

TRAINING WITHIN INDUSTRY (TWI) AND 'LEAN'

Providing capability in three core lean concepts.

Respect for people, standard work and continuous improvement have long been understood to be integral, overlapping and essential 'ingredients' in any organisation that sustains lean.

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“The three TWI “J” courses, Job Relations, Job Instruction and Job Methods provide a very important basis for a work team in a lean program that will be sustained. At the heart of every work system are people and their collective beliefs and behaviours, their work culture. The TWI “behaviours” played a powerful shaping force very early in Toyota’s improvement journey.”

Art Smalley: “Basic Stability” summary document

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“Why are you crying?” “Because I am not a fool” the young woman answered. Right then and there, on the factory floor, Mr Shigeo changed the name to poka-yoke which means “mistake proofing” or “inadvertent error prevention”.

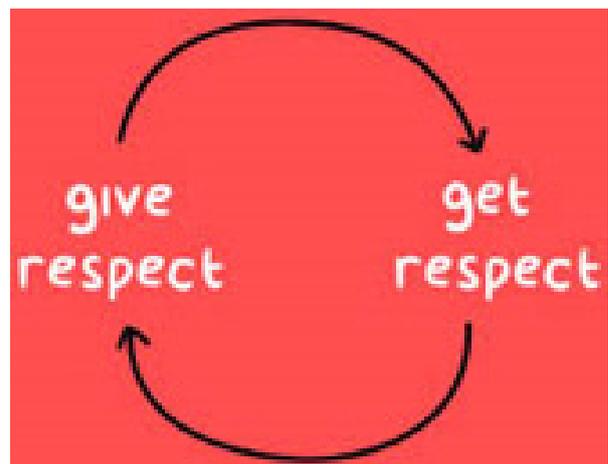
Respect for people has a fundamental presence in any truly successful work area. How can a Leader expect to be able to effectively teach a person how to do a job if there is not mutual respect? The worker will not believe they are being shown the best way to do a job.

This begs the question “what habits and behaviours do we need present in our organisation that will give us these outcomes, and how will we establish them?”

Respect for People and Job Relations

This one short story illustrates the importance of people and the need for respect.

Mr Shigeo Shingo, cofounder of the Toyota Production System (TPS), was explaining “Baka-yoke” to a young woman on the factory floor. Baka-yoke translated into English is “fool proofing”. The young woman burst into tears, she started to cry. Mr Shigeo asked



Further, without respect for people in the work area, changes (improvements) will not be sustained long term as workers will not believe they are being introduced to the “best new way”.

Respect (and disrespect) is an outcome of doing something. Job Relations (JR) provides that vehicle of doing. If a Leader is committed to applying the 4 Foundations, and to using the 4-Step method when problems do arise, respect in his work area will be there, it will take care of itself.

Standard Work and Job Instruction

Standard Work is a description of how an activity should be done (to get the desired results). Standard Work defines the most efficient method currently known to produce the required output using available equipment, people, and material. It is “the best way we know how today”.

Standard Work is a reference tool for comparing actual to required and when changes are being made, and is a basis for training. It is usually quite detailed and is not best used when instructing someone.

Art Smalley has quoted “A well trained workforce is a workforce that follows standard work.”

So, how do we best train our workforce? Job Instruction (JI) provides the Leaders with a proven skill for doing just this – training their workforce in standard work.

Continuous Improvement and Job Methods



Genuine continuous improvement is just that, continuous. It is not sporadic events to introduce “lean tools”. It requires a vehicle, a method, a way of thinking for the Leader of the work area.

As for JR and JI, there is evidence that JM came to Toyota and Japanese industry long before “Lean” did. Masaaki Imai in his book Kaizen states “Less well known is the fact that the suggestion system was brought to Japan by TWI and the US Air Force (about the same time as Deming and Juran – mid ‘50’s).”

JM is a practical method to help the Leader produce greater quantities of quality products in less time by making the best use of the manpower, machines and materials now available.