

TWI Job Instruction Training

Session 1

Participant Handout

TWI* Brief History

- Established August 1940 by National Defense Advisory Committee
- Enacted by Presidential order in 1942 to become part of the War Manpower Commission
- TWI content was developed and supported by leading specialists, manufacturing companies, and union representatives
- TWI focused on producing safely, quickly, correctly, and conscientiously
- Managers and supervisors were coached in three core skill areas
 - Instruction
 - Improving
 - Leadership
- The original TWI basic training programs were
 - Job Instruction (JI)
 - Job Methods (JM)
 - Job Relations (JR)
 - Program Development (PD)

*Training Within Industry

TWI Results Encouraging (1/2)

Initial Overall Results May 1943

Category	<25%	25-49%	49-74%	> 75%
Production Increased	63	16	1	20
Training Time Reduced	52	25	7	16
Manpower Saved	80	9	1	1
Scrap loss reduced	89	5	5	1

*Training Within Industry

TWI Results Encouraging (2/2)

Percentage of plants reporting improvement results of 25% and over

Category	May 1943	Sept 1943	Feb 1944	Nov 1944	April 1945	July 1945	Sept 1945
Production Increased	37	30	62	76	64	63	86
Training Time Reduced	48	69	79	92	96	95	100
Manpower Saved	11	39	47	73	84	74	88
Scrap loss reduced	11	11	53	20	61	66	55
Grievances reduced	--	--	55	65	96	100	100

*Training Within Industry

Leadership Qualities in Production

1. Knowledge of work
-(e.g. how we do things)
2. Knowledge of responsibility
-(e.g. what we need to do by when)
3. Skill in improvement
-(e.g. how can we do this better)
4. Leadership behavior & motivation
-(e.g. why we do things this way)
5. Teaching ability
-(how to pass along our skills to others)



Job Instruction

How to teach an employee to do a particular job

- Safely
- Correctly
- Conscientiously



Teaching Methods

1. Telling

-Explaining verbally

2. Showing

-Demonstrating how it is done

3. Illustrating

-Explaining with written material or pictures

4. Question & Answer

-Asking about and discussing the contents



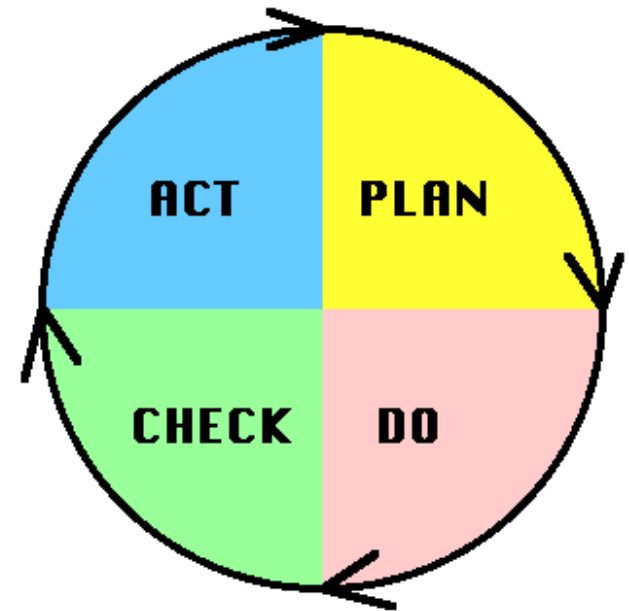
Job Instruction Card

Step 1: Prepare the learner

Step 2: Present the operation

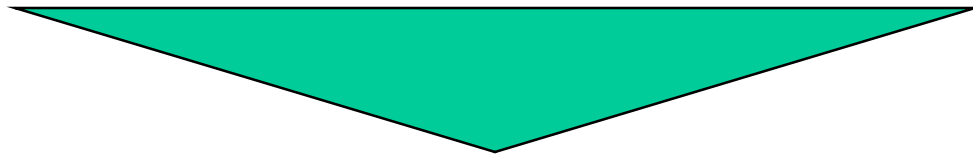
Step 3: Try out performance

Step 4: Follow up



JI Step 1: Prepare the Learner

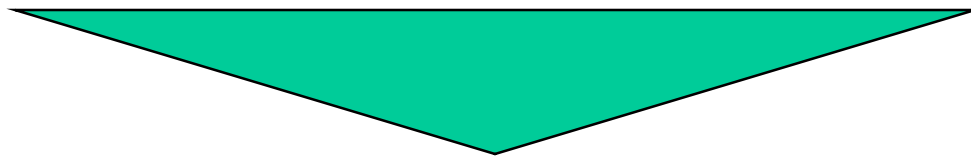
- Put the learner at ease
- State the job
- Find out what they already know
- Get the team member interested in learning
- Put the learner in the correct position



Create an informal atmosphere conducive to learning.
Motivate the learning to master the contents.

