

Partnership Creates Pathways to Progress

3-Way Win Connects Greater Cincinnati's Contractors With Talent For Today and Tomorrow

International Brotherhood of Electrical Workers, National Electrical Contractors Association and SWORWIB are working together for the future. The IBEW-NECA Training Center is a symbol of the resiliency of this region. Housed in a former Circuit City store on the westside of Cincinnati, the facility trains



“Apprenticeship programs like the IBEW-NECA are pivotal to career pathing.”

Sherry Kelley Marshall
President & CEO, SWORWIB

Telecommunications and Electrical Construction apprentices from throughout the Ohio-Kentucky-Indiana Tristate area. This program is not for the faint of heart; applicants must pass the most rigorous testing of all of the trades in one of the most important, well-recognized and perilous of the professions, setting the stage for a significant recruiting challenge.

But, thanks to the dedication of Assistant Director Chris Fridel, of the IBEW-NECA Training Center and SWORWIB Board Member, the parking lot is packed and the 34,000-square-foot facility is alive with students who, after working a full eight hours on a job, are here, training to become the journeyed professional electricians and telecommunications installers required by the 45+ contractors throughout Greater Cincinnati who employ them.

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The Southwest Ohio Region
WORKFORCE INVESTMENT BOARD

With the number of construction starts and projects on the rise, the Greater Cincinnati region's builders need skilled labor. For the next four to five years (four for the Telecommunications program and five for the Electrical Construction program), the apprentice class of 2017 will pull double-duty – working in the trade by day and learning the skills they need to graduate by night. These students don't have to look far to find the brass ring, or conduit. As they hustle to classes and labs, they pass a mural in the lobby of the IBEW-NECA Training Center that traces the history of electrification and the inventors, pioneers and innovators who shaped the legacy of this highly skilled craft-talent responsible for building this country.

There's a pride shared between the 25 part-time instructors and the 300 apprentices, combined with a sense that they are all preparing for something big and lasting – supporting the region's continuing strengths and ongoing recovery from the Great Recession. Apprenticeship programs like the IBEW's are seeing new life as companies across Ohio face



Chris Fridel works with students in the IBEW NECA Training Center lab.

the need to replace retiring Baby Boomers and continue to grow. Ohio ranks third in the nation in the number of apprentices and seventh for the number of apprenticeship program sponsors, according to the Ohio Department of Job and Family Services.

“The skilled labor launched from these training centers support the region's building and manufacturing efforts. Originating during the Depression Era through President Roosevelt's Work Progress Administration (WPA), which delivered needed work on our roads, bridges and parks, 60 similar training centers are still training the men and women we now entrust with fortifying our national infrastructure, businesses and homes,” according to SWORWIB President Marshall.

Finding and growing the pool of skilled labor is a challenge that's amplified by demand – and history.

As a result of the Great Recession, 80 million jobs were lost between February 2008 and February 2010. Concurrently, GDP contracted by 5.1%, making this the worst period in United States' history since the Great Depression.

Responding to the skilled labor gap

The IBEW-NECA program is dedicated to supplying talent needs of the nearly 50 electrical contractors in the region that provide funding. Chris Fridel, IBEW NECA Training Center, offers, “Our contractors are still feeling the effects of the skilled labor gaps created between 2007-09, when a limited number of apprentices went through the program. From 2009-11, we only had 30-35 students go through the program – half of our usual number of trainees.”

With limited work starts during economic downturn, journeyed professional electricians sought other professions. Replacing this shortage of skilled labor takes time. Fridel emphasized, “We needed to recruit and train the talent needed to respond to the uptick in construction; it's more important than ever to get our contractors the help they need.”

That, however, is not the only challenge. While 300 men and women apply to the Electrical Construction and Telecommunications apprentice programs

annually, only half pass the aptitude test because of a lack of math and reading comprehension skills. And, of the 150 who pass, 75 to 100 applicants are offered apprenticeship in the program after the interview process. Fridel confirms, “The program requirements for the Electrical Construction and Telecommunications programs are the most stringent of the 22 apprentice programs affiliated under the Greater Cincinnati Apprenticeship Council (GCAC) and the Construction Advancement Program (CAP), which serve to promote and improve the commercial construction industry in our tristate region.”

