

## BACKGROUND

Professional skilled trades are occupations that require specialized skills and knowledge gained through a different kind of training after high school. Careers include electricians, welders, construction workers, plumbers, heating-ventilation-air conditioning specialists (HVAC), riggers, and machinists. These professional tradespeople might be employed with independent companies or by large businesses or institutions such as hospitals, state and federal government, schools or universities.

- Michigan is experiencing a sizeable shortage of skilled trades professionals. The state needs to fill more than a half million openings by 2026 to meet the demands of hiring employers.
- Nearly 50,000 professional skilled trades jobs open in the state annually, contributing factors include retirements and increased demand from the industry.
- To understand professional skilled trades careers, the concepts of "journeyman" or "journey person," "Apprenticeship" and "union" are important to learn.
- From Dr. Frank Luntz, in his response to "the language of 'career and technical education,'" the use of "**professional skilled trades**" is preferred to simply "skilled trades." He goes on further to share:

*If you want students to take it seriously you need language that communicates seriousness. "Skilled trades" is a bad term. "Skilled labor" is even worse. The problem with "skilled trades" is that no one really knows what they are. The problem with "skilled labor" is that it connotes the worst job that no one wants to have. The word "professional" communicates a significance and seriousness to the job.*

## Lesson: IBEW Local 692 Talent Tour Video

### The lesson has three parts:

1. Learning about professional skilled trades, the various career options and the concepts of "journey person", "Apprenticeship" and "union" is in **Setting the Stage** for the Talent Tour Video.
2. The **Talent Tour Video** highlights electricians as among the "highest paid skilled trade."
3. **Follow-up activities** help students synthesize information for six professional skilled trades careers and present other sources for learning about skilled trades opportunities in the Great Lakes Bay Region and throughout Michigan. A [Jigsaw teaching strategy](#) is used.

Two resources are provided for students that can be very helpful to future career research:

[Going Pro](#)

[Guide to Skilled Trades in the Great Lakes Bay Region](#)



## 1. Set the stage with students: 1 class period

**“Does anyone know what we mean by the professional skilled trades?”** Carry out a discussion eliciting pre-knowledge. Share the definition:

*Professional skilled trades are occupations that require specialized skills and knowledge gained through a different kind of training after high school.*

**“What do you think is meant by ‘different kind of training’?”** Ask students to classify careers that need advanced degrees such as with four or more years of college, careers that need no extra education or training at all, careers that get total on-the-job training, careers that need some post college education combined with on-the-job training.

4 or more years college	Some college education (or CTE) plus on-the job training	All on-the-job training	No training or education
Doctor	<b>Electrician</b>	McDonalds/Taco Boy/Restaurant	XXXXX
Lawyer	<b>Plumber</b>	Menards	
Engineer	Physical Therapist Assistant	<b>Carpenter</b>	
Teacher	Computer Programmer	Housekeeping	
Registered Nurse	<b>HVAC specialists</b>	<b>Ironworker</b>	
Computer Network Architect	<b>Welders</b>	<b>Heavy Equipment Operator</b>	
Airline Pilot	<b>Riggers</b>	<b>Sheet Metal Worker</b>	
	<b>Bricklayer</b>		
	<b>CNC Machinist</b>		
	Web Designer		

**“Notice that there is no such thing as a career that does not require some sort of training!”**

Add careers that are highlighted in the table as needed.

“These are examples of careers we call professional skilled trades. Each of these careers requires some very specialized training some of which might come from a college setting and much that comes from on-the-job training.”

“Along with specialized training are some special terms to learn for better understanding about these careers. Let’s look at three important concepts to understanding some of the professional skilled trades careers.”

- **Apprenticeship/Apprentice:** Use the [Apprenticeship Basics \(pdf\)](#) resource with a [KWL teaching strategy](#) for students to gain a better understanding of an apprenticeship.
- **What is a journeyman (journeyperson)?**  
Journey-level experience applies to a person, called a “journeyman” or “journeyperson”, who has completed an apprenticeship program or is an experienced worker, not a trainee, and is fully qualified and able to perform a specific trade without supervision.

## Union (present the following for discussion)

### Doing Your Chores

It’s not fun to have chores to do around the house, but the money or incentive you receive for doing them is probably worth it. What if your parents made you do chores from the time you woke up until the time you went to bed for very little allowance? That would be not seem fair.

But what if you and your friends could form a group to choose what chores you wanted to do and how much money you’d receive for each chore? How cool would that be? This is similar to how labor unions began with workers more than a century ago.

### When Labor Unions Began

Labor unions began in the late 1800s during a period called the Industrial Revolution. During that time, factory workers, mill workers, and miners were working many hours with little pay in environments that were often unsafe.

At the time, the government did nothing to help these workers. The workers decided to come together, forming unions to revolt against unfair working conditions and poor pay and striking against their employers. Some of these strikes became dangerous, so the government finally stepped in and created a better working atmosphere for the employees.

### Labor Unions Today

Labor unions still exist today and have developed into larger organizations. The main occupations that offer labor unions are the police force, educators (teachers), and firefighters. However, there are many labor unions in other professions throughout our country. Today, unions work not only on the pay and working conditions for their members but they help members get needed training and education as you will see with the local skilled trades union shops presented in this lesson.

