



North Coast Teacher Induction Program



**Career Technical Education (CTE)
Resource Guide**



TABLE OF CONTENTS

CHAPTER 1: CAREER TECHNICAL EDUCATION (CTE)	3
1.1 Introduction.....	3
1.2 Careers that Reflect the Contemporary Workplace.....	3
CHAPTER 2: CALIFORNIA DEPARTMENT OF EDUCATION’S CTE STANDARDS	4
CHAPTER 3: TYPES OF LEARNING	5
3.1 What is Inquiry Based Learning?	5
3.2 What is Project-Based Learning?	5
3.3 Critical Thinking/Problem-Based Learning	5
CHAPTER 4: RESOURCES AND PROFESSIONAL DEVELOPMENT OPPORTUNITIES	6



CHAPTER 1: CAREER TECHNICAL EDUCATION (CTE)

1.1 Introduction



The goal of ensuring that all students graduate from high school ready for college, careers and life has taken hold in every state across the nation. Yet all too often, the focus on “college readiness” and “career readiness” remains in two distinct silos, even though there is little question that reading, writing, communications and mathematical reasoning are all core skills for success in postsecondary education, in the workplace and for citizenship and that educators across all disciplines should help students develop, deepen and refine these core skills.

Right now, the moment is here, and the opportunity is clear: As states are working to align their education systems with the Common Core State Standards (CCSS) in support of the goal of graduating all students ready for college, careers and life, academic and CTE leaders at the state and local levels can and should maximize this opportunity to finally break down the silos between their disciplines and collectively find ways to ensure that the new standards rigorously engage all students in both academic and CTE courses.¹

For more information on Bridging the Divide between CTE and the Common Core, visit: www.achieve.org/files/CCSS-CTE-BridgingtheDivide.pdf.

1.2 Careers that Reflect the Contemporary Workplace

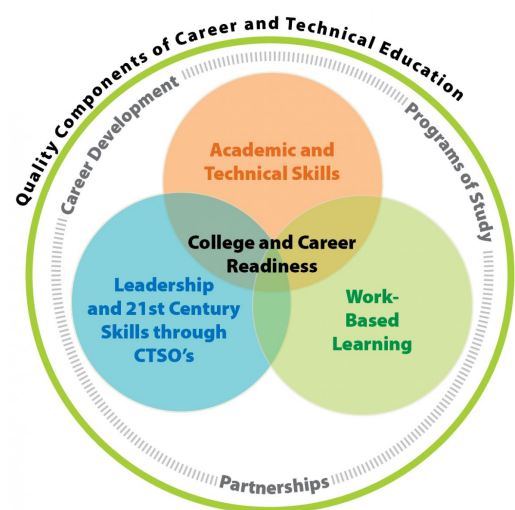
Career and Technical Education (CTE) programs provide students with a foundation for a wide range of careers that reflect the contemporary workplace.

College and Career Readiness - CTE programs provide quality work-based learning programs, relevant academic skills, and the employability skills and workforce behaviors necessary for postsecondary success and careers.

Academic & Technical Skills - promotes life-long learning in a global society.

Work-Based Learning - enhances business and education partnerships, provides students with opportunities to reinforce skills and behaviors to be effective in the workforce.

Leadership and 21st Century Skills through Career and Technical Student Organizations (CTSOs) - CTE programs support skills such as communication, critical thinking, problem solving, entrepreneurship and leadership through CTOSs.²



¹Reprinted from: "Bridging the Divide Between College and Career Readiness." Achieve. Web. Nov. 2014. <<http://www.achieve.org>>.

²Reprinted from: "Career & Technical Education." Wisconsin Department of Public Instruction. Web. Nov. 2014. <<http://cte.dpi.wi.gov/>>.



CHAPTER 2: CALIFORNIA DEPARTMENT OF EDUCATION’S CTE STANDARDS

The California Department of Education (CDE) provides Career Technical Education Standards for CA Public Schools. These standards provide a basis for curriculum frameworks, instructional materials, and statewide assessments.

For each Industry sector listed below, the corresponding link provides industry specific information on the knowledge and performance anchor standards, pathway standards, and the Academic Alignment Matrix.

