**Apprenticeship and Workforce Development**

- Apprenticeship Transformation
  - Then and Now - a 10 year Transformation
  - OJT to JATC & AJATC - A Shift in Skills Training
  - Curriculum Delivery - Technology & Learning

- Leveraging Technology
  - Expanding the Classroom - Improving Efficiency and Outcome

**Workforce Development**

- Skilled Worker Shortage
- Great Recession of 2008
  - (2014) 31,000 total apprentices
  - (2008) 45,000 total apprentices
Workforce Development

- Accessing Apprenticeship and Training
- New National Guideline Standards
  - New Direct Entry Tools
  - Position to Deliver Training
  - Competency Based Programs
  - Hybrid Based Programs
- Selection Process
  - Reduce Drop Out Rate
- Electric Prep- Target Audience

ELECTRIC PREP VETERANS

IBEW - NECA

ALLIANCE
Core Curriculum

• Electrical Training ALLIANCE Senior Director Jim Boyd led an industry-wide effort to develop and implement a Core Curriculum model for our Inside Apprenticeship Program.

32 Core Courses – Delivered in 5 Years – Provide 88 Credits

Optional Courses May Be Selected by the JATC

Minimum of 40 Credits of Advanced Courses

Minimum of 40 Credits of Advanced Courses

Core Curriculum

electrical training
IBEW - NECA
Blended Learning

- A transition to a blended learning model for the Outside and Inside Programs

Blended Learning

- Labs (Physical & Virtualized)
- Active Learning Classroom
- Online LMS

Active Learning Classroom
3/10/2015

Active Learning Classroom
Time at Training Center

- 10% CERTS
- 15% HOMEWORK
- 25% LABS
- 50% CONTENT

Online LMS
(Learning Management System)

Online LMS Lesson

Lesson 5: Conduit Threading Techniques

Reference
- Conduct Bending and Fabrication Textbook Chapter 8

Many conduit installations will require you to have a knowledge of the various types of conduit threading equipment and the techniques that are used to thread conduit. Threading a flexible or thermoplastic conduit of any size exactly not done correctly. If done poorly, the electrical system can fail with destructive results. A simple twist, kink, or other damage to the conduit during the threading process, may cause the insulation of the conductors to be damaged. Such damage can lead to insulation failure and a possible electrical explosion later on.

In this lesson, you will learn some of the things that must be taken into account when using a variety of threading tools. While small conduit may be thread by hand, larger conduits will require power thread tools which are more complex in their operation and can be divided into one or more categories. While it may be some time before you encounter all of these types of threading in the field, your careful study of the text and this lesson will acquaint you with many of the types of threaders available.
Blended Learning Expands the Classroom

- Blended Learning Model gives us an opportunity to expand the capabilities of each instructor to create what we call, an "Active Learning Classroom."
Craft Certification

- Using written and hands-on assessments this important program will be vital to ensuring that the virtual skills that are developed can be transformed into real-life & practical hands-on skills.
CET

• Newly organized and existing journey-level workers interested in taking up-skill or upgrade training.

CET (Continuing Electrical Training)

Journeymen

CW/CE Workers

IBEW/NECA Employees
Available CET Courses

THEORY

Available CET Courses

Soft Skills

Flexible Training

- Customized Training: Selected for the level of worker
- Immediate Training: Asynchronous JIT
- Distance Training: Working out of town
Emerging Technologies

- BIM, Lean Construction, Pre-fab and related supply chain logistics.
Certifications

• Third Party Certifications to demonstrate to our industry and customers the safety oriented, production driven and quality of the Organized Electrical Industry.
Crane Certification

- OSHA’s crane rule for construction requires that most crane operators be certified, among other things.

- The skills and abilities of crane operators that work around power lines is so unique that NECA, IBEW and the AJATCs determined that an Electrical Industry Crane Operator Certification was necessary.
Oil & Gas

- There is no doubt that the oil and gas industries will present tremendous opportunities for the electrical industry.
  - Safety
  - Hazardous Locations
  - Existing Skills and Training