

*Note: This article is part three of a ten part series written by Art Smalley in conjunction with the 2014 TWI Summit hosted by Lean Frontiers. Art helped facilitate a meeting of TWI thought leaders that is held each year during the Summit. Following this meeting, Smalley composed his thoughts and opinions in a series of papers aimed to support the TWI community's body of knowledge. Smalley's website can be found at [www.artoflean.com](http://www.artoflean.com). The annual TWI Summit website can be found [www.twisummit.com](http://www.twisummit.com).*

In [Part 1 of this series](#) I looked at how to improve the train the trainer aspect of TWI Job Instruction Training. By applying TWI JI principles to Job Instruction I have had good success in shortening the lead time for instructors to learn the material as well as obtaining better results. The audience evaluation of the instructor was higher as well.

In [Part 2 of this series](#) I also looked at two additional improvements to the basic TWI Job Instruction materials. These next two improvement ideas deal more with proper implementation of the Job Instruction program from a management point of view. I am fortunate to visit many different companies which have implemented TWI Job Instruction training. Unfortunately all tend to have the same struggles after creating JI trainers. The problem is that no management structure is in place to support the training activities as desired. So in most companies the overall program struggles initially and someone has to run around and try to make it work as either an internal or external consultant. Historically I have no doubt the original TWI trainers did some of this as well. And no doubt some developed their own personal way of doing this in a better fashion. However my point is that any such individual tinkering is not part of the *standard courses* taught today which is part of the problem.

It may sound harsh however I don't really care what TWI Instructor Mr. XYZ in 1952 might have done in one or two or ten client sites. The reality of the situation is the here and now and there is a problem in 2014. Most companies struggle with linking TWI Job Instruction to management and the required routines to make it work and keep it running effectively. It should be simple but it is not from what I observe. And the standard TWI training material in existence today does not cover this topic at all. For example in conjunction with TWI JI there must be a monthly planning meeting to look at volume changes, hiring additions, personnel assignments, vacation schedules, safety, and quality problems etc. Generally no one person can do all that even if the production manager is the key person for organizing the meeting. There is a vital role for production control, human resources, quality, and all production supervisors just to name a few in regards to this basic topic.

Just take the topic of quality for a moment. In any organization there is usually some form of a defective corrective action report (call it DCAR for short). The name is not important as dozens of different names exist. Somehow a defect is created and escapes either downstream or to the customer causing a complaint. As part of the process a document has to be created explaining why the problem occurred, what was the root cause, what is the countermeasure to prevent recurrence, and how will this be tracked and validated, etc. etc. Again many different flavors of this exist.

Now how many of these reports have you ever seen which result in 1) some sort of weak root cause analysis which states "operator error" as the root cause and 2) "training" as the countermeasure? Sadly there are a lot that I run into and have to reject on first principles. If the operator made an error then the question remains what is the root cause and how do you prevent it from ever recurring? That might entail mistake proofing or some form of product or process change. Simple detection devices might be

utilized as well. Guess what also should be required when the product or process changes? It is in this instance that TWI Job Instruction is called for to make sure the new recurrence prevention standard is understood and followed. There are of course cases where training might be part of the immediate temporary countermeasure. However simply stating "operator error" and "training" is not acceptable for a permanent countermeasure.

Sadly this sort of detail is not in the basic TWI materials for training Job Instruction. And I could create other examples for production control, staffing changes, and dozens of other instances. There are lots of "management triggers" which should drive the need to for conducting TWI Job Instruction. However in the standard textbooks today the material is only about HOW TO INSTRUCT TWI-JI from the standpoint of the trainer. What I would like to see is a standard set of courses on HOW TO MANAGE TWI-JI properly in today's environment. Individuals in the past or present might have their pet way of doing this but that is not solving the problem of the average company I observe today. The average site has nothing in this capacity which I am referring to and they have to slowly make it up as they go along. Or in the worst cases the TWI-JI trainers simply sit on the sideline and don't know how to get involved.

I jokingly refer to this phenomenon as the Session 0 and Session 6 problem of TWI Job Instruction. In reality I think there needs to be a standard 1-2 hour course that explains to management what TWI-JI really is before they start any deployment and what their roles will be in relation to the content. I refer to this as "Session 0". Also there needs to be a Session 6 after development of trainers which explains to management how they need to interact with the course and make it part of company culture and operating routines. I call this "Session 6" of the course. What are the regular routines, meetings, and processes by which TWI-JI is embedded into the managerial cadence and standards of the organization? Sadly I sense that everyone either skips this parts or ad hoc pulls it off on their own. I am as guilty of this as anyone and unfortunately I don't teach TWI-JI often enough to work on this aspect of it with clients. However this represents an opportunity for someone to develop a standard in this area and share it with the outside world. If someone or some organization is up to this task I would like to see it undertaken and presented at an upcoming TWI conference and placed in the public domain.

In previous posts I looked at two ways to improve TWI Job Instruction based upon observations and experiences with typical companies and problems I observe. In this post I will add one more item for consideration. I have seen companies practicing JI do some of this next idea and companies not doing JI practice it as well. I will keep this post short and to the point as it is fairly straightforward.

The third improvement idea for TWI Job Instruction relates to the creation of some type of "Training Dojo" or area for practice. The term Training Dojo comes from martial arts and refers to an area for structured practice under supervision and self-learning, etc. Currently all of TWI Job Instruction is done inside of a class room in a ten hour (or more) block of time across five days. Usually there is training time outside of the class as well for breaking down a job, getting some practice in, and learning the feel for the method. Of course each person attending the class has to do a 15 minute demonstration of the TWI JI method using a small example. The initial focus is on learning the method and not so much the actual job performed. For example the instructor uses the famous Fire Underwriter's Knot as a demonstration vehicle.

The TWI JI course is fine in this regard for the most part. However some participants struggle to find a suitable idea for their class room demonstration. Also many struggle to connect the method to their actual jobs at first glance. In this spirit it would be ideal to have a small training area for TWI JI practice outside of the classroom. Many companies including Toyota have these areas set up for learning on different topics. Initial skills acquisition, quality, safety, Kaizen, etc. are all examples of topics which have utilized the Training Dojo concept for practice. I was not allowed to take pictures of the Toyota JI Training Dojo last time I visited the company however here are some similar pictures which should help get the idea across.



What I think is an excellent idea for companies truly committed to TWI JI training is to establish a similar TWI Skills Training Area as well. There would be some standard tasks for learning and practice as an addition to the normal training sessions. In the afternoon for example participants can practice breaking down a job, or experimenting with the method. This is better in my opinion that showing up with something from home or tying a necktie or making a paper airplane, etc. This also helps cement TWI concepts to actual work done in the organization and takes it out of the realm of just theory.

Not everyone needs to make this type of area of commitment. Toyota had no such area for decades for example. However for dedicated companies really trying to drive home the points and build skills quickly I think this is a good idea to emulate. I would like to see more examples of this in action and presented at a future TWI conference.