



Building a Bridge Between CTE and EWD



CTE Hubs

CCCAOE Fall, 2011

October 19, 2011

CTE Hubs Overview

- 8 CTE Hubs
- Hosted at EWD centers
- One CTE Hub per EWD initiative
- Statewide role
- Funded in part by SB70
- 5-year projects

Industries/Specializations

- Biotechnology
- Transportation & Energy (ATTE)
- Media Arts
- Manufacturing (CACT)
- Healthcare (HWI)
- Envir./Health/Safety/Hom. Security (ETC)
- Workplace Skills (WpLRC)
- Research/Career Exploration (COE)

CTE Hubs' Goal

- To promote the EWD model of integrating business and emerging industries with CTE programs and courses offered in K-14
- To improve CTE and build partnerships with industry

CTE Hubs' Objectives

To engage in:

- Work experience, work based learning, job shadowing, community classrooms, cooperative vocational education, and internships
- Skills identification and certification
- Career pathways and program/curricula design
- Pre-high school career education



CTE Hubs' Objectives *(continued)*

- Currency with labor market demand and economic trends
- Increased membership and level of participation in student-business organizations
- Building a statewide system to link business and economic development with CTE



Highlights from Projects

- Partnerships with K-14
- Developing career pathways
- New curriculum development
- Tools and resources
- Student internships
- Career exploration events and tools
- Professional development for faculty
- Partnerships with businesses
- Partnerships with WIBs

Partnership with K-14

- Media Arts: Teacher development, student and graduate internships, training, industry networking and articulation agreements with animation, film, television and digital media partners.
- ETC: Teacher training; teacher-instructor networking; and resource sharing. Partner on middle and high school grants.

Partnerships with K-14 *(continued)*

- Workplace Learning: Piloting curriculum in principles of sustainability and workplace soft skills with high schools.
- ATTE: Energy academies and related high school programs; creating joint programs with Community Colleges

Developing Career Pathways

- **Biotechnology:** Articulation agreements through Tech Prep credit by exam model
- **Media Arts:** Internships, training, industry networking and articulation agreements with animation, film, television and digital media partners in high schools, colleges and universities.

New Curriculum Development

- Workplace Learning: Introduction to Sustainability and Next Skills Prep for high school students.
- ATTE: Natural Gas Vehicle; Hybrid Vehicle; Technology; Air Pollution Control Technology; Renewable Energy
- Health: Contextualized science coursework to include Medical Biology, Medical Chemistry, Medical Anatomy, in conjunction with ROP/CTE offerings

Tools and Resources

- **Advanced manufacturing: Volunteer match software.**
 - Allows teachers to post requests for classroom volunteers.
 - Volunteers can then "browse / search" for local requests that match their qualifications.
 - Available to any educational organization (non-profit) for free.
 - <http://www.californiatechedresources.org/volunteermatch/test11/>



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CTER Goal

The goal of the California Technology Education Resource (CTER) Center is to provide a resource for teachers and administrators in technology education in the state of California. We define this to include those in industrial technology education (such as machining, welding, drafting, automotive, construction, etc.), engineering, and other technology-related classes. While it is targeted more towards K-12 teachers, there will also be information useful to Community College and University teachers as well.

By providing these resources for teachers, we hope to assist them in getting more kids interested in careers in manufacturing, engineering, and technology-related careers.

Resources

This Resource Center is focused on helping high school, middle school, and community college teachers in a number of different ways. Note that not all of these resources are available at this time. The site is being launched in December 2009, and new features will be added over the coming months.

- Connect with other teachers & programs
- Connect with industry
- Find classroom materials
 - Curriculum
 - Examples of hands-on projects
 - Donations of equipment & supplies
- Teacher Professional Development
 - Grants
 - Externships
 - Teaching Jobs
- Help students find:
 - Summer jobs

Tools and Resources *(Continued)*

- Health: Curricula, program implementation resources, surveys, and toolkits available at www.haspi.org
- COE: Path2Careers.net
 - Tools for students, faculty, counselors and administrators.
 - Discover high demand and emerging occupations
 - Career fact sheets and videos available online.



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Career Counseling Tools

Targeted information to guide student choices



Program Development Tools

Market validated information for course development



Students

Find your career path



Path2Careers eNews

Sign up now

Student Internships

- **Biotechnology:** Approx. 50 HS students placed in paid summer internships annually.
- **Media Arts:** 10 students from CHAMPS Charter High School interned for 60 hours at Los Angeles Center Studios. Received class credit and certificates of completion.
- **Health:** Internships with local hospitals; assist with recruitment and selection, provide HIPAA and soft skills training.



Career Exploration Events and Tools

- Careers in Manufacturing Workshop in Bay Area (May '11)
- ETC: Conducted Summer Youth Employment Program, Middle College career exploration workshops; in planning for high school academy and ROP career exploration workshops



Professional Development for Faculty

- **Biotechnology:** Annual summer program for High School Teachers
LSSI
- **Health:** Coordinate health professions information sessions , tours, orientations, and related workshops at partner colleges

Partnerships with Businesses

- Workplace Learning: Partnerships with Go Greenside, Inc., ABC Solar, and South Bay Environmental Services Center to support Introduction to Sustainability curriculum through presentations to high school students.
- ATTE: Expanding programs with business. Developing both governmental and business partnerships (i.e. Southern California Gas Company, South Coast Air Quality Management District).

Partnerships with Businesses *(continued)*

- ETC: California Conservation Corps, Santa Clara Water Agency, Santa Clara County Chapter American Chemical Society.
- Media Arts: Opportunities for training, internships and career exploration (e.g. the Entertainment Economy Institute, the Mary Pickford Institute for Film Education, Acme Animation, and the Academy of Television Arts and Sciences Foundation.)

Partnerships with WIBs

- Workplace Learning: Membership on Youth Council Advisory Boards of Pacific Gateway WIN and South Bay WIB. Job preparation skills training partnership with South Bay WIB to support Gateway to Green Building project.
- Biotechnology: LSSI and WIA Youth Program
- ETC: NOVA Workforce Board of Silicon Valley, Work2Future Workforce Board

For More Information Visit us at

- ATTE: atteccolleges.org & fourenergy.org
- Biotech: matsc.org
- CACT: californiatechedresources.org
- COE: path2careers.net and coecc.net
- ETC: ncaetc.org
- HWI: haspi.org
- iima4biz: iima4biz.org
- WpLRC: wplrc.org

Additional Resources

- www.cteonline.org/
- www.statewidepathways.org/
- www.theacmenetwork.org/
- www.amecareers.org/
- www.emmysfoundation.org/
- www.marypickford.com/
- www.ccc.ca.gov

Contact Us

- ATTE: Greg Newhouse gnewhous@sdccd.edu
- Biotech: Sandra Slivka sslivka@sdccd.edu
- CACT: Mark Martin mark.martin@design4X.com
- COE: Audrey Reille AReille@mtsac.edu
- ETC: Michael Hall Mike_Hall@wvm.edu
- HWI: Linda Zorn ZornLi@butte.edu
- Media Arts: Daniel Nyiri nyiridj@lavc.edu
- WpLRC: Phillip Sutton psutton@elcamino.edu

THANK YOU!