subsets of a sample space (the set of outcomes) using characteristics (or categories) of the outcomes, or as unions, intersections, or complements of other events ("or," "and," "not").	A4.0, A5.0, A6.0, A7.0	B3.0, B4.0, B5.0, B6.0, B7.0, B8.0, B10.0	C3.0, C4.0, C6.0, C7.0, C8.0
2. Understand that two events A and B are independent if the probability of A and B occurring together is the product of their probabilities, and use this characterization to determine if they are independent.	A4.0, A5.0, A6.0, A7.0	B3.0, B4.0, B5.0, B6.0, B7.0, B8.0, B10.0	C3.0, C4.0, C6.0, C7.0, C8.0
3. Understand the conditional probability of A given B as $P(A \text{ and } B)/P(B)$, and interpret independence of A and B as saying that the conditional probability of A given B is the same as the probability of A, and the conditional probability of B given A is the same as the probability of B.	A4.0, A5.0, A6.0, A7.0	B3.0, B4.0, B5.0, B6.0, B7.0, B8.0, B10.0	C3.0, C4.0, C6.0, C7.0, C8.0
4. Construct and interpret two-way frequency tables of data when two categories are associated with each object being classified. Use the two-way table as a sample space to decide if events are independent and to approximate conditional probabilities. For example, collect data from a random sample of students in your school on their favorite subject among math, science, and English. Estimate the probability that a randomly selected student from your school will favor science given that the student is in tenth grade. Do the same for other subjects and compare the results.	A4.0, A5.0, A6.0, A7.0	B3.0, B4.0, B5.0, B6.0, B7.0, B8.0, B10.0	C3.0, C4.0, C6.0, C7.0, C8.0
<i>Use the rules of probability to compute probabilities of compound events in a uniform probability model</i>			

