

Houston Community College: TRIO Electric Pre-Apprenticeship Program

EXECUTIVE SUMMARY

Houston's continued economic growth over the last decade has spurred a thriving job market with high demand occupations in almost every sector. But with this success, the Houston region also faces a vast skills gap in middle skills occupations—those requiring more than a high school diploma but less than a four year degree. In particular, the skills gap has widened in the construction sector where an aging incumbent workforce nears retirement and yet new jobs continue to be created because of the robust economic growth. Electricians, specifically, are in high demand in the region and will continue to be so in the future.

TRIO Electric, an electrical design, construction and service firm based in Houston, Texas, is trying to combat the issue. In 2013, TRIO developed an in-house Department of Labor (DOL) approved 4-year electrical apprenticeship program called the TRIO Apprenticeship Program (TAP). The program targets post high-school graduates who are looking for a career in the construction field. Nearly 200 workers have taken advantage of TAP since its inception. Even so, the demand is greatly outpacing the supply.

Thus, in 2017, Houston Community College, Spring Branch ISD, and TRIO Electric formed a three-way partnership to offer an industry-led, pre-apprenticeship, dual credit, electrical technician training program to high school students. The TRIO Pre-Apprenticeship Program (TPAP) gives students the opportunity to learn valuable skills in a high demand, high wage field before graduation.

Students entering their junior year are recruited by high school counselors and evaluated by TRIO then selected for the program. The TPAP curriculum teaches students how to be safe and productive electrical workers as well as other employable and soft skills that are attractive to potential employers like TRIO. Students in the program engage in a paid, summer internship between their junior and senior years, and full-time employment opportunities with TRIO after graduation where they can continue their electrical apprenticeship training through TAP until they are eligible to take the state journeyman exam.

TPAP gives high school students who are not bound for a four year institution a skillset in a high wage, high demand field within a dual credit setting. This skillset enables students to obtain employment upon graduation in an industry with a tremendous and long term upside. The wages earned in the electrical field combined with the stackable credentials received during high school give students many options—continue their career, go to college, or both.

PROJECT DESCRIPTION

The regional labor shortage in construction craft trades continues to destabilize productivity and efficiency in project completion across the Houston metropolitan area. With over \$50 billion in ongoing petrochemical expansions, \$13 billion in education facilities projects, \$4 billion in health care related expansions, and \$1.6 billion in transportation projects, the construction industry is struggling to meet the labor demand required of these projects.

Such an environment necessitates innovative strategies to manage the talent supply chain. In August of 2017, Houston Community College forged a partnership with Spring Branch ISD and TRIO Electric to address the shortage in electricians faced by the company. The partnership is a low cost mechanism to train the next generation of electricians in the region. The following key components of the program have made it both unique and effective in closing the skills gap:

- Industry-led Partnership Program
- DOL Registered Apprenticeship administered by TRIO Electric
- Annual cohorts of 50 taught on ISD Campus
- Dual-Credit, Electrical Helper Level 1 Certificate completed in 11th and 12th grades
- TRIO Electric Master Electrician holding a high school teaching certificate and credentialed by HCC serves as instructor
- Paid summer internship with Trio Electric between 11th and 12th grades
- OSHA 10 included
- Students accumulate hours toward the Electrical Journeyman License
- Students receive Financial Literacy Training

Partnerships and Collaborations

In addition to the partnership established with Spring Branch ISD and TRIO Electric, the project has garnered significant support and collaboration with a number of external entities. United Way of Greater Houston and their THRIVE Network has provided financial literacy training for the students as part of the summer internship. METRO, the regional public transportation arm, has provided free transportation cards for students to utilize during the summer internship. The Gulf Coast Workforce Board/Workforce Solutions has provided staff and support as part of the registered apprenticeship process and will be facilitating funding to support on-the-job training. The project has also received

support from the Farb Foundation in the form of direct grant funds in support of the program. Additional partners that have supported the program through technical assistance, training and mentorship include the Greater Houston Partnership (regional chamber of commerce), Texas Workforce Commission—Office of Apprenticeships, the Department of Labor, and the Anti-Defamation League, Frost Bank, Junior Achievement, KIPP Public Charter Schools, and Memorial Assistance Ministries.

Economic Impact

With the annual job openings for electricians in the Gulf Coast Region nearing 3000, this partnership provides a pipeline of talent into the region's workforce. Annually, TPAP seeks to provide an additional 50 electricians to the talent pool. The mean hourly wage for electricians in the region is \$26.57 and the mean annual salary is \$55,261. As such, students and by extension their families add to the economy through gainful employment. With the continued growth in the construction sector, the 50 students per year could and soon will easily be double through replication.

Program Results

TPAP began in the Fall of 2017 with a cohort of 52 students enrolled in the program taking the dual credit program. In the summer of 2018, 42 of the original cohort participated in the paid summer internship with TRIO Electric. One student, in fact, during the summer internship received a Safety Award for his work on a job site for a large general contractor. In May of 2019, the first cohort will graduate with 36 students receiving an Electrical Helper Level 1 Certificate from HCC, over 200 hours toward their journeyman's license requirements, and employment at TRIO Electric. Some of the graduates have committed to working at TRIO while continuing to pursue further higher education at HCC and other regional institutions.

From the ISD side, the program has been so successful that the second cohort for the Fall 2018 had a waitlist of 15 as enrollment by cohort was capped at 50. Cohort II will graduate in May of 2020 and Cohort III will begin in Fall of 2019.

Replication

Currently, TRIO Electric has begun replication programs in areas where they have work including Austin and Grand Prairie, Texas. They intend to develop more programs where work arises as well as expand opportunities with HCC in the Houston region. HCC is developing two similar projects that utilize the key components of TPAP within other construction craft trades. In the Fall of 2019, HCC in

partnership with HISD and MBS, an interior and finishing company, will kick off the first of such replication projects with the plans in the works for a third such program in Fall of 2020 in plumbing. The model has proven a success and implementation to be easy provided all partners commit to the end goal.