Applicants are required to pass both an Aptitude Test and a personal interview. Telecommunications apprenticeship applicants must have completed one full year of Algebra 1. Electrical Construction applicants do not have to have an Algebra credit, but they must demonstrate a proficiency in Algebra on the Aptitude Test.

According to Fridel, “Our admittance requirements are the most intellectually rigorous for several reasons. First and foremost is safety: electricians must be skilled and aware at all times of the inherent risk of injury or death from electrical shocks and burns from ‘live’ wires to themselves and others. The electrical trade requires specialized skills – electricians must be able to layout, assemble, install, repair and test electrical relays and electronic systems. Journeymen electricians

must have a complete working knowledge of blue print reading and know the National Electric Code and local codes.”

Expanding the applicant pool

To best meet the demand of contractors, priming the pump for trainees has been and will continue to be paramount. “We needed to remove some barriers to entry so that we could increase our applicant pool of approximately 300 students. In the past, the only way to enter an apprentice program was to take the IBEW aptitude test, pass it, and then interview. When students didn’t have the algebraic skills or didn’t pass the aptitude test, they had to wait six months before reapplying. On average, only 50 percent of applicants going through the process were being interviewed, and that was too low. We needed to widen the funnel.”

Fridel thought that one way to remove a barrier to entry would be to allow applicants who didn’t pass the Aptitude Test to take an alternative – but equally relevant test. In an effort to afford a greater entry opportunity for interested applicants, “I learned about the ACT® WorkKeys National Career Readiness Certificate (NCRC), an assessment-based credential that measures and certifies Applied Mathematics, Reading for Information, and Locating Information – essential work skills needed for success in jobs across industries and occupations. As a member of the Board

Risky Business

First-year apprentice Brent Rapp works at Delta Electric in Norwood. “I’m glad I was able to take the NCRC. It was easier to understand than the IBEW tests, and the WorkKeys gave me the math refresher I needed to pass and made me more confident for the IBEW-NECA interview process. I could tell that the electricians and instructors interviewing me take this program very seriously. We deal with work that, if not done right, can kill. It’s just that important. And, we represent the future, so everybody in the trade wants to see us learn something new.”

Brent continues, “I’m learning a lot here at the Training Center. There’s always new methods and ways to tackle problems. The contractors and journeyed workers need us to know as much as we can because there’s a lot of work in Cincinnati and all of it is important for our community.”



First-year apprentice Brent Rapp



Apprentice measuring conduit.

of the SWORWIB, I heard the ‘crusade message’ of our executive leadership, Sherry Kelley Marshall, advancing the NCRC as a viable work readiness tool.”

Chris had several hurdles: educating leadership at the IBEW-NECA Training Center to consider a change to their existing standards in considering the ACT® WorkKeys NCRC as an IBEW Aptitude Test alternative – and working with ApprenticesOhio, the oversight organization for all certified apprenticeship programs in the state of Ohio, to approve the change to their long-held testing standards.

“ApprenticesOhio approves and monitors standards for apprenticeship programs,” explains Fridel. “These standards are truly purposeful in ensuring that all applicants have an equal opportunity to participate, which is why our IBEW-NECA Training Center Leadership Committee abides by them.

“But given the NCRC availability as a viable option for testing, I was successful in getting the IBEW-NECA Training Center leadership committee to allow the consideration of testing via ACT® WorkKeys NCRC as an alternative to the IBEW-NECA Aptitude Test.”

Putting the plan into action

Fridel next worked with his rep at ApprenticesOhio and was able to change the requirements to allow testing via ACT® WorkKeys NCRC as an alternative to the IBEW-NECA Aptitude Test. Fridel states, “Once we got approval to change the apprenticeship program standards, I needed a pathway to put the plan into action. I serve on the Board of SWORWIB and I’m the Co-Chair of the Emerging Youth Workforce Group, too, and I’m impressed by the diversity of organization and businesses that serve on SWORWIB’s board. Being connected gives me a chance to see the work of the ‘WIB in action, along with other education and service providers in the region, like the Community Action Agency, the Urban League and the Cincinnati

About ACT NCRC®

ACT is a mission-driven, non-profit organization dedicated to helping people achieve education and workplace success. A national leader in college and career readiness, ACT NCRC provides high-quality assessments, including the National Career Readiness Certificate®

The ACT WorkKeys NCRC® is an assessment-based credential issued at four levels. The NCRC measures and certifies the essential work skills needed for success in jobs across industries and occupations to:

- Build confidence that skills meet the needs of employers
- Show prospective employers concrete proof of skills
- Apply real-world use to coursework from the classroom
- Determine skill improvement and training needs
- Improve the opportunities for career changes and advancement

To earn the NCRC, students must successfully complete the WorkKeys assessments in Applied Math, Graphic Literacy, and Workplace Documents.

