



APPRENTICESHIP Preserving Institutional Knowledge While Growing The Next Generation of Talent

CALIFORNIA APPRENTICESHIP COUNCIL



In This Issue:



The California Apprenticeship Council Newsletter

is a quarterly publication produced by the Department of Industrial Relations' Communications Office and is published every January, April, July, and October. Archived editions can be accessed at http://www.dir.ca.gov/cac/CACPublications.html

- 03 Apprenticeship training includes workplace safety
- 04 California apprenticeship sponsors "LEAD" the way
- 05 UBC and CITF partnership expand training sites
- *o6* Increased state funding benefits apprenticeship and workforce development programs
- 07 A word from the apprentices
- *o8* Cosmetology and barbering apprentices continue to enjoy success in Southern California
- 09 An apprenticeship led to a lifetime of multiple careers
- *IO* Going green is changing the roofing and waterproofing industry
- *II* Preparing a skilled workforce for California's energy efficiency demand



Contacts

DIR Headquarters

1515 Clay Street Oakland, CA 94612 1 (844) LABOR-DIR (toll free) 1 (844) 522-6734 www.dir.ca.gov

Christine Baker Director, Department of Industrial Relations

Erika Monterroza Communications Director

DAS Headquarters

455 Golden Gate Avenue, 9th floor San Francisco, CA 94102 (415) 703-4920 (office) (415) 703-5477 (fax)

Diane Ravnik Chief, Division of Apprenticeship Standards

Comments? Questions? Suggestions? Email Communications@dir.ca.gov



The California Department of Industrial Relations (DIR) protects and improves the health, safety, and economic well-being of over 18 million wage earners and helps employers comply with state labor laws. DIR is housed within the Labor & Workforce Development Agency.



C Keep your workplace safe

· Workers' compensation r

Help for small pusinesses

D Licensing, registrations, certifications & p
 Public works projects

Workplace postings

DIR's Division of Apprenticeship Standards (DAS) creates opportunities for Californians to gain employable lifetime skills and provides employers with a higly skilled and experienced workforce while strengthening California's economy.



File a claim for unpaid wages
 Report unsafe work conditions
 Request benefits for a work injun

- Avequest behefits for a work injury
 Work permits
- Apply to be an apprentice

Photo Credit: Bob Gumpert

Apprenticeship training includes teaching workplace safety



Christine Baker Director, Department of Industrial Relations



DAS not only creates opportunities for California apprentices to gain employable lifetime skills, it ensures high standards are maintained for on-the-job training and that includes teaching workplace safety. orker's Memorial Day on April 28 is a time to reflect and pay tribute to the men and women who died on the job. It is also an opportunity for all of us—the Department of Industrial Relations (DIR), the Division of Apprenticeship Standards (DAS), employers, and employees—to recommit to safety on the job.

Over 40 years ago Congress passed the Occupational Safety and Health Act. Since then those hard-fought protections have made jobs safer, saved hundreds of thousands of lives, and prevented millions of workplace injuries and illnesses. DAS not only creates opportunities for California apprentices to gain employable lifetime skills, it ensures high standards are maintained for on-the-job training and that includes teaching workplace safety. While apprentices gain knowledge in their specialty, they also learn about its potential hazards, especially when working with machinery, equipment, or toxic substances.

An effective apprenticeship program incorporates classroom and field experience in the trade as well as comprehensive instruction

Photo Credit: Bob Gumpert

about preventing workplace injuries and fatalities before they happen. Teaching workplace safety begins on the apprentice's first day and continues throughout the entire program. When the apprentice is ready to enter the workforce, the employee already knows how to work safely as a result of the comprehensive training. Employers save time and money, and employees remain safe and healthy on the job.

We believe there is still more to accomplish to ensure compliance with workplace laws. It is clear from our efforts in fighting the underground economy that some employers continue to cut corners and violate the law. They subject workers to substandard conditions including the failure to pay wages, inadequate workers' compensation coverage, or exposure to hazardous conditions that could cause serious injury. Apprentices who gain practical knowledge of safety protocols and know how to recognize and report hazards will develop into workers who lead by example.

