

IN THIS ISSUE:

Introduction; Northeast Region: Leveraging Grants to Light Up the Future Workforce in Connecticut; Southeast Region: NWI@ Academy: Helping the Savannah River Region Grow Its Own; Midwest Region: FirstEnergy Offers Soap Box Derby New Life; West Region: TEP Teaches the Teachers in Summer Intern Program; Upcoming Events

Promising Practices from Across the Country

As we wrap up the regional meetings, we want to share some of the great things happening around the country. In this month's newsletter, you'll get a sampling of promising practices that tie to the Career Pathways model, including career awareness, student support, stackable credentials, and employer involvement. This is what CEWD is all about. National solutions, regional implementation.

You can learn more about how regions are successfully building the energy industry pipeline at this year's Summit, November 14-16 in Arlington, VA. The Annual Summit will provide you with the opportunity to take part in an action-planning process to help your company implement solutions based on your own needs. You'll learn about the latest trends in workforce development and education as well as the successes and challenges CEWD members have experienced in implementing the Get Into Energy Career Pathways model. Register Here: https://netforum.avectra.com/eWeb/DynamicPage.aspx?Site=CEWD&WebCode=EventDetail&evt_key=32183f6d-b49a-46d6-9442-32872830a5cd

701 Pennsylvania Ave., NW
Washington, DC 20004-2696
202.638.5802

www.cewd.org
www.getintoenergy.com

To change your e-mail address for this newsletter, unsubscribe, or for information on membership, please contact us at staff@cewd.org.

**Center for Energy
Workforce Development
(CEWD) ©**

Northeast Region

Leveraging Grants to Light Up the Future Workforce in Connecticut

Leveraging grant money, forging partnerships, and building upon existing programs as avenues for reaching and training tomorrow's energy workers are messages the Center for Energy Workforce Development (CEWD) frequently promotes to its members.

But if you've ever wondered what a successful example of all of the above might look like, search no further than the "Light Up Your Future" program developed by the Energy Providers Coalition for Education (EPCE) in Connecticut.

Pay attention now, because once you start doing all of the above, it's no longer just one organization's program. Or budget. It goes like this: EPCE developed an energy internship program for high school students that could be used anywhere in the country. It's currently being offered to students in Connecticut, in partnership with Northeast Utilities and the Connecticut Business and Industry Association (CBIA). The internship program is funded through a grant from the Department of Energy, and being run by the Council for Adult Experiential Learning (CAEL).

Meanwhile, CBIA loved the program so much, it decided to add on to it using funding from a National Science Foundation (NSF) ITEST Grant. This grant is administered through CBIA's

Education Foundation, which saw an opportunity to expand Light Up Your Future to include not only students, but teachers.

So the internship program is now run concurrently with an externship program.

The bottom line? Students—and teachers—from three high schools in Connecticut are learning how the math and science classes they take (or teach) at school are applied in the real world of a utility.

“It really shows what you can do with grant funding when you bring partners to the table,” said Christine Carpenter, EPCE Director. “Now teachers have a chance to learn what the students are learning, which wouldn’t be happening without everyone pooling their resources and programs and working toward a common goal.”

That goal, “to engage students in rigorous academic work by helping connect them to how that work is relevant in the real world,” is an important one, said Judy Resnick, Executive Director of CBIA’s Education Foundation. “If you go into a geometry class you see kids who are bored to tears. But if you give real world examples of how the concepts they are learning are used in the workplace, like how you need to understand angles to hang a shelf in a shower or create a part for a space shuttle, they understand why they have to learn these things. Likewise, sending teachers into the work world helps them understand how the concepts they are teaching will be applied. And they can take that information and weave it into their curriculum so that they’re giving the students real-world problems to practice the concepts they’re learning.”

The teachers actually attend the internship program alongside the students, though they do so for just two weeks compared to the four weeks the students attend, said Carpenter.

“The teachers are shadowing the kids,” said Resnick, as they ride along in bucket trucks and learn firsthand how the gas and electric utility operates. In Connecticut, there are 22 students in the program, with 11 doing the internship last summer and another 11 completing it this summer.

“Northeast Utilities is committed to workforce development in all areas of the community with a focus on the utility industry,” said Tom Burns, Director of Training. “Workforce development has to begin when our high school students begin thinking about their future career opportunities. The VHS [Virtual High School] and company eLearning courses, the industry self-study materials, and the Bismarck classes allow the students to explore all aspects of the electrical and gas business while learning about different career opportunities. The hands-on application makes the connection between the classroom and the real world of the individuals who work in our electric and gas businesses. Northeast Utilities is proactive in our approach to workforce development recognizing that getting young people excited about our industry is not only a necessity, but is critical to the company’s future ability to respond to customers’ needs in a timely and professional manner.

Northeast Utilities was fortunate to have both the internship and externship programs. But Carpenter said that Light Up Your Future could be offered in a variety of ways, depending upon the utility partner’s needs and available resources.