In the past it was not unusual for a labor union to revolt, or rebel, against its employer through strikes and negotiations. Strikes are where labor union workers decide to protest against unfair and unreasonable working rights. During strikes, labor union workers protest and picket with signs demanding better working rights and pay from the employer.

Union strikes are rare today. Businesses and workers all recognize how important it is to have safe working conditions, reasonable pay and benefits, and fair interactions between people. Negotiating for conditions that are fair to everyone is a high priority in today’s culture of a union/management relationship.

## 2. You are now ready for the Talent Tour Video! 15 minutes

[Share the IBEW Local 692 video](#)

Notice that there are several recommendations for you to take action upon now.

- Take classes that emphasize problem solving, blueprint and diagram reading, and measurement.
- Math courses such as algebra, geometry, calculus.
- Work experience outdoors on job sites or factory settings.
- Develop habits of being punctual and reliable, and paying attention
- Look into CTE courses (see **Extensions** for links to local CTE professional skilled trades programs)
- Join the Robotics Team
- Practice interview and job seeking skills

## 3. Follow-up Activities 1 class period

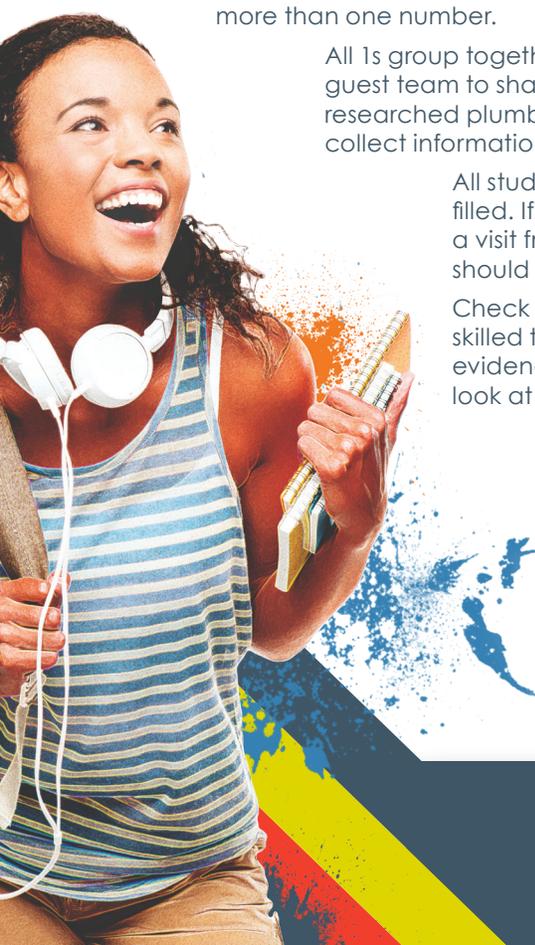
Use a Jigsaw teaching method for accumulation of information on the variety of professional skilled trade careers. Divide students into six groups. Each group should be given a task card (can be done electronically so links are clickable) with one career to research, attributes to look for and links for information. Provide students with an attribute chart on which to take notes on their assigned career. Provide 20 minutes for research. See cards on separate page.

Starting with any team, number each student from 1 -6, then repeat 1-6, repeat, etc. continuing from team to team. It does not matter if a team does not have each number from 1-6 nor does it matter if a team has more than one number.

All 1s group together, all 2s, all 3s, etc. These are their guest teams. Students meet with their guest team to share information filling in blank areas of their charts. For example, a student who researched plumber will share with everyone else his/her information while that student will collect information in his/her chart from careers he did not research. Take about 15 minutes.

All students return to their home teams and share information so that all charts are filled. If a team has missing information they can request the "call a friend" option for a visit from someone from the home team that researched that career. Each student should have career information for six skilled trades careers in their attribute charts.

Check for understanding: Ask students to use their charts to choose a professional skilled trade career that they think would fit them the best. They need to provide evidence from their charts. They might go into the Going Pro in Michigan website to look at more information.



### 3. Extensions:

#### CTE Professional Skilled Trades Programs

- Bay/Arenac
  - [Building Trades I & II](#)
  - [Precision Machining](#)
  - [Welding](#)
- Clare/Gladwin
  - [Construction Trades](#)
  - [Welding Technology](#)
  - [Advanced Manufacturing](#)
- Crawford/Oscoda/Ogemaw/Roscommon
  - [Welding & Fabrication](#)
- Gratiot/Isabella
  - [Mechatronics](#)
  - [Welding](#)
  - [GI-TEC](#)
- Iosco
  - [Building Trades](#)
- Midland
  - [Midland County Career & Technical Education](#)
- Saginaw
  - [Engineering, Manufacturing & Industrial Technology](#)pg 5 and 8

#### Community College Programs

- Alpena Community College
  - [Electrical Systems Technology](#)
  - [Machine Tool Technology](#)
- Delta College
  - [Technical Trades & Manufacturing](#)
- Kirtland College
  - [Professional Trades Programs](#)
- Mid Michigan College
  - [Skilled Trades](#)