Please join DIR and DAS on this Worker's Memorial Day and every day of the year to teach workplace safety, and make injury prevention a key to a healthy and prosperous California.



California apprenticeship sponsors "LEAD" the way



Diane Ravnik Chief, California Division of Apprenticeship Standards



I urge all our California apprenticeship program sponsors to sign on to the newly initiated federal apprenticeship LEADERs program. kay. I admit it. I'm biased toward our California Registered Apprenticeship programs and program sponsors as being the best in the country. I think all California apprenticeship program sponsors are leaders in the nation's apprenticeship system. That's why I urge all our California apprenticeship program sponsors to sign on to the newly initiated federal apprenticeship LEADERs program (Leaders of Excellence in Apprenticeship Development, Education and Research) and consider becoming a nationally recognized "LEADER."

It encourages established apprenticeship program sponsors to spread the good word about the benefits of apprenticeship to other employers who haven't used apprenticeship and don't know how it works or what the benefits of apprenticeship are to employers and their employees. The LEADERs program also anticipates these apprenticeship LEADERs will work together to share innovative practices and partnerships for expanding and shaping apprenticeship in their industries and across the country. It's an opportunity for experienced apprenticeship program sponsors to become national spokespersons for apprenticeship, thus engaging new employers in industries and occupations which haven't been exposed to apprenticeship. Furthermore, this new program will highlight our California apprenticeship programs and garner the national recognition they deserve for the high-quality training programs offered over the years to build a skilled workforce from generation to generation.

LEADERs is also a springboard for other state and federal initiatives recently launched. This includes the \$100 million the Department of Labor's American Apprenticeship Initiative (AAI) grants, the federal Registered Apprenticeship College Consortium (RACC), and Governor Brown's commitment to the growth and expansion of registered apprenticeship that was addressed in his 2015–16 budget. Adding \$14.1 million RSI funding to cover all costs for apprenticeship classes will increase reimbursement levels and make funding equal to that of other community college courses along with \$15 million more for the establishment and support of new apprenticeship programs.

Our April 2015 California Apprenticeship Council meeting coincides almost exactly with the April 30th deadline to apply for AAI grants. Several outstanding submissions are expected from California in advanced manufacturing, energy efficiency, healthcare, and other emerging industries and occupations which we hope will be successful and arise as the LEADERs of tomorrow.



UBC and industry partnership expand training sites



Richard Harris 2015 Chairman, California Apprenticeship Council



Since 2003 CITF, in collaboration with contractors, industry experts, and equipment manufacturers, has developed curriculum and written instructor manuals for more than 100 courses, including student manuals, instructor guides, presentations, and videos.

t our California Apprenticeship Council (CAC) meeting in January, Robert Marcial of Pacific Gas and Electric spoke about the energy efficiency of building envelope technology and the need for journeymen and apprentices to learn about this field (See page 11). The Carpenters International Training Fund (CITF) and Carpenters International Training Center (CITC) presently offer such training. In a short turnaround time their knowledgeable staff can train instructors and members at its 200 affiliated sites, as well as print instruction manuals. All this is now possible because of the partnership forged in 1997 between the United Brotherhood of Carpenters and Joiners of America (UBC) and the carpentry industry to build an international training center and standardize training throughout the United States and Canada.

In 1999 CITF purchased 12 acres near McCarron Airport in Las Vegas to construct a \$14 million 176,000 square foot training facility that would become CITC. Since opening in 2001, it has expanded four times. The last 220,000 square foot expansion was completed in 2013 and cost \$43 million. Today the one million square foot center now sits on 17 acres and boasts 200,000 square feet of training floor, 70 classrooms, a meeting hall with a seating capacity for 800 and hotel rooms for 420, plus a cafeteria equipped to serve three meals a day to 600 trainees. Hospitality services are also provided. In addition, there is a fitness center, pool, Jacuzzi, bar and lounge. All food, lodging, and transportation are provided by CITF. Training sessions typically last an average of six days.