The internship program was designed to include an online academic component as well, she said. The online classes are offered as high school, energy-related STEM courses through Virtual High School or college level energy courses through Bismarck State College.

“Essentially, the program can be modified to suit the needs of the utility that wants to partner with us,” she said.

For more information about Light Up Your Future, contact Christine Carpenter at ccarpenter@cael.org or visit <http://www.epceonline.org/programs/highschool.html>. For more information about CBIA’s externship program, contact Judy Resnick at Judy.Resnick@cbia.com.

Southeast Region

NWI® Academy: Helping the Savannah River Region Grow Its Own

Over the next 10 years, the Savannah River region—which straddles central South Carolina and Georgia—will need 10,000 new nuclear workers to fill key jobs, including those at four new reactors and others needed at the Department of Energy's Savannah River Site.

That's a tall order to fill, which is why energy industry stakeholders in both states came together to create the Nuclear Workforce Initiative (NWI®) Academies, which offer training programs at Aiken Technical College in South Carolina and Augusta Technical College in Georgia, to begin training potential applicants. Part of the Get Into Energy Career Pathways project funded by CEWD through a Bill and Melinda Gates Foundation grant, NWI® Academies target low-income young adults, who might otherwise be unaware of job opportunities in the nuclear industry in this region. NWI® Academies are one part of the robust approach to nuclear workforce development taking place in the region through the Nuclear Workforce Initiative, a program of the Savannah River Site Community Reuse Organization.

"Some people don't even know these opportunities exist," said Mindy Mets, NWI® Program Manager for the Savannah River Site Community Reuse Organization. "You don't drive by them every day. But we'd like people in the region to get these jobs. We just have to make sure that they have the right skills."

So last year, the consortium launched an NWI® Academy in coordination with Aiken Technical College, where seven students completed a six-week program that provided them with everything from basic employability skills to HAZWOPER training, and earned six hours of college credit. Ten more went through this year, along with another 10 at Augusta Technical College, which runs a similar—though not identical—program. In total, participants earned more than 60 industry-recognized credentials. Credentials from both programs include WorkReady (equivalent to the National Career Readiness Certificate) and the SkillsUSA Energy Employability Skills Certification. The Augusta Tech program includes 10 Hour OSHA and First Aid/CPR Certification. Aiken Tech's program includes 40 Hour HAZWOPER certification and 6 hours of college credit applicable toward nuclear training programs at the college.

Of the 10 students who completed the Augusta program, nine continued on in studies related to nuclear energy. The response among Aiken Technical College programs has been similar. "It's a big jumpstart for some of these students to move into college," Mets said.

"The goal of this program is to get people to a point where they can enter into a nuclear training program," she said, and to make people in the region aware that these career opportunities exist, because the nuclear power plants are not visible to most people and they often don't know there are job opportunities so close by. "If you open an opportunity for someone to enter a new field, the ripple effect for that person or even their family can be pretty grand."

Students are recruited to the programs through high school counselors and local Workforce Investment Boards. The consortium has had to educate many of these, as well, Mets said, about the types of opportunities that exist in their region.

"Before this program, I was only planning on getting a nursing degree," said Bianca Bradley, who went through the NWI® Academy at Aiken this year. "However, now that I know about the nuclear industry, I want to focus on Radiation Protection Nursing and work at the Savannah River Site as a nurse specializing in radiation protection."

Harry Basket, who attended the Aiken program last year, said he was initially interested in earning an automotive degree. "Attending the Academy helped me to set a long-term goal of becoming a Nuclear Engineer," he said. "I would eventually like to become a manager at a nuclear power plant in South Carolina. I am continuing my education at Aiken Technical College as a step to accomplishing this long-term goal."

“This initiative gave students the unique opportunity to gain insight into a career in the nuclear industry, and we hope they move in that direction!” said Nora Swanson, Southern Nuclear Workforce Development Coordinator, and a member of GEICC and CEWD. “But, more importantly what I saw during the program was the focus on choosing an individual career path wisely, and then providing the students with the skills to succeed in whatever career they choose. If they pursue a career in nuclear, that is great and we know they are headed in a great direction, but whatever path they choose they are now prepared to be successful.”

For more information, contact Mindy Mets, NWI Program Manager, at mindy.mets@srsro.org.

Midwest Region

FirstEnergy Offers Soap Box Derby New Life

The All-American Soap Box Derby is a generations-old tradition in Akron, Ohio, which also happens to be home to FirstEnergy Corp., a diversified energy company and one of the city’s largest employers.

So when the Derby hit financial hurdles that threatened to put an end to decades of families working together in basements, garages, and schools all over the world to build the fastest gravity-powered vehicles they could, FirstEnergy stepped up to take the role of title sponsor and, along with actor Corbin Bernsen, who got involved with his movie “25 Hill,” helped improve the event’s long-term prospects.

