

Training Within Industry



The need is now!



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We Can Do It! TWI HISTORY

Crisis Created a Need



- TWI Service was one of the first emergency services established during World War II by the U.S. Government War Production Board in the early 1940's.
- A national network of professionals was drafted from industry to develop techniques to quickly ramp up the production of war materials.
- The TWI Mission:
 - To help industry to help itself get out more materials than have ever been thought possible, and at constantly accelerating speed
 - By the end of the war over 1.6 million workers in roughly 16,500 plants had received certified training in TWI.



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Why Now?

- Defense Production Act Declaration may require you shift production to different products and rapidly skill the team
- Business Planning
 - *Reduction in Force*
 - *Maintain Same Quality*
 - *Flex the Work Force Differently*
- Need proven methods to transfer skills quickly

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“Without work standards there won’t be standardized work”

“The primary function of a Work Standard is to clearly communicate **“normal”**. This permits recognition of “abnormal”. This lays the foundation for a scientific approach when **“abnormal”** occurs which it will!”

Isao Kato

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What is TWI – Job Instruction

Job Instruction



The way to get **A** person to
Quickly remember to do **A** job
Correctly
Safely
Conscientiously

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HOW TO GET READY TO INSTRUCT

- Make a timetable for training
 - *Who to train*
 - For which work
 - By what date
- Break down the job (standard work)
 - *List Important steps*
 - *Select key points*
 - *Identify reasons*
- Get everything ready
 - *Equipment, tools, materials, instruction aids*
- Arrange the work-site

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Get ready side of card

JOB INSTRUCTION POCKET CARD

How to Get Ready to Instruct

Before instructing people on how to do a job:

1. HAVE A TRAINING TIMETABLE

Determine **who** to train...

On **what tasks**...

By **what date**.

2. BREAK DOWN THE JOB

- List Important Steps
- Pick out key points and reasons
- Safety is always a key point

3. HAVE EVERYTHING READY

Have the right equipment, tools, materials, and supplies – everything needed to instruct

4. ARRANGE THE WORK AREA

Just as in actual working conditions

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How to train quickly

- Approach
 - *Find the expert (person doing the job)*
 - *Perform the job correctly*
 - *Create breakdown (standard work)*
 - *Train the employee*

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How to breakdown work quickly

- Current SOPs or Work Instructions
- Machine Manuals
- 5 minute Breakdown
 - Important steps
 - Key points
 - Reason



Breakdown form

JOB BREAKDOWN SHEET U

Operation:	CREATE BORDER	Plant:
Purpose:		Document #
Tools & Materials:	MEASURING TAPES, BOARD	
Common Key Point:	SHOULD HAVE ABOUT 1/4" TO 1/2" WRITE SPACE BORDER. MEASURE BOARD, SUBTRACT ABOUT 1" FOR STEP 2 DATA.	

IMPORTANT STEPS	KEY POINTS	REASONS
WHAT <small>A logical segment of the operation where something happens to advance the work.</small>	HOW <small>Things in steps that will: 1. Make or break the job 2. Injure the worker 3. Make the work easier</small>	WHY <small>List reasons for the key points.</small>
1. DRAW BORDER	- BUTTON: - CLICK & DRAG	- EASIEST WAY - GIVES THE SIZE CLOSE TO ACTUAL
2. SIZE BORDER	- SELECT - ENTER DATA, E.G., WIDTH & HEIGHT	- WYSIWYG
3. THICKEN* BORDER	- SELECT & RIGHT CLICK - "INLINE/OUTLINE" - DISTANCE: .25" - REPEATS: 1 - CHECK: INLINE	- THIS ROUTINE CREATES A 1/4" THICK BORDER
4.		
5.		
6.		



Trainer side of card

JOB INSTRUCTION POCKET CARD HOW TO INSTRUCT

STEP 1 – PREPARE THE WORKER

- Put the person at ease
- State the job
- Find out what the person already knows
- Get the person interested in learning the job
- Put the person in correct position

STEP 2 – PRESENT THE OPERATION

- Tell, show and illustrate – one IMPORTANT STEP at a time
- Stress each KEY POINT and its REASON
Instruct clearly, completely, and patiently giving no more than they can master at one time

STEP 3 – TRY OUT PERFORMANCE

- Have the person do the job – correct for errors
- Have the person do the job – explain KEY POINTS and REASONS
*Make sure the person understands
Continue until YOU know THEY know*

STEP 4 – FOLLOW UP

- Put on own
- Who to go to for help
- Check frequently
- Encourage questions
- Taper off coaching

IF THE PERSON HASN'T LEARNED,
THE INSTRUCTOR HASN'T TAUGHT

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What is Different Going Forward

- What is the new norm for manufacturing?
 - *Having a team that is agile and ready*
 - *Integrating hygiene safety into the Job Instructions*
 - *Investing in training skills*
 - *Adjusting to the abnormal*

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