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# Hands-on Management

## Teaching: A Learning Experience

The quality revolution has manifested itself literally everywhere, throughout everyday life. I recently saw a television commercial on quality in education. It showed first-grade students learning to read—with a new twist. Each first-grader had a third-grader as a once-a-week tutor/mentor. That the first-graders learned faster and better is a given—nearly all of us would benefit from one-on-one instruction—but what did the third-graders gain from this experience? What was the lesson plan for them? Most of the third-grade students showed improved reading skills, which was expected. On the average, however, they also improved in all other subjects.

Can you guess what they learned before and during their work with the younger students? They were instructed in teaching techniques. Teaching-learning “models” were used to describe, in simple terms, some of the theories in educational psychology. (Model is defined as words, such as in overheads, or pictures used to give an understanding of the subject being covered.) Models as learning aids have two primary benefits. First, models are said to provide “accurate and useful representations of knowledge that is needed when solving problems in some particular domain.”

Second, a model makes the process of understanding easier because it is a visual expression of the topic. We learn faster when the “big picture” or concept is explained before the lesson.

Learning skills can play a major role in dealing with the technology in the school and workplace. Technol-

ogy is such an important factor in today's society, and the more familiar the students/workers are with technology, the more likely they are to succeed in the modern workplace.

The culture shift resulting from the Information Age is influencing all aspects of our lives. It is redefining the knowledge and skills that both students and workers need to be successful in society today. To help gauge the size of this shift, compare the number of people employed in the service and information sectors today—more than 75 percent—and know that it is about the same percentage that accounted for both agriculture and industry in the 1890s.

John Carroll's model states that time spent on learning is the most important variable to how much you learn. This is all well and good, but how do we tie learning theory and technology together for the betterment of the surface finishing industry? The AESF has just the thing: *Electroplating for Beginners*.

*Electroplating for Beginners* is AESF's CD-ROM-based, self-training program intended to quickly train a new hire, someone on the plating line who needs a basic knowledge of what he/she is doing, or someone who wants the basic information that we all think everyone else knows about—except possibly yourself! This training program is as simple as putting a CD into your computer and pointing with your mouse to the areas of a plating process for which you need information.

The program contains photos, illustrations and video presentations covering basic electroplating questions. What does a rectifier do? How

does plating happen? What chemicals are in the solution? What causes contamination? How do you know what setting is best for the rectifier? How long should you plate a part to get a certain thickness? These and numerous other questions are answered and explained in plain, simple language. The program was developed by Frank Altmayer, CEF, AESF's technical director, with input from a number of industry experts. There also is a “Manager's Version” available, which includes the interactive CD, plus trainer's guide and administrative database that allows testing, verification of knowledge and issuance of satisfactory completion certificates for any number of students.

This quality instruction works so well because it:

- Organizes the subject matter into manageable learning units
- Has developed specific objectives for each unit
- Has accumulative assessment measures

You can strengthen the impact of this training by showing the group a preview of the material in a conceptual form. It makes “teaching” a little easier for someone who hasn't been trained as an instructor. And who knows ... maybe the teachers will learn something new as well.

Without a doubt, *Electroplating for Beginners* is proof that teaching can be a learning experience. P&SF

**Editor's Note:** To order a copy of “*Electroplating for Beginners*,” call the AESF Bookstore at 407/281-6441.