“Nothing is lost on these kids,” said Tim Quine, Director of Communications Services for FirstEnergy, who was on hand to watch youth ages 7 to 17 compete at Derby Downs this past July at the 75th anniversary of the race. “They know that without our sponsorship they might not have had an event this year. It was really pretty emotional, having kids come up and thank you personally. They are very thankful for our efforts.”

Utilities looking for new ways to raise awareness of their own brand and the energy industry in general are increasingly linking themselves to events such as the Derby, or robotics competitions, which utilize engineering and math skills, because it’s precisely these kids who will one day grow up looking for careers that can put their skills to work.

“These kids spend a lot of time figuring out how to use basic tools and materials to create a car that goes faster than other cars from all over the world,” Quine said.

Many FirstEnergy employees have grown up watching the Derby, a fixture in Akron’s life and culture. The company often hires from schools in the surrounding area, particularly when looking for engineers—who may have applied their early engineering skills to building soap box racers. The utility hopes that subsequent generations will think of FirstEnergy as a potential employer when they look around at the Derby and its many related events and see the company’s logo prominently displayed.

“We are the title sponsor, and we’re looking for opportunities down the road that might provide a closer link to our company,” Quine said. “You can’t really miss our presence at the venue, Derby Downs.”

FirstEnergy also encourages employees to participate in race-day activities and events leading up to the race, such as a parade. “I even got an opportunity this year to race down the hill myself in one of the cars,” Quine said. “It was pretty exciting.”

West Region

TEP Teaches the Teachers in Summer Intern Program

If you want your state to graduate better students, provide better teachers.

That's the thinking behind a summer internship program for STEM teachers who are earning master's degrees in education through the University of Arizona's College of Education, which partners with approximately 20 employers each summer to help teachers get hands-on experience that can be utilized in the full-time world of academia.

Tucson Electric Power (TEP) is one of those employers.

"Students are leaving school without the math and science skills they need," said Marji Morris, who works in Human Resources at TEP. "Arizona has a very high rate of turnover for STEM teachers—more than 50 percent in the first five years of teaching. We spent a lot of time in our state energy consortium talking about how to change this. We decided that our goal is to help teachers learn about our industry so they can take this valuable information back to the classroom and better prepare our students for the workplace."

The 6-10 week paid summer internship, a requirement for the Math and Science Teacher Education & Retention Industry Partnerships (MASTER-IP) Program, provides teachers with supplemental income and valuable work experience while helping them understand how the subjects they teach are applied in the workplace. Teachers are given project-related jobs during their internships so they can learn first-hand what goes on at the work site, Morris said.

"They are not just job shadowing," Morris said. "They work. They are placed in an area that complements what they teach."

For example, a biology teacher assigned to work in the engineering department tested water samples. An earth science teacher worked on a long-term geographic information systems project. And a chemistry teacher was placed in the chemical and environmental engineering department of a power plant.

This past summer, six teachers went through the program at TEP. MASTER-IP, which has been running for four years, had 35 teachers across Arizona enrolled in its programs during the summer of 2012. MASTER-IP is available to middle and high school teachers across the state through interactive distance learning technologies. MASTER-IP is a collaborative effort between Tucson Values Teachers; public, private and charter schools; and STEM businesses across Arizona. Science Foundation Arizona funds 75 percent of the tuition for the teachers through a matching funds grant.

Sometimes, the teachers provide training to TEP employees, as well. "They bring with them a unique skill set that we benefit from," Morris said.

The partnership between Tucson Values Teachers, the University of Arizona MASTER-IP Program, and TEP creates a "win" for all parties involved, said Cathy Ries, Vice President of Human Resources and Information Services for TEP and its parent company, UNS Energy Corporation.

"Teachers and counselors are becoming more familiar with energy sector jobs, the requirements to fulfill our sustainable jobs, and how their internship experiences can be used to positively influence their students," Ries said. "Teachers who have gone through this program generate greater STEM educational initiatives within Arizona. It's our pleasure to participate in this program."

For more information, please contact Marji Morris at MMorris@tep.com or Dr. Julia Olsen, Director of the MASTER-IP Program at jkolsen@email.arizona.edu. The MASTER-IP Program website is found at <http://coe.arizona.edu/mp>.

Upcoming

CEWD Annual Summit

November 14-16, 2012

Arlington, VA

[Annual Summit Sponsorship Opportunities](#)

Register Here: https://netforum.avectra.com/eWeb/DynamicPage.aspx?Site=CEWD&WebCode=EventDetail&evt_key=32183f6d-b49a-46d6-9442-32872830a5cd

Interested in receiving the CEWD monthly newsletter?

If you are new to CEWD or are not currently receiving our monthly newsletter directly, please click the following link: <https://netforum.avectra.com/eWeb/DynamicPage.aspx?Site=cewd&WebCode=Verify>. At this site you will have the opportunity to verify that you do not have an account with CEWD and establish a new record in our database. If upon entering your e-mail address you receive a message stating that you already have a record, please send an e-mail to staff@cewd.org to change your opt-out status to receive the newsletter. After setting up your account, you will begin receiving the newsletter the next month.