The new West Building showcases a 65,000-gallon diving tank with closed circuit television where divers are trained to weld and work on underwater construction projects. The new 80,000 square foot South Shop has a pile driving pit and concrete form area serviced by two 20-ton overhead cranes. To facilitate large-scale industrial scaffold training there is a 30-by-60 foot retractable roof section.

In the Turbine Shop millwrights are trained to install and maintain gas and steam turbines. A turbine pit and two 30-ton overhead cranes were added for close quarter training. In a nearby shop millwrights are also trained in mechatronics, which is the installation and maintenance of robots used on factory assembly lines.

The CITC Computer Center hosts a centralized database system that tracks apprentice, journeymen, and instructor training. Using a proprietary software called Train a carpenter's membership card can be easily scanned to access his or her training and certification history.

Since 2003 CITF, in collaboration with contractors, industry experts, and equipment manufacturers, has developed curriculum and written instructor manuals for more than 100 courses, including student manuals, instructor guides, presentations, and videos. Over 600 manuals and instructional materials are reproduced and inventoried in CITC's print shop.

UBC remains dedicated to building a bright future for tomorrow's working professionals. In 2015 UBC will train 20,000 instructors and members at CITC sites throughout North America, an investment that will surpass \$200 million.

Increased state funding benefits apprenticeship and workforce development programs



Van Ton-Quinliven California Community Colleges Vice Chancellor of Workforce & Economic Development and CAC Commissioner



The proposal would increase overall spending for apprenticeship from an annual \$22 million to over \$52 million for the 2015–16 fiscal year, with \$15 million for "new and innovative" apprenticeship programs.

any new and exciting events have occurred since the January California Apprenticeship Council (CAC) meeting that will positively impact registered apprenticeship programs. Following the release of the governor's proposed budget earlier this year the Chancellor's Office and other agencies have been working diligently to formulate a plan of action should the proposed increases in funding remain in the budget come July 1. The proposal would increase overall spending for apprenticeship from an annual \$22 million to over \$52 million for the 2015–16 fiscal year, with \$15 million for "new and innovative" apprenticeship programs. The Chancellor's Office would distribute the funds and partner with the Division of Apprenticeship Standards (DAS) and other workforce agencies in this effort.

In November Chancellor Brice Harris announced the creation of the Taskforce on Workforce, Job Creation and the Economy. A series of Strong Workforce Town Hall events



began gathering input from around the state in January. Chaired by President Sunita Cooke (Mira Costa College) and co-chaired by Lynn Shaw (Long Beach City College) and Tim Rainey (California Workforce Investment Board Executive Director), the Taskforce is comprised of knowledgeable leaders from the community college system, the business community, labor, public agencies, community based organizations, K-12 policy, and other groups. To learn more about the Taskforce visit http://doingwhatmatters.cccco.edu.

Many of you are also involved and participate in the AB86 Adult Education consortia in your region. Much discussion has taken place over the role of adult education providers in apprenticeship; it is one of the five areas of emphasis that each consortia was asked to address in their reports to the Chancellor's Office. Consortia has been encouraged to identify those programs that may already be operating in the area and work collaboratively with them to provide pre-apprenticeship opportunities and other types of support for adults looking for a career through apprenticeship training programs.

Most recently, as of March 12th, 20 California community colleges have joined the Registered Apprenticeship College Consortium (RACC) in anticipation of increased federal/state investments in apprenticeship as an effective strategy to build skills while students earn a living. These RACC Colleges will provide an opportunity for those journeymen who desire to return to college and pursue an associate's or bachelor's degree to further their education.

Career Technical Education, Apprenticeship and other workforce development programs continue to dominate the conversation in California and throughout the country as the means to provide a pathway out of poverty for so many of our fellow citizens. The Chancellor's Office applauds your contribution to these efforts and looks forward to working with you in the future as new and exciting opportunities emerge.

A WORD FROM THE APPRENTICES

What do you like most about the apprenticeship program?



James O'Keefe | Antioch 6th Period Carpenter Apprentice

"The CTCNC has been such a great place for me. Many years ago, I was in an office job and going nowhere. I like working with my hands and working outside. The training facility has given me all of the tools and training I have needed to advance in my career that is not only profitable but exciting. The training that I obtained has helped take care of my family and will for years to come. I will definitely be taking journeyman upgrade classes once my apprenticeship is complete."



