EFFECTIVE IPAs GET NATIONAL RECOGNITION

IPAs currently offer problem-solving activities in five ITE industry sectors. Here’s an update on their rapid acceptance by the field.

The California Industrial and Technology Education Consortium (CITEC) develops instructional units, Integrated Performance Activities (IPAs), for California’s industrial and technology education (ITE) teachers.

Integrated Performance Activities are hands-on, design-based instructional units that address the new Career and Technical Education (CTE) state curriculum standards. These problem-solving activities provide an excellent opportunity for instructors to integrate ITE and academic standards.

IPAs that have been completed to date cover the five ITE industry sectors: construction and building trades; manufacturing and product development; engineering and design; transportation; and energy and utilities.

Since its inception two years ago, IPA curriculum development for grades 7 through 12 and beyond has been well received. All grade levels have been represented with an even statewide split of representatives from northern and southern California including Middle Schools, High Schools, ROCPs and Community Colleges.

To date more than 33 teachers have participated in the publication of 41 IPAs designed for general access. These IPAs are free and may be downloaded, along with the multimedia components, at citeconline.org.

The most recent advancement made to the IPAs has been the Multimedia element. This component incorporates a real-world dimension to classroom presentations, bringing an industrial environment into the lesson as students have an opportunity to hear the sounds of manufacturing facilities and businesses that relate to actual classroom assignments.

IPA project coordinator is Teri Tsosie, Director of Technology and technology teacher at Hermosa Beach City School District. She is assisted by Terry Price, Professor and Manufacturing Department Chair at Cerritos College.

Ms Tsosie and two IPA authors, Terry Price of Cerritos College and Warren Jensen of Pleasanton Middle School, have taken the IPA project national, presenting the concept at the National Industrial and Technology Education Association (ITEA) Conference in Baltimore, last March.

Hoping to inspire others to develop and share curriculum at the local, regional, and national level, the team shared California’s IPAs with the nation’s leading technology teachers. Over the past two years, the...
program has also been presented at a number of conferences throughout California. In fact, a team of writers and ITE teachers from around the state met last month in Monterey to continue the development of IPAs in the five ITE industry sectors.

Readers are reminded, these IPAs can be downloaded free at the websites mentioned above. For additional information, contact Project Coordinator Teri Tsosie at ttsosie@hbcsd.org

Comments from teachers who have used IPAs are testament to their effectiveness:

“I have seen common, routine curriculum for technology classes blossom into refreshing and more valid pieces of well laid-out and student followed teaching materials.”

“IPAs are well thought out, researched and written to meet all the state standards”

“IPAs are a fantastic “Planning Tool” for my Manufacturing Technology curriculum!”

“The development time spent is well worth it. The products are ‘real and engaging’ and the computer-based format makes them easily shared, updatable and tweak-able.”

“IPAs allow Technology instructors across the US, to visualize, access and apply ideas and concepts from other instructors and utilize the material in their own classes.”

“IPAs give the new Technology teachers a model to see what fascinating things other teachers are doing with their programs. After completing my IPAs, I received numerous calls from instructors wanting further information on the projects.”

**Middle School Report**

Much interest in industrial and technology education middle school programs has grown out of the 2005 California State Board of Education's approval of the California Career Technical Education Model Curriculum Standards. The excitement over including middle school programs continues as the new California Career Technical Education Curriculum Framework moves into final draft form.

Though California’s industrial and technology education programs are alive, well, and strong, they don’t usually receive much “press” in our statewide community. High school and regional occupational centers and programs are becoming increasingly interested in middle school “feeder” programs, particularly in threatening environments wherein secondary programs are fading.

California has a long history of strong “junior
high” or middle school industrial arts and industrial technology programs. Not so long ago the state’s larger districts supported elementary school industrial arts with categorical funding, coordinators and support staff. While a current study is underway to identify all viable industrial and technology education middle school programs, we have long identified middle school leadership in California and engage these professionals in our many statewide initiatives.

So where are the middle school standards in the new California Career Technical Education Model Curriculum Standards? Well, first try to find high school standards or regional occupational centers and programs standards in the new document. That’s right, you can’t locate a specific middle school, high school, or regional occupational centers and programs standard because the individual standards do not carry a delivery system or delivery level label.

First understand that the new standards are career technical education standards. Next, note that these standards are divided into 15 industry sector categories. Now note that the industry sectors are divided into career pathways, and so forth. Still no grade level indicated. OK, now look at the document cover and title page. There it is in the subtitle. Your rare exception to the nonspecific standards rule: “Grades Seven Through Twelve.” Now go to the debated California Career Technical Education Curriculum Framework draft to find the middle school discussed in four of the 17 pages of the preface. There are even a couple statements in about K-12 and elementary schools. Not a bad start.

