Technical Training

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Key Presentation Take-Aways

- We Need to Engage Technicians More in the Learning Process
- Use of SOPs can Accomplish That



Many Approaches to Technical Training

- Some Effective....
-Some Not
- Some Inspire Mechanics to Learn....
- Others Put Them Asleep



Instructors Use Many Techniques

Lecture is Least Effective

- Works for Teaching History...
 - Easily relate to human events

- Not for Adjusting Valves!
 - "Telling how" doesn't relate



Techs Want More Hands-On

- ASE Survey for TRB
 - -95% want more hands-on learning
 - Powerful message!
- I'm of the Belief:
 - Teach me I forget
 - -Show me I remember
 - Involve me I understand



SOP's & Training

- SOPs Standard Operating Procedures
- Aka Maintenance Practices, RPs
- Step-by-step Instructions for Performing Routine Jobs (tune-ups, brake reline, etc.)
- Typically Written, but can Incorporate...
 - Photos, graphics, videos, etc.



SOPs Represent Best Thinking of Agency

- Mechanics, Managers, Instructors all Define Best Practices for Each Job
- Apply to Repairs, Inspections, Overhauls, even Troubleshooting
- All jobs Done in Consistent Manner
- All in Compliance with OEM RPs, Legal & Local Conditions



"I Did It My Way"

- Without Defined Procedures
- Each Mechanic Does it His/Her Way
- May not be the Right Way
- i.e., Engine Won't Start
 - Some replace starter
 - Some the battery
 - Maybe it's just a Dirty Battery Terminal



SOPs Take Time to Develop

- Start with one and build from there
- Once done, convenient shop-floor reference
- Update them over time
- TCRP Project to Develop and Share SOPs
 - Template to create your own
 - TCRP Report 109



SOP's Have Dual Use

- SOP instructions for carrying out jobs...
- Can also used for teaching
- i.e., SOP for R&R Alternator
 - Classroom (teach me)
 - Hands-On (show me, involve me)
- Training consistent with shop-floor practices



Another SOP Benefit

- Lend Themselves to Mentoring
- Vast Untapped Resource Leaving in Droves
- SOPs = the structure for mentoring
- Guides Mentors thru teaching process
- Task checklists assure steps not missed



In Closing.....

- Far Too Much Classroom Lecture
- SOPs One Way to Involve Learners
- Provide Job Consistency & Reference
- Framework for Mentor Training