Franklin Penado | San Francisco 7th Period Carpenter Apprentice

"CTCNC has allowed me to enjoy an exciting well-paid career in the construction field and access to the best training possible. I recommend the program to all my friends."

"This program is an investment for a long career."

Apprentice Statistics for the quarter ending March 31, 2015

54,674 Number of active apprentices

4,542 Number of new registrations and reinstatements

3,030

Number of active women apprentices

5.4% Percent of active apprentices represented by women

59% Percent of active apprentices represented by minorities

3,842 Number of active veteran apprentices

297 Number of veterans registered in 2015

39

Number of veterans who have completed apprenticeships in 2015





Lynna Vong | San Francisco 2nd Period Carpenter Apprentice

.....

"This apprenticeship is an invaluable opportunity for me to gain skills and explore new interests. The classes especially, allow me to discover new interests and better my trade. They are professional development opportunities in addition to my daily training at work. This program is an investment for a long career. I believe apprenticeship classes in the trades is very similar to attending college; it's a set number of years that allow students, like myself, to gain job skills necessary for today's workforce."

Hunter Cole | San Francisco 4th Period Carpenter Apprentice

τιν 1 επισά Carpenier Appreniice

"CTCNC Apprenticship Program has allowed me access to the State of the Art Training and helped me build a well paying career. The training and work opportunities have given me a skilled trade for life."

Photo Credit (Black & White Photos): CTCNC

Cosmetology and barbering apprentices continue to enjoy success in Southern California

From day one individuals in the program gain through theory and practice the confidence to exercise their profession so they can achieve certification by passing the state exam. or more than a decade Cosmetica Cosmetology & Barbering Apprenticeship Unilateral Committee has been training Southern California men and women through its specialized courses and instruction. The program has yielded results for thousands of certified apprentices who have managed to work and find a job to become the main source of income for their families.

Years of being the leader in cosmetology and barbering education in Los Angeles County could not have been better. This is due to the fact that Cosmetica takes a personal interest in their students by offering a permanent support group that goes beyond the duties of academia; instructors remain in contact with their mentees. After passing the course they are given valuable information regarding industry updates and techniques for opening or increasing their business that is entirely provided by Southern California Cosmetology and Barbering Employers Association. The growth of Cosmetica is greatly attributed to the recommendations of recent students and graduates who return as salon/barber shop owners and want to provide an apprentice with training.

The apprenticeship courses last for 240 hours and are led by highly qualified, certified teachers who give their all to provide the

best education for each student. From day one individuals in the program gain through theory and practice the confidence to exercise their profession so they can achieve certification by passing the state exam. They learn techniques for skin, hair, and nails and how to handle a razor for barber shaving methods. At the end of the program students have the option to take advanced classes in cosmetology, barbering, beautician makeup, electrolysis, and massage. Cosmetica is currently approved in 11 counties with training facilities in Downey, San Diego and Ventura. Due to high student demand additional centers will be opening in Bakersfield, Salinas and San Bernardino counties.

Cosmetica Cosmetology & Barbering Unilateral Apprenticeship Committee accepts applicants over 16 years of age who wish to obtain a professional license in the industry. The only requirement is a sponsor or employer wanting to participate in a mutually beneficial learning experience that will ultimately reflect in the success of the salon or barbershop during the student's apprenticeship.

Cosmetica initially taught those who spoke only Spanish but now the program is also offered in English. It is the best kept secret in California where an individual can work and learn at the same time in an exciting profession.

Cosmetology and

barbering students develop their skills at Cosmetica training facilities in preparation for passing the state exam. Apprenticeship courses cover a myriad of topics and are taught by highly qualified, certified instructors. (Far right) Maria Teresa Villareal, Director of Cosmetica.

8



Photo Credit: Julian Moreno



Cosmetica Cosmetology

and Barbering UAC

An apprenticeship led to a lifetime of multiple careers

've come from a long, family line of craftsmen and tradesmen so it made perfect sense, as part of a later-in-life career change, to choose an apprenticeship program-for the second time!