Statewide ITE Forum

The Women & Industrial Technology Project, sponsored by the CDE, Office of ROC/P and Workforce Development is designed to develop and promote a network of women industrial and technology education instructors (ITE), their supporters, and advocates. The network will serve as a resource to female ITE instructors.

The project plans a statewide forum for women ITE teachers in October that will focus on current concerns in the ITE field, and consider strategies to encourage the enrollment of nontraditional students. Questions about the forum or discussion topics may be addressed to Penelope Paine at 805-637-3194, pennypaine@aol.com. For questions about meeting logistics, schedule, or location, contact Margaret Fichtner at 916-228-2234, or mfichtner@scoe.net.

Building Trades and Construction Industry Sector Curriculum Standards

The Building Trades and Construction Industry sector provides a foundation for interested California students. The instructional program integrates academic and technical preparation and focuses on career awareness, career exploration, and skill preparation. The sector encompasses four pathways: Cabinetmaking and Wood Products, Engineering and Heavy Construction, Mechanical Construction, and Residential and Commercial Construction.

These pathways emphasize processes, systems, and the way in which structures are built. The knowledge and skills are acquired in a sequential, standards-based pathway program that integrates hands-on, project-based, and work-based instruction as well as internship, community classroom, work experience, apprenticeship, and cooperative career technical education.

Standards included in the Building Trades and Construction sector are designed to prepare students for technical training, postsecondary education, and entry to a career. A strong and collaborative effort by industry representatives, educators, and the California Department of Education resulted in the first ever California State Board of Education approved industry sector foundation and pathway standards for this sector.

The following writing team members of the Building Trades and Construction Industry Sector are commended for their hard work and a job well done: Rick Cole, Director, Carpenter’s Apprenticeship Training Institute, San Diego; Nick Nicholson, Director, Woodwork Institute, Lakewood; Rondoll Moss, Service Manager, Beutler Mechanical, Sacramento; Doug Urbick, President, Teichert Construction, Sacramento; Mike Mejia, Operations Manager, MasterBrand Cabinets, Rancho Cucamonga; Tom Vesella, Construction Technology Instructor, Glendale High School, Glendale; Marty Mangan, Construction Teacher, Ayala High School, Chino; and Rick Mejia, Consultant, California Department of Education, Sacramento.

CTE Online - Part of the Solution

Connecting the Curriculum of Academics to the World of Industry and Career Preparation

The fact is, schools should equally support both academic needs AND career options of all students. To pursue either to the exclusion of the other places students at a serious disadvantage throughout the entirety of their adult lives as citizens, members of their communities and families, and employees within a highly competitive workforce.

Because of this, “CTE Online” was developed to employ direct methods and resources to accurately analyze and document the degree to which CTE curricula across all programs aligns with the newly-adopted CTE standards, Industry Standards and academic standards which are emphasized on the STAR assessment test and the California High School Exit Exam.

Educators signing up for this incredible, web-
Tweltridge Message...

Yes, 2006-2007 is emerging as another landmark year. Favorable legislation, increases in school budgets, dollars earmarked for specific Industrial and Technology Education program needs – is moving in the right direction.

Stay connected. Visit the CITEC web site www.citeconline.org frequently, and participate in CITEC events: Conferences, Workshops, Newsletters, and Emailed Briefs. Also visit your Industrial and Technology Education web site www.cde.ca.gov/ci/ct/ie at the California Department of Education (CDE) to obtain information and links you need. Your CDE industry sector staff and I wish you success in your new school year. — Al Tweltridge

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CITEC Mission Statement

CITEC, a project funded and supervised by the California Department of Education, provides financial support for the IPA project. Linda Matzek, Project Director, and Bill Gray, Project Manager provide logistical and clerical support. The Integrated Performance Activities are an excellent resource for California’s industrial and technology education teachers.

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CTE Online...

based resource are given online access to a quick and powerful set of tools that easily allows small teams of regional, county, district or ROCP Career Technical Educators to instantly explore and analyze their CURRENT classroom activities and correlate them to the most heavily emphasized and assessed state academic content standards from Math and English-Language Arts to science.

Login to the site and these tools will provide you and your teachers a virtual platform to support both face-to-face workshops and online-based support throughout the school year to insure effective implementation of curriculum alignment strategies. With all of the CTE standards and the highly tested academic standards built directly into this resource, all it takes is a click of the mouse to develop high-quality lessons and submit them for review and suggested modifications. Exceptional lessons can then be shared among teachers as fully editable copies to enable new teachers to add instructional activities and continue to enhance the types of environments students encounter each day in California’s “world class” Career Technical Education program.

Check it out! Go to www.cteonline.org.

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