

Where Troubleshooting and Training Come Together: Using Software to Efficiently Understand Machines and Processes

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Troubleshooting On-the-job



What is the importance of troubleshooting?

- Getting your processes up and running as quickly as possible
- Downtime can cost \$\$\$ every hour

What's the process for Troubleshooting?

- Follow a systematic approach
- Use your senses
- 2 most important tools: measurement devices and schematics
- Refer to TPC Training's last webinar for more information

How to shorten the time it takes to troubleshoot?

What you do.

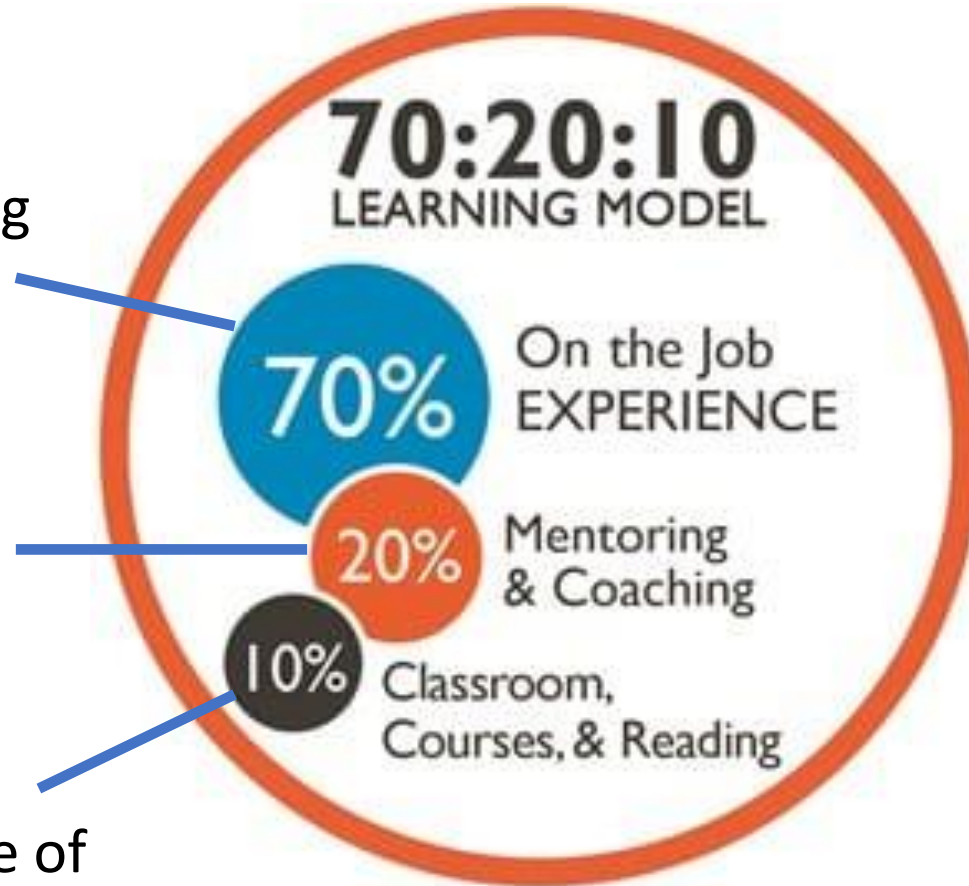
Gaining the actual experience of doing the job

What you see.

Someone showing you how to do it.

What you hear.

The “classic” style of learning



On-the-job Training (OJT)



What is OJT?