WorkKeys offers additional assessments to measure interests, values and behaviors that can lead to greater job satisfaction. Most tests are web-based and take one hour. Scores are easily verified online.

WorkKeys Program Starts Unlocking Doors

Andrew Spruell, another first-year apprentice, graduated from ITT with an associate's degree. "My first job was at Milacron, building panels. It was a good job, but I didn't feel complete. I needed more skilled training to match the journeymen electricians I worked with – and to be able to do work that mattered. The journeymen electricians are craftsmen, and I wanted to achieve that level of expertise, too."

"I used the WorkKeys program to get in, and now I work for Archiable Electric Company at Children's Hospital. This apprenticeship is a good, hands-on program. I'm getting paid and learning so many skills that I can take anywhere. I won't just be building panels – I'll be building skills that I can use to earn a good living and work on my own house someday. Skills that will last forever."



First-year apprentices Andrew Spruell (left) and Nolan Zeinner (right).

Public Schools, to serve in- and out-of-school youth by connecting them with pathways for success. That was exactly what I needed to execute."

Fridel reported that the next thing he did was to reach out to Sherry Kelley Marshall to find out if it would be possible for the IBEW-NECA Training Center to be a testing center for the ACT® WorkKeys NCRC program. He learned that he didn't need to reinvent the wheel or duplicate any services. Marshall connected Fridel with the Cincinnati Public Schools' ASPIRE program, for which Roberta Thomas is the ASPIRE representative on the SWORWIB. ASPIRE helps train residents studying to prepare for the National Career Readiness Credential and the High School Equivalency (HSE) Exam to earn an Ohio high school diploma.

Creating a pathway for applicants

Funded under the Workforce Investment Innovation and Opportunity Act (WIOA) through the State of Ohio, Cincinnati Public Schools (CPS) Adult ASPIRE program works with a variety of community service providers. The IBEW expanding partnership was under way.

The CPS Adult ASPIRE staff assesses IBEW-

referred individuals to identify academic strengths and weaknesses to create a personalized course of study for WorkKeys prep. When the individual has successfully completed the course of study, the ASPIRE staff directs the student to the OMJ website to complete the timed WorkKeys practice test. Once the student scores a Level Four in all three areas of the practice test, the ASPIRE staff makes recommendations for testing, schedules test times and requests the YWCA to launch the WorkKeys test. The testing fee is paid for under the SWORWIB apprenticeship support policies and managed by the OhioMeansJobs Center. The ASPIRE staff reviews the results and counsels students regarding completion or additional remediation if needed. If none is needed, the participant is referred to the IBEW with their NCRC test results.

Chris continues, "The partnership between the SWORWIB, ASPIRE and the YWCA created a pathway for my applicants. Before this pathway, applicants who didn't pass the Aptitude Test weren't permitted to take the test again for six months. We'd run the risk of losing them – or losing their interest. Now, instead of waiting for six months, we can say 'take the Work-Keys' to provide another avenue for success.

In addition to classroom training, the ACT® WorkKeys NCRC offers KeyTrain – online testing practice for applicants for additional assistance.”

“We sent seven apprentice applicants from February to June of 2017 through the ACT® WorkKeys NCRC program. Four completed and came back, passed the Interview Process and were admitted into our apprentice program. And, between the ACT® WorkKeys NCRC program option and the high school outreach, we’re starting to see an uptick in applicants and we’re able to qualify more apprentices for our program – which translates to a greater number of skilled professionals for contractors in Greater Cincinnati. We had 95 accepted this year!”

Reaching out through the region

In addition to adjusting testing requirements, Fridel also conducts a rigorous tri-state outreach program. Promoting opportunities in apprenticeship, he speaks with approximately 5,000 students annually, within CPS and Great Oaks and the surrounding school systems. For Fridel, “recruiting students is a ‘24x7’ job, and school visits are only one of the ways we share our education options and employment needs.”

