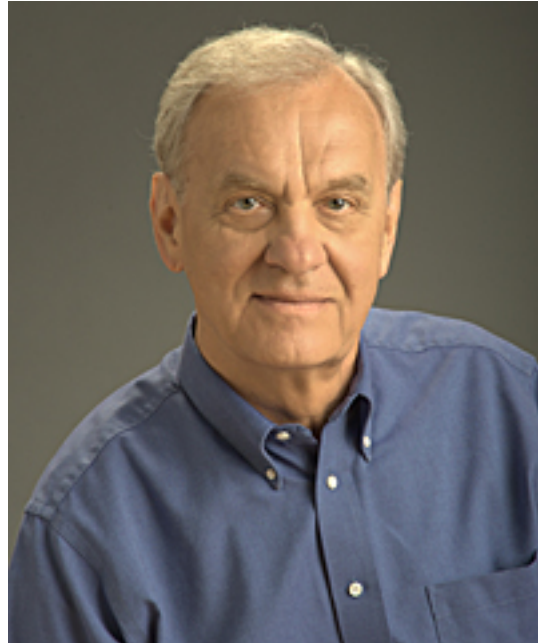


ONLINE EXCLUSIVE: Capturing Workforce Knowledge Before People Retire

Bob Wrona

U.S. manufacturers continue to struggle finding people with the skills required for operating the increasingly complex equipment they must invest in to compete in the global economy. There appears to be no immediate solution to this problem because of three contributing events that have accelerated the skills shortage at this inopportune time (described in the introduction to *Implementing TWI: Creating and Managing a Skills-Based Culture* by Patrick Graupp and Robert J. Wrona, Taylor and Francis Group, 2011):



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- A compromised educational system
- The lack of technical apprenticeships
- An aging workforce.

Companies do not have time to wait for educators and/or government to solve their problems. Manufacturers must take the initiative by learning to use self-help programs such as Training Within Industry (TWI). “The TWI programs contain very little that is new. They are distinctive not because of the accepted principles of good management they cover (Job Instruction, Job Relations, Job Methods Improvement)but because they are successful in getting them used, and on a national scale.” (As described in “Training, Continuous Improvement, and Human Relations: The U.S. TWI Programs and the Japanese Management Style,” by Alan G. Robinson and Dean M. Schroeder, *California Management Review*, Winter 1993.)

Manufacturers must also accept the fact that government and educators simply cannot solve their immediate need for teaching people how to do jobs in their factories. As Steven Spear noted in *Implementing TWI: Creating and Managing a Skills-Based Culture* (by Patrick Graupp and Robert Wrona, Taylor Francis

Group, New York, 2011), “It is unrealistic to expect that people will arrive with the skills already intact. Even were they products of the most successful education, and we know not all education is so successful, they'll lack the job-specific skills and knowledge to succeed. People could acquire skills through experience alone, but that is both time consuming and unreliable.”

The single most important thing manufacturers can immediately do to minimize the impact of an aging workforce is to capture the knowledge of their experienced people while standardizing how to train their unskilled replacements *before* people retire. There really is no excuse for any organization to allow skilled operators to take what they learned on the job with them into planned retirement. An increasing number of companies around the globe are capturing this vast source of knowledge before people retire and are quickly passing it on to new hires. This approach gives retiring employees personal satisfaction that what they learned on the job, often through trial-and-error, will help others avoid having to learn on their own by making these same mistakes.

Analyzing a job using the TWI JI four-step method identifies the current best work method. It provides a foundation to standardize how each job is performed with the least amount of waste while producing the best quality product at the lowest cost. By involving operators in this process, companies extract “knacks,” “tricks,” special timing and other bits of special information that operators have learned over the years and then kept to themselves because management did not take the time to ask about their processes. These “lessons learned” can help to ensure that work and related activities are safe and reasonable for their people. Abnormal conditions then become visible when they occur, creating a basis for future improvement efforts. A standardized method also makes it easier to train new and existing staff.

*Bob Wrona is executive director, TWI Institute. He had 20 years of experience in manufacturing and retailing before becoming an organizational development consultant. Wrona “discovered” TWI while studying kaizen and the Japanese Production System. He then tracked down Patrick Graupp, a TWI trainer for Sanyo. Pilot projects in 2001 provided a foundation for them to reintroduce TWI in their books*The TWI Workbook: Essential Skills for Supervisors *and* Implementing TWI: Creating and Managing a Skills-Based Culture.