Apprenticeship Learning Network: Engaging Underrepresented Youth in Skilled Trade Apprenticeships

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Purpose

The purpose of the Youth Skilled Trade’s Program is to build a career pathway to various skilled trade registered apprenticeships (RA) for underrepresented youth in City of Detroit. Program will include:

- Internship - Work Experience with Hands-on Training, Safety Training, and Employability Skills Training
- Career Exploration
- Adult Mentorship Support
- Remediation to Increase Competency and Pre-Hire Testing Scores

Project Overview

This is a pilot program, and still in the planning and implementation phase of the project. Therefore, outcome data is not available. Today’s presentation will cover the following overview:

- Program Objectives
- Program Overview and Partnership Development
- Challenges and Opportunities to Address in Planning
Program Objectives

- Develop a repeatable process to build and retain a candidate pool of youth within Detroit Public Schools.
- Provide a supplemental Youth Skilled Trade’s Program to City of Detroit high school students and graduates, pilot program target Cody High School graduates and Randolph High School students.
- Program will provide:
  - Paid internship opportunities within skilled trades
  - Career awareness and exploration
  - Adult mentorship support within industry
  - Employability soft skills training
  - Common core curriculum training program delivered as a college-credited and industry-recognized training program
  - Remediation training to increase competency and pre-hire testing scores
  - Supportive services or “wraparound” services provided throughout the program until participant secures employment
Youth Skilled Trade’s Program Overview

Partnership Development

Source for Program Participants
- 25 students from Cody High School in June 2017
- 10 students (10th-11th grade) from Randolph Career and Technical Center

Internship
- Career Exploration
- Learning plans in Gas and Electric for 8-week duration
- Employability Skills Training
- Assessment Testing to help identify skills gap

Mentorship
- Mentorship will be provided through REACH and business unit leaders
- “Meet Your Mentor” kick-off event with interns and mentors

Technical Fundamental Training and Preparation
- Common Core Curriculum Program
- Stackable credential courses at Henry Ford College under development
- Remediation Training to help increase competency and pre-hire testing scores

Supportive Services or Wrap Around Services Provided

1. Courses are eligible to be covered by the Detroit Promise scholarship if student is full-time enrolled and meets application requirements
2. Core/foundational curriculum broadly applicable to skilled technician jobs across the energy industry
3. Courses that are part of a sequence of credentials accumulated over time to build qualifications and move along a career path to different and potentially higher-paying jobs
Source for Program Participants
25 Cody High School/10 Randolph Technical (16-18 yr. olds)

- Working with Detroit Employment Solutions Corporation (DESC), Michigan Works Agency through the Jobs for Michigan’s Graduates program to identify Cody High School graduates.

- Working with United Way to identify Randolph Career and Technical Center to identify 10-11th high school students.

- Sourcing youth from existing programs such as Jobs for Michigan’s Graduates and United Way allows partners to help identify candidates interested in exploring careers in skilled trades.
Internship Learning Plan Development
Youth Skilled Trade’s Program is underway

- Our program design team has met with SMEs from Electric and Gas business units to develop learning plans for this program.

- Job roles and tasks are currently being defined; and training identified for interns will be customized by the instructor for the safety of the youths.

- We are also developing performance evaluations to measure the success of program.

- Our plan is to provide an eight-week internship program before the fall semester 2017.

- The start date for this program is scheduled for June 26, running through Aug. 18.

<table>
<thead>
<tr>
<th>Field Service Operation</th>
<th>Sample Tasks</th>
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</thead>
<tbody>
<tr>
<td>Safety</td>
<td>Disconnect gas meters</td>
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<tr>
<td>Pre-job Brief</td>
<td>Turn on gas</td>
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<tr>
<td>PPE</td>
<td>Relite appliances</td>
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<tr>
<td>Meter manifolds</td>
<td>Scan meters into the system</td>
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<tr>
<td>Pipe fitting</td>
<td>Log into the system</td>
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<tr>
<td>Regulators &amp; meters</td>
<td>Close out Jobs</td>
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<tr>
<td>Meter orders</td>
<td>Carry tools</td>
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<tr>
<td>Locking &amp; tagging</td>
<td>Job Prep</td>
</tr>
<tr>
<td>Gas leaks</td>
<td>Fill out pre-job brief</td>
</tr>
<tr>
<td>Corrosion</td>
<td>Check for gas leaks</td>
</tr>
<tr>
<td>Service Suite</td>
<td>Rebuild manifold</td>
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</tbody>
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**Safety Regulatory**