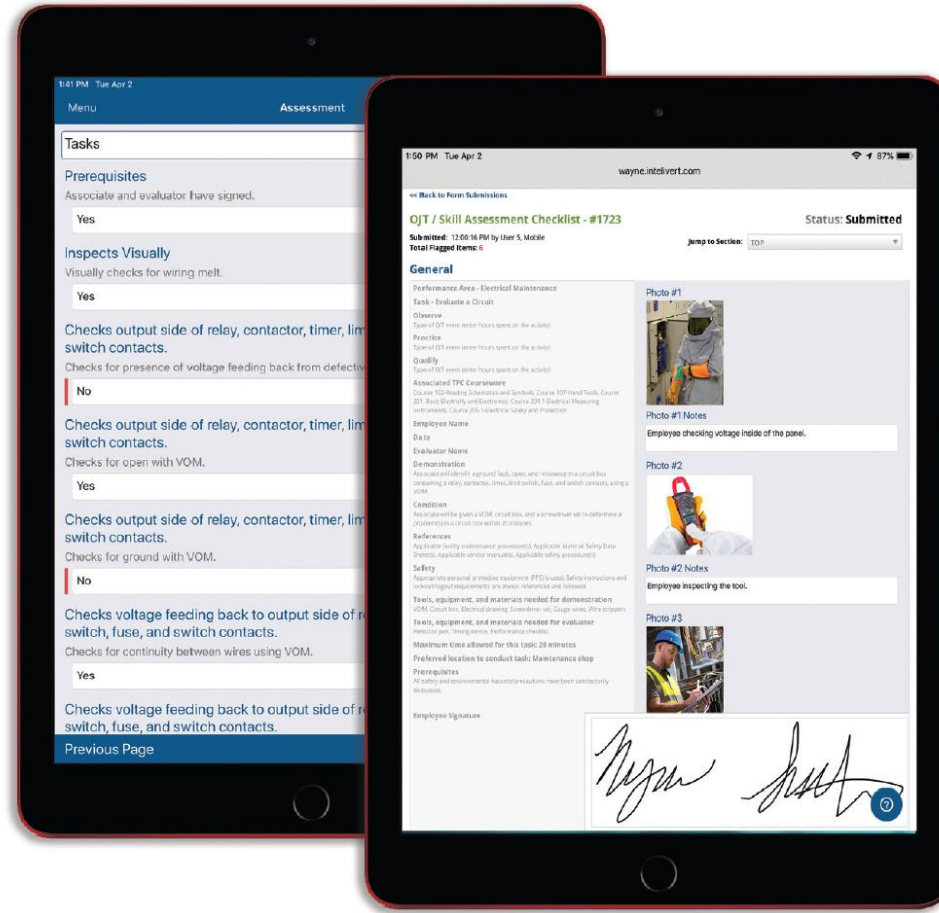
- Learning the essential tasks of a job under the guidance of a trusted trainer/mentor

What's the process for OJT?

- Introduce the task
- Practice the task
- Verify performance of the task
- Signatures from mentor / trainee for each step
- Must be documented! **No tribal knowledge!**

Bringing OJT to the 21st Century

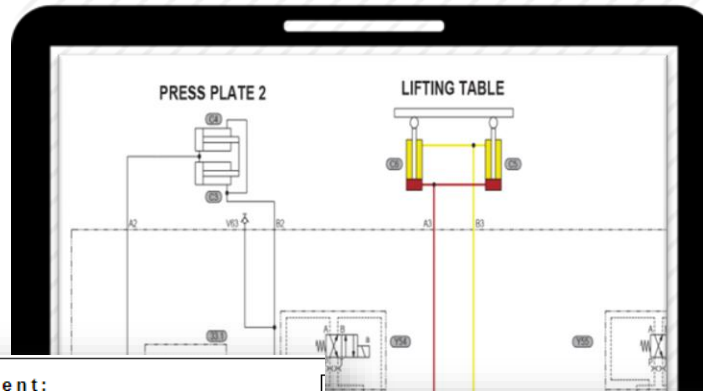
- Mentor checklists can be filled in via **mobile form technology**
- **Signatures and initials** can be made via mobile forms
- Checklists, SOPs, and JSAs can all be **stored and organized electronically**
- Have **one centralized location** for learning about machines and processes



- No need for the uncertainty of binders, notebooks, filing cabinets
- Forms can be accessed at any time **on any device**
- Track and monitor **quality** of OJT given in the field, over just quantity
- Always be ready when asked **“Where is your training documentation?”**

Bringing Troubleshooting to the 21st Century

- **Electronic documentation** of schematics, in one central location
- Ability to gain a **short list of problem components**, as quickly as possible
- Ability to sort through schematics to find **operational events** of interest
- Minimizing time spent in front of hazards: within panels or within mechanical equipment



Component:
Y57

Description:
Directional Control Valve

Manufacturer:
Vickers

Part Number:
DG4V-5-6C-M-U-EK6-20

Stock Code:
Not Provided

Electrical Address:
Not Provided

Component Application:
This directional control valve controls the extension and retraction of Lifting Table Cylinders (C5 and C6.)



- Find **manufacturer and part numbers** quickly for replacement
- Ability to switch between different process systems: **hydraulic, pneumatic, electrical, etc.**
- Ability to relate machine schematics **to the real-world** as readily as possible
- Ability for **different learning styles** to find the information they need



Questions?

- If you'd like to learn more about how to improve troubleshooting and on-the-job training program at your facility, TPC Training can help!

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