

Training Within Industry (TWI)

By Drive, Inc.

COMPELLING REASONS WHY

In past blogs, we have mentioned that standardization is the foundation for creating a continuous flow of value to the customer. TWI is part of the backbone of standardization. TWI recognizes the need for observed verifiable performance criteria and outcomes. It recognizes the need for standardization and stability, and forces supervisors to engage employees. TWI provides good integration of simple instructional processes, as well as the means to deal with people problems. It also focuses on improvement, is good in repetitive production environments, is easier to deploy, and is easy to learn. Since this is the case, why have so many companies not embraced this valuable process?

Below are some of the reasons we have found for this lack of TWI use:

1. Training is not considered part of managing
2. The assumption that training results cannot be measured
3. The reliance on tribal knowledge and generational training
4. The absence of training as a strategy for change
5. Training is seen as a cost and not an investment
6. Intellectual arrogance
7. New developments are not considered
8. The lack of a collaborative business culture / disengaged management
9. The lack of strategic thinking in human resources (along with management)

TWI provides a systematic approach to sustain changes and continuous improvements by indoctrinating one into an “improvement” frame of mind. It does this by teaching one how to identify opportunities for improving their jobs, training one how to generate ideas to take advantage of these opportunities, showing one how to get these ideas into practice right away, and creating ownership for one to maintain standard work. When practiced, TWI produces outstanding results.

A BRIEF HISTORY

TWI was developed by the U.S. Government Service after the fall of France on June 22, 1940, which signaled that a U.S. involvement in the war in Europe was inevitable. The purpose for TWI was:

“to help industry to help itself to get out more materials than have ever been thought possible, and at constantly accelerating speed...”



...to win the war.

Results Reported* for TWI Effectiveness:

- 86% increased production by at least 25%
- 100% reduced training time by 25% or more
- 88% reduced labor-hours by over 25%
- 55% reduced scrap by at least 25%
- 100% reduced grievances by more than 25%

* Actual data reported by over 600 companies attributed the above results to TWI

AFTER THE WAR

TWI was discontinued in 1945 as U.S. manufacturers focused more on getting product out the door to fill a worldwide demand for consumer products. Since the use of TWI in the U.S. diminished after the war, TWI became a privately led initiative by independent contractors and a TWI foundation, which was active as late as 1969 in the U.S. The U.S. Occupation Government brought TWI to Japan to “quickly” rebuild their industrial base to avoid mass starvation that the U.S. feared would further the cause of worker communism. The result achieved by the implementation in Japan is outstanding. Toyota is a great example of the power of TWI.

Many companies may have lost their way after the war, but that doesn't have to be the case. The TWI program is one of simplicity. It uses a repeatable procedure that requires a minimum of time to train. It adheres to the “learn by doing principle,” and it has built in multipliers to spread training. Some of the core elements of TWI are:

- Simple structure: four step approach to enabling skill development
- Modeling, Practice, Feedback, Competence
- Recognizes the need for observed verifiable performance criteria and outcomes
- Recognizes the role of the supervisor/leadership in training
- Recognizes the need for standardization and stability.
- Core focus in structured modules
- Train the skill - **Job Instructions**
- Ensure skills of improvement - **Job Methods**
- Improve employee motivation by dealing with human problems - **Job Relations**
- Good integration of simple instructional process and dealing with people problems

JOB INSTRUCTION TRAINING (JI)

Job Instruction Training teaches supervisors how to quickly train employees to do a job correctly, safely, and conscientiously. Job Instruction Training follows the following four steps:

- Step 1: Preparation – make the learner think to aid comprehension of the new idea.
- Step 2: Presentation – add the new idea to those already in the learner's mind.
- Step 3: Application – train the learner to apply what was presented and check results.
- Step 4: Testing – test the ability of the learner to apply the new idea alone.

“If the student has not learned, the teacher has not taught.”



JOB METHODS TRAINING (JM)

Job Methods Training teaches supervisors how to continuously improve the way jobs are done. The steps to Job Methods Training are:

Step 1: Breakdown the Job

Step 2: Question Every Detail

Why is it necessary? - Focus on Elimination of Steps

What is its purpose? - Focus on Elimination of Steps

Where should it be done? – Combine and Rearrange

When should it be done? – Combine and Rearrange

Who is best qualified to do it? – Combine and Rearrange

What is “the best way” to do it? - Simplify

Step 3: Develop the New Method

Step 4: Apply the New Method

JOB RELATIONS TRAINING (JR)

Job Relations Training teaches supervisors how to develop and maintain positive employee relations to prevent problems from happening, as well as how to effectively resolve conflicts that arise. Some critical items needed in order to ensure good job relations are:

1. Let each employee know how he or she is performing.
2. Give credit when due.
3. Tell employees in advance of changes that will affect them.
4. Make the best use of each person’s abilities.

The 4 steps to Job Instruction training are:

Step 1: Get the Facts – Talk with people and get the whole story.

Step 2: Weigh and Decide – After weighing the facts, decide which actions to take.

Step 3: Take Action – Determine where and how, don’t “pass the buck.”

Step 4: Check Results – Check Often, ensure Results are Improved (output and relations)

The combination of these elements, if embraced by the top management and implemented effectively, will lead to rapid improvement of any process. Combined with the assurance of management that the standards are being followed (refer to our newsletter on [Leader Standard Work](#)), TWI will result in outstanding safety, quality, delivery, and cost.

Does your team suffer from the reasons for not investing in training? Are you in need of a TWI program to drive change in your organization? Drive can help. We have a team of proven experts in improving business performance. We offer executive coaching as well as a 200% risk-free guarantee on implementation work. For a no-obligation introduction meeting, please contact Paul Eakle at paul.eakle@driveinc.com or 865-323-3491.