Industry Sector	Web Link
Agriculture and Natural Resources	www.cde.ca.gov/ci/ct/sf/documents/agnatural.pdf
Arts, Media, and Entertainment	www.cde.ca.gov/ci/ct/sf/documents/artsmedia.pdf
Building and Construction Trades	http://www.cde.ca.gov/ci/ct/sf/documents/buildingconstruct.pdf
Business and Finance	www.cde.ca.gov/ci/ct/sf/documents/bizfinance.pdf
Education, Child Development, and Family Services	http://www.cde.ca.gov/ci/ct/sf/documents/edchildfamily.pdf
Energy, Environment, and Utilities	www.cde.ca.gov/ci/ct/sf/documents/energyutilities.pdf
Engineering and Architecture	www.cde.ca.gov/ci/ct/sf/documents/enginearchit.pdf
Fashion and Interior Design	www.cde.ca.gov/ci/ct/sf/documents/fashioninterior.pdf
Health Science and Medical Technology	www.cde.ca.gov/ci/ct/sf/documents/healthmedical.pdf
Hospitality, Tourism, and Recreation	www.cde.ca.gov/ci/ct/sf/documents/hosptourrec.pdf
Information and Communication Technologies	www.cde.ca.gov/ci/ct/sf/documents/infocomtech.pdf
Manufacturing and Product Development	www.cde.ca.gov/ci/ct/sf/documents/manproddev.pdf
Marketing, Sales, and Services	www.cde.ca.gov/ci/ct/sf/documents/mktsaleservices.pdf
Public Services	www.cde.ca.gov/ci/ct/sf/documents/pubservices.pdf
Transportation	www.cde.ca.gov/ci/ct/sf/documents/transportation.pdf



CHAPTER 3: TYPES OF LEARNING

3.1 What is Inquiry Based Learning?

The power of an inquiry-based approach to teaching and learning is its potential to increase intellectual engagement and foster deep understanding through the development of a hands-on, minds-on and ‘research-based disposition’ towards teaching and learning. Inquiry honors the complex, interconnected nature of knowledge construction, striving to provide opportunities for both teachers and students to collaboratively build, test and reflect on their learning (www.teachinquiry.com).³

“The meaning of ‘knowing’ has shifted from being able to remember and repeat information to being able to find and use it.”
~ National Research Council

3.2 What is Project-Based Learning?

Project-based learning is a dynamic classroom approach in which students actively explore real-world problems and challenges in order to acquire deeper understanding. Students become more directly involved with the content, developing a sense of “ownership” of their learning as well as a higher level of meaning and relevancy. It also enables students to show what they know in a variety of ways other than pencil/paper-type tasks⁴.

Chicago Public School’s website, Choose Your Future, provides in depth information, videos and project ideas (www.chooseyourfuture.org/support-file/cte-project-based-learning) for classroom learning.

3.3 Critical Thinking/Problem-Based Learning



Twenty-first century skills and career and technical education are essential in every state, district, and school committed to college and career readiness for all students.

According to the survey, *The Ill-Prepared U.S. Workforce: Exploring the Challenges of Employer-Provided Workforce Readiness Training*, many students do not have the skills they need in order to succeed beyond high school. Specifically, the results indicated that critical thinking and problem solving ranked highest as the area where students need the most training and preparation⁵.

³Reprinted from: Stephenson, Neil. "Introduction to Inquiry Based Learning." *Teach Inquiry*. Web. Nov. 2014. <<http://www.teachinquiry.com>>.

⁴Source: "Overview of CTE Project-Based Learning." *Choose Your Future*. Web. Nov. 2014. <<https://www.chooseyourfuture.org>>.

⁵Source: *The Ill-Prepared U.S. Workforce*, 2009. The Conference Board, Corporate Voices for Working Families, American Society for Training and Development, Society for Human Resource Management.

**CHAPTER 4: RESOURCES AND PROFESSIONAL DEVELOPMENT OPPORTUNITIES**

CTE Resource	Web Link
Achieve's CCSS-CTE Classroom Tasks	http://www.achieve.org/ccss-cte-classroom-tasks
California Department of Education's CTE Standards	http://www.cde.ca.gov/ci/ct/sf/ctemcstandards.asp
CTE Lessons: What do CTE Students do after high school?	http://www.ctelessons.com/
Crosswalk Between Math CCSS and The National CTE Career Clusters	http://www.ode.state.or.us/wma/teachlearn/commoncore/mathcccareerclusters.xls
Humboldt County Office of Education's ROP Program	http://www.humboldt.k12.ca.us/hrop.php
Lake County Office of Education's CTE Program	http://www.lake-coe.k12.ca.us/programs/rop_in_lake_county
Literacy in CTE Lessons	http://www.cteliteracylessons.com/
Mendocino County Office of Education's CTE Program	http://www.mcoe.us/District/Department/36-Career-Technical-Education
North Coast School of Education's CTE Program	http://www.ncsoe.org
Sonoma County Office of Education's CTE Professional Development	http://www.scoe.org/pub/htdocs/cte-prof-dev.html