The IBEW-NECA training program participates and helps organize many events annually with middle and high school students. Chris uses its website, social media via Facebook and Twitter, (@212jatc) and has



Sign at IBEW-NECA Training Center

had great success with Facebook Live by posting live videos during events celebrating both apprentices and employers and communicating with current and potential students about the opportunities available in the electrical and telecommunications fields.

“These are great ways and tools for us to help young people learn more about the building trades and to share information about our earn-and-learn options.”

Avoiding the debt trap

That ‘earn as you learn’ availability strikes a resonate chord.

Ohio Attorney General Mike DeWine recently released a report from the Student Loan Debt Advisory Group, comprised of legislators, collections experts and college and university official, ranking Ohio eighth nationally among college graduates with student loan debt. The report noted that two-thirds of Ohio students leave college with an average of \$30,239 in student loan debt, and that Ohioans default on their student loans at a higher rate than the national average, with 30,573 Ohioans – 13.6 percent of borrowers – in default on their student loans, compared with 11.3 percent nationally.

“With the apprentice program, our students avoid this trap,” continues Fridel. “They’re compensated and are setting themselves up for systematic pay increases

The Payoff: A Career

Telecommunications Journey person Kayla Yaden is an IBEW-NECA graduate. “After a year of college, I quickly realized that I was racking up debt and not studying what interested me. I worked in retail and found that I wasn’t getting the skills I would need for life, so I entered the telecommunications apprentice program. It was a great experience – I was working during the day and attending classes at night, which gave me the opportunity to put what I was learning to the test.

“I’m now working with Indrolect Co. and I have a career where I’m constantly learning new techniques. I’m much more marketable. I’m fulfilled and my earning potential is better.”



Roles & Responsibilities

Inside Electricians

Inside Electricians layout, assemble, install, repair, and test entire electrical and electronic systems. Along with their electrical training, journey person electricians must have a complete working knowledge of blueprint reading and know the National Electric Code and local codes. With the hazard of electrical shock and burns from “live” wires, safe work practice is a must. Electricians must be mechanically inclined, physically fit and enjoy working with mathematical formulas.

Telecommunications Installer

Technicians Telecommunications Technicians install circuits and equipment for telephones, computer networks, video distribution systems, security and access control systems and other low voltage systems.

that come with experience which they get on the job and in the training program. It's a win-win situation that doesn't come with a mountain of debt.”

Chris is committed to ensuring that more students take advantage of the IBEW opportunities. As a member of the Cincinnati Public School Career Path Committee, he is leveraging his access and experience to promote the consideration of the ACT® WorkKeys NCRC program, for graduation and college credit.

He says, “I'm confident that they'll see the advantages of granting students access to ACT® WorkKeys NCRC program certificate to earn 12 points towards their credit requirements for graduation. I believe there are many seniors who are considering this career and will take advantage of this pre-qualifying opportunity.”

Working with others to broaden the impact

Fridel is also working with Allied Construction Industries, a local construction association, to provide technical assistance at Woodward High School, which received a grant from the Department of Education to focus on math skills. “I'm sharing our national algebra work books so that Allied can see what we're training on and the types of problems on our Aptitude Testing to enable greater success. The work of enabling success is based on developing pathways and partnership,” offers Chris. “IBEW Local 212 represents our 1,500 journeyed professionals, NECA represents the 45+ electrical contractors here who help fund

our training facility based on a percentage of worker hours, while our national apprentice organization, the Electrical Training Alliance, provides curriculum guidelines. Organizations like SWORWIB help create pathways for success.”

“SWORWIB's contracted one-stop operator of the Cincinnati/Hamilton County, known as the OhioMeansJobs (OMJ) Center, helps create pathways for contractors too, with awareness of electrical projects and labor qualification assistance. OMJ's page on the Greater Cincinnati Apprenticeship Council website serves as a project referral site and OMJ hosts sessions to help qualify workers by providing services to help with necessary identification cards, drivers' licenses, drug testing and interest screening. Each of us – the IBEW Local 212, NECA, the electrical contractors, our Training Center, SWORWIB, ASPIRE and OMJ — play a huge role in the health of this region. The collective impact is like a symphony.”

Interested?

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