At age 19 I entered a heavy-duty engine mechanic apprenticeship working alongside journeyman mechanics. My education was a combination of observing their actions and applying their techniques, as well as learning from the training manager in a controlled classroom/laboratory setting. The entire experience gave me a personal understanding of the value of an apprenticeship program. I was paid for the work I performed, received instruction from a multitude of skilled people, and was able to quickly develop my own skills in the field.

Twenty-five years later the diverse experience I gained from my first apprenticeship empowered me to become a machinist, a service technician, an accredited mechanical instructor, a service manager, a field operations manager, and even a senior research assistant for Chevron (assisting with the R&D of engine lubricants and fuels). In 2001, the internet-based company where I was working closed. However, it was a transition that gave me the opportunity to seriously consider what I wanted to do next.

At that time the electrical field was the most intriguing of the options available to me. Throughout my previous career I'd observed and interacted with many electricians doing what I thought was significant, interesting, and mentally challenging work. Furthermore, based on my previous apprenticeship experience, I believed that by entering an apprenticeship program again I would quickly prosper in this new career field and still maintain a viable source of income to meet the needs of my family... and I was right!

NSTRUCTOR

I decided to join the Western Electrical Contractors Association (WECA) commercial electrician apprenticeship. While enrolled in the five-year program I considered many of the new career options available to me, including field service electrician, project manager, estimator, safety coordinator, superintendent, and business owner. However, I really wanted a position where I could help others while continuing to further my education. In an auspicious occurrence, a part-time instructor opening became available at WECA and two apprenticeship instructors encouraged me to apply for it. I got the job which soon led to a full-time position. I'm currently a California state credentialed trade instructor. Now I primarily teach third year apprenticeship, but I also instruct electrician trainees and continuing education journeyman students enrolled in WECA's online programs. I also serve as a subject matter expert and a developer of various self-paced and classroom curriculum for WECA.

Throughout my life I have received the tremendous benefits of knowledge and skill from many selfless people who have given of themselves so that I could be who I am today. I believe that I have been given the privilege to pour my knowledge and abilities into others so that they can flourish as well. Apprenticeship programs aren't just about jobs; it's lifelong learning.



Throughout my life I have received the tremendous benefits of knowledge and skill from many selfless people who have aiven of themselves so that I could be who I am today.

Apprenticeship / Department of Industrial Relations

Going green is changing the roofing and waterproofing industry



Integrating green with waterproofing systems is just one of the many endeavors generating a demand for developing new apprenticeship opportunities or for expanding existing programs to teach "green."

Photo Credits: Jose Padilla

eople often ask "what's a green roof?" as if we could answer in a few words and be easily understood. It's not that simple and yet in some ways, it is. Green means building in a way that is sensitive to the environment. There are many new products and systems designed to be specifically green. However, green is not just using different materials; it is using existing materials differently and prompts a whole new way of thinking, from recycling to nano technology.

Roofs have traditionally been designed with one purpose in mind, to keep water out. Keeping heat from transferring into the building, how to capture and use rain runoff, or how to use all of that open space in an environmentally friendly way was hardly taken into consideration. All of that has changed.

One green option is to have roof coatings that don't just reflect back some of the sun's heat but emit it back into the atmosphere. They are so effective you could literally walk barefoot on an emissive roof even during 100 degree weather. But heat must still go somewhere. Between four and five feet above the roof is a heat zone that typically accelerates heat-related illnesses for those working in that area.

Photo voltaic panels that are installed on many roofs can sustain the weight. However, these systems present challenges to roofers if the roof is not specifically designed for that purpose. The roof can fail and be difficult to maintain. Also, the life cycle of photo voltaic panels exceeds that of many roofing systems, which required the industry to design new specifications so the roof would last as long as the panels.

When most people hear green roofs they think of vegetative roofing systems, sometimes called living roofs. These systems have many advantages. In addition to offering all of the benefits derived from living plants they are great insulators to prevent heat from transferring into the building while serving a dual purpose of adding beauty and other functions such as a roof top park. The California Academy of Sciences building in San Francisco was covered in vegetation to specifically create a habitat for an endangered butterfly. These systems often capture rain water and use it for irrigation during dry times. Since they are too heavy for most existing buildings they are primarily incorporated into new construction.