<table>
<thead>
<tr>
<th>Safety Regulatory</th>
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<tbody>
<tr>
<td>Asbestos Awareness #32013439</td>
<td>Scan meters into the system</td>
</tr>
<tr>
<td>Environment Overview Training #32014432</td>
<td>Log into the system</td>
</tr>
<tr>
<td>Fire Extinguisher Training # 32015052</td>
<td>Close out Jobs</td>
</tr>
<tr>
<td>32003296</td>
<td>Carry tools</td>
</tr>
<tr>
<td>Customer Service</td>
<td>Job Prep</td>
</tr>
<tr>
<td>Gas leaks</td>
<td>Fill out pre-job brief</td>
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<tr>
<td>Basic electricity</td>
<td>Truck Organization</td>
</tr>
<tr>
<td>Manifold sets</td>
<td>Label Tools</td>
</tr>
<tr>
<td>Re-establishing gas</td>
<td>Log into the system</td>
</tr>
<tr>
<td>Below-grade valves</td>
<td>Lead Safety Focus for each location</td>
</tr>
<tr>
<td>Space heat</td>
<td></td>
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<tr>
<td>Appliances</td>
<td></td>
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<tr>
<td>Furnaces</td>
<td></td>
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<tr>
<td>Boilers</td>
<td></td>
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<tr>
<td>Service Suite</td>
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Mentoring and “wraparound” services are integral parts of this program.
Additional Steps when Including Minors in Internship and Mentorship Opportunities

• Onboarding Process
  ✓ Minors must complete paper application, criminal background check and drug testing forms to ensure it is signed by parent/guardian. Requests for minor signature must include parent signature as well.
  ✓ If the parent cannot take the minor to the drug test, they must sign a release for the school to take them to the screening.
  ✓ Obtain work permit.

• Meal and Break Requirements
  ✓ A minor shall not be employed for more than five (5) hours continuously without an interval of at least 30 consecutive minutes for a meal/rest period. The meal/rest period must be recorded in the time records.

• Minors cannot perform “hazardous work,” such as:
  ✓ Motor Vehicle Driving on behalf of the Company
  ✓ Use Power-Driven Equipment, Tools and Machinery
  ✓ Construction Work
  ✓ Exposure to Hazardous Substances, Chemicals, Explosives, or Radioactive Substances
Mentoring is a key component of this program to create the transformational experience we are seeking for participants

- To understand how we should design the mentorship component of this program, benchmarking activity was conducted as follows:
  - We reviewed Summer Talent Exposure Program (STEP)
  - We conducted an analysis of Ideal Group’s Internship Program
  - We collected information on DTE’s Women’s Mentorship Program and the Distribution Operations Leadership Mentoring Program

- Development of this component is now underway with the following steps taken to advance this effort:
  - Met with operations leadership to discuss the design of the program
  - Developing mentorship guides and selection criteria, and mentee standards and guidelines
  - Designing a mentorship kick-off event, “Meet Your Mentor,” to be implemented in June

- Finally, we are partnering with business units and the reconstituted energy resource group Respecting Ethnic and Cultural Heritage (REACH) to recruit and source mentors

1. Ideal Group is a minority contractor for the City of Detroit recommended by the Detroit Workforce Board’s Youth Committee as a best practice resource on mentoring.
Our educational partner, Henry Ford College (HFC), has begun developing a stackable credential curriculum for targeted skilled trade job disciplines

- Based on business unit feedback, nine (9) DTE job roles have been identified as priorities for inclusion in the development of the stackable credential curriculum and 1st year training plans for these roles are being developed.

- A common “core” curriculum being developed for roles will also apply to skilled trades-based jobs that are not necessarily energy-specific (e.g., electrician, advanced manufacturing, construction, heating and cooling HVAC.)

- Common Core Curriculum Program targeted for Fall 2017.