JI Step 2: Present the Operation

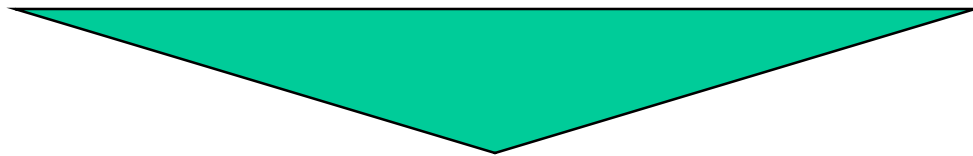
1. Instructor does the job and describes the operation one **Major Step** at a time
2. Instructor does the job, states the Major steps, and stresses each **Key Point**
3. Instructor does the job, states the Major Steps, Key Points, and explains the **Reasons**



Instruct clearly, completely, patiently.
Present only what the learner can master

JI Step 3: Tryout Performance

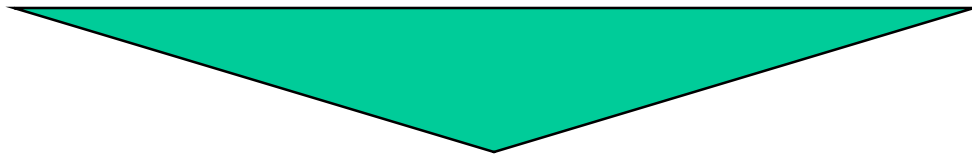
4. Learner does the job silently. Instructor corrects errors as needed.
5. Learner does the job - explains each **Major Step**
6. Learner does the job - explains the Major Steps, & **Key Points** behind each step
7. Learner does the job - explains the Major Steps, Key Points, & **Reasons Why**



The learner demonstrate the operation 4 times for a combined total of 7 repetitions overall

JI Step 4: Follow Up

- Put learner on own
- Encourage questions by the learner
- Designate for whom to go for help
- Check back frequently at first
- Taper off and provide coaching as needed



If the employee has not learned, the instructor has not taught!

Session 1 Review

- What did you take away from Session 1?
- Without looking at your cards what are the 4 main steps in JI?
- What is the JI Motto?

Pre-Instruction

- Create a planning time table
- Create a job breakdown sheet
- Prepare the work area
- Make sure that all materials are ready

“Failure to plan is the same as planning to fail”

-Coach John Wooden



Job Breakdown Sheet

Operation: _____

Parts: _____

Tools & Materials: _____

Safety Equipment: _____

Major Steps

Key Points

Session 2 Review

- What did you take away from Session 2?
- What are the 4 steps of JI?
- Which is the most important step for the instructor and why?

JI Basic Teaching Pattern

- Step 2 – Present the operation (Instructor)
 1. Do the job and tell the **Major Steps** only
 2. Do the job and tell the Major Steps and **Key Points**
 3. Do the job and tell the Major Steps, Key Points, and **Reasons Why**
- Step 3 – Try out the operation (Learner)
 4. Does the motions silently – instructor corrects if needed
 5. Does the job while stating the **Major Steps**
 6. Does the job while stating the Major Steps, and **Key Points**
 7. Does the job while stating the Major Steps, Key Points, and **Reasons Why**

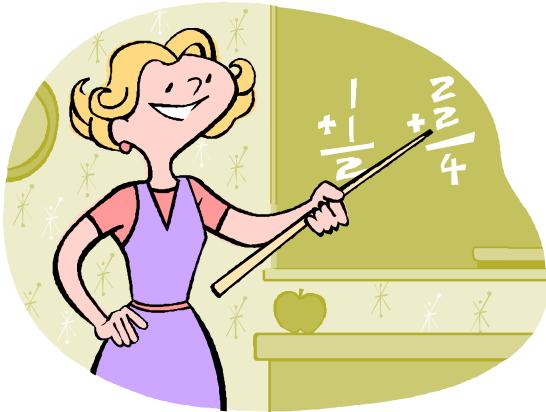
Session 3 Review

- Without looking at your card what are the four basic steps of JI?
- What are the main points under Step 1 – Prepare?
- What are the main points under Step 2 – Present?

Session 4 Review

- Without looking at your card what are the four basic steps of JI?
- What are the main points under Step 3 – Try out?
- What are the main points under Step 4 – Follow up?

Instructing Longer Operations



Factors to consider

- Capacity of the learner
- Natural breaks in the job
- Time constraints

Instructing Longer Operations – Example 1



Golf Swing Elements

- Grip
- Stance
- Alignment
- Backswing
- Downswing
- Follow through
- Special Shots
 - Downhill
 - Uphill
 - Sand
 - Rough
 - Chipping
 - Putting

Instructing Longer Operations – Example 2



Production Job Elements

- Assembly process
- Tool Set up
- Gauging
- Quality Checks
- Machine Start Up
- Machine Shut Down
- Etc.

Ideally break longer jobs down into steps that are manageable and easy to learn. Present to more than the learner can master