These changes demand a need for training at a much faster pace than ever before to keep up with new technology. Integrating green with waterproofing systems is just one of the many endeavors generating a demand to develop new apprenticeship opportunities or to expand existing programs to teach "green."

Nervice of the second sec

Preparing a skilled workforce for California's energy efficiency demand

n January 5, 2015, Governor Jerry Brown proposed three ambitious goals for California as part of his inaugural address. One was to "double the efficiency of existing buildings and make heating fuels cleaner." To accomplish such a goal the state will need to implement various strategies and develop a workforce that is well-trained, skilled and knowledgeable enough to recognize and act upon energy efficiency opportunities. Workers must also be competent in relevant trade-specific topics and able to understand the interconnectivity of different building systems.

Through their Workforce Education and Training (WE&T) program, California's investor-owned utilities (IOUs)—Pacific Gas and Electric Company, Southern California Edison, San Diego Gas & Electric, and Southern California Gas Company—provide current and future workforce members several resources to help design, build, commission, and maintain buildings in line with the state's aggressive energy efficiency goals. These include education and training programs, technical advice, and building performance measurement tools that are offered throughout the IOU service territories. The majority of these programs are at the IOU energy training centers, however, they are also available at dozens of other cities throughout California and online via the Internet. To learn about PG&E's Tool Lending Library, please visit www.pge.com/pec/tll.

The current lists of classes available through the IOUs are shown below:

SDG&E:	http://seminars.sdge.com
SoCal Gas:	http://seminars.socalgas.com
SCE:	www.sce.com/workshops
PG&E:	www.pge.com/energyclasses

The IOU staff have decades of energy efficiency training experience and expertise that can complement existing building trades training programs. PG&E, SCE, SoCal Gas, and SDG&E are seeking to collaborate with appropriate apprenticeship training programs in California, particularly with those trades that impact the installation, commissioning, and maintenance of lighting and HVAC systems, as well as the quality of the building envelope. Collaboration can take many forms, including, but not limited to providing technical curriculum advice on energy efficiency, building diagnostics tool loans, energy efficiency course materials, and train-the-trainer sessions focused on energy efficiency.

Photo Credit: Pacific Gas and Electrical Company

The statewide Workforce Education and Training (WE&T) Program offers current and future workforce members several resources to help design, build, commission, and maintain buildings in line with the state's aggressive goals for energy efficiency.



For more information or questions about this opportunity to collaborate with the IOUs on energy efficiency training, please contact Robert Marcial, PG&E's lead for Workforce Education and Training, at (415) 972-5177 or email robert.marcial@pge.com

California Apprenticeship Council

Established by the 1939 landmark Shelley-Maloney Apprenticeship Labor Standards Act, the California Apprenticeship Council sets policy for the Department of Industrial Relations' Division of Apprenticeship Standards (DAS). The 17-member council is comprised of six employers, six employees and two public representatives appointed by the governor, plus one representative each from the chancellor of the California Community Colleges, the superintendent of public instruction, and the director of Industrial Relations as administrator of apprenticeship. The DAS chief serves as secretary to the council, and the division provides staff assistance to the CAC and its subcommittees.

The council meets quarterly in different locales around the state to address issues affecting apprenticeship in California. CAC's functions include:

- Receiving reports from the DAS chief and other cooperating agencies
- Providing policy advice on apprenticeship matters to the administration of apprenticeship
- Ensuring selection procedures are impartially administered to applicants
- Conducting appeals hearings on apprentice agreement disputes, new apprenticeship standards for approval, and apprenticeship program administration
- Adopting regulations carrying out the intent of apprenticeship legislation

Photo Credits: Victoria Maglio

2015 CAC Chairman Richard Harris (left) and 2014 CAC Chairman Jack Buckhorn



DAS Chief Diane Ravnik and CAC Commissioner Aram Hodess

Commissioner Pat McGinn