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**Nine DTE Job Roles**

<table>
<thead>
<tr>
<th>Role</th>
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<tbody>
<tr>
<td>Gas Service Technician</td>
<td>Gas Maintenance Fitter Apprentice</td>
</tr>
<tr>
<td>Overhead Line Worker</td>
<td>Underground Cable Splicer Apprentice</td>
</tr>
<tr>
<td>Substation Assistant Operator</td>
<td>Electrical Maintenance Journeyman Apprentice</td>
</tr>
<tr>
<td>PERT Technician</td>
<td>Cable Tester</td>
</tr>
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</table>

**Example**

<table>
<thead>
<tr>
<th>Stackable Credential</th>
<th>Gas Tech. Gas Maint. Pre Apprenticeship Job Specific Training</th>
<th>Lineworker Pre Apprenticeship Job Specific Training</th>
<th>Cable Splicer Pre Apprenticeship Job Specific Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Semester</td>
<td>Core Training Completed in 1st Semester or # of Semesters Identified</td>
<td>Core Training Completed in 1st Semester or # of Semesters Identified</td>
<td>Core Training Completed in 1st Semester or # of Semesters Identified</td>
</tr>
<tr>
<td>2nd Semester</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Students Select Career Path</td>
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“Stackable credentials” approach opens the door to career pathways and jobs beyond the energy industry

Energy Competency Model

- Stackable Credentials allow students the flexibility to move from one training program to another, enabling transfers based on industry need and ability to meet pre-hire aptitude requirements.

- The approach focuses on identifying common core curricula within skilled trades in order for the student to transfer or obtain multiple certifications or degrees.

- Areas where this common curricula have been identified include: electric operations, gas operations, advanced manufacturing, construction, electricians and engineering technicians.

- Energy Industry Fundamentals (EIF) is an example of curricula that aligns with Tiers 4 and 5 of the Energy Competency Model and becomes a stackable credential.

1. The Energy Competency Model was developed by the Center of Energy Workforce Development (CEWD) and the U.S. Department of Labor. EIF is a foundational course that introduces students to the energy industry and includes curriculum such as basic electricity and energy principles, health and safety compliance, electric generation and distribution, and gas transmission and distribution.
Free Application for Federal Student Aid (FAFSA) Basic Eligibility Criteria

- Demonstrate financial need.
- Be a U.S. citizen or an eligible noncitizen.
- Have a valid Social Security number.
- **Be enrolled or accepted for enrollment as a regular student in an eligible degree or certificate program.**
- Be enrolled at least half-time to be eligible for Direct Loan Program funds.
- Maintain satisfactory academic progress in college or career school.

Detroit Promise – Eligibility Criteria

- Attend any high school in the City of Detroit for at least two years and graduate from a Detroit high school in the spring of 2017 (must be a Detroit resident.) This includes schools operated by Detroit Public Schools (DPS) and the Education Achievement Authority (EAA), as well as self-governing, charter, private, alternative and parochial schools.
- Successfully complete and submit the FAFSA by **June 30, 2017**.
- Register for the Detroit Promise by **June 30, 2017**.
- Be admitted to a participating college.
- **Participate in the mandatory student academic success activities as outlined by the participating community colleges. This may include orientation sessions, study groups and/or classes on academic success.**

**Researching Potential Scholarship Opportunities**
Our skilled trades pipeline work aligns with the four themes that guide DTE Energy’s Education and Employment efforts

<table>
<thead>
<tr>
<th>Theme</th>
<th>Alignment</th>
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<tbody>
<tr>
<td>Workforce Needs</td>
<td>• A skilled trades pipeline enables the increase of resources available in fields where we have growing workforce needs.</td>
</tr>
<tr>
<td>Underrepresented Youth</td>
<td>• The program enables us to increase diversity and inclusion across job fields.</td>
</tr>
<tr>
<td>Multiplier Effect</td>
<td>• By leveraging the power of partnerships, our impact is beyond our own workforce needs.</td>
</tr>
<tr>
<td>Transformative</td>
<td>• Our skilled trades internships are designed for significant, positive impacts on the lives of the youths involved.</td>
</tr>
</tbody>
</table>
Supportive services are also being provided to ensure success; Power of Partnership

- Detroit Employment Solutions (DESC), who manages the youth programs in Detroit, commits to enrolling all interns in their youth programs in either Jobs for Michigan Graduates (JMG) or Workforce Innovation and Opportunity Act (WIOA) youth program.

- Youth program components include: career planning and counseling, employment soft skills, job search assistance, training/education funding and other support services.

- The Skillman Foundation partnership will provide additional support, such as Microsoft applications training and other basic employability skills training.
Current Challenges Identified and Opportunities to Address in Planning

• Assess candidates and determine if they are not “college ready” or basic skills-deficient, working with Henry Ford to develop plan.
  • Tutor sessions being planned during internship to increase competencies through Apprenticeship USA Grant

• Personal protection equipment (PPE) such as work boots, safety glasses, safety vests and hard hats needed for students to complete internship. Using Apprenticeship USA state expansion grant to purchase PPE.
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