Apprenticeships Best Convey Tacit Knowledge

“Scientific knowledge” is “explicit knowledge.” It is precise and thus can be explicated in mathematical formulae, textbooks, blueprints, procedures, and manuals. It can be converted into a system. It can be stored, retrieved, and used again, exactly as it was used before, whether that was yesterday, last year, or centuries ago.

Explicit knowledge works. This knowledge can be easily learned, easily taught, easily transferred from one human to another.

Certainly explicit knowledge is much easier to teach and to learn than “tacit knowledge.” For tacit knowledge cannot be precisely codified. As Michael Polanyi, who first articulated the concept of tacit knowledge famously explained: “We can know more than we can tell.”

Or, to phrase that in reverse, “We cannot tell everything we know.” If we know things that we cannot “tell”—cannot “explain”—how is it possible for us to “teach” this knowledge to others? How can others learn, “understand,” and “use” this knowledge?

For any public agency to produce results, the knowledge about leadership and management cannot be proprietary information—understood and used only by the cognoscenti on the agency’s leadership team.

For example, such a leadership team may have evolved some effective motivational strategies—leadership behaviors that are based on a set of cause-and-effect principles. Unfortunately, both these motivational strategies and their underlying principles are primarily tacit. They cannot be converted into an explicit system.

For the agency to significantly improve performance, however, this knowledge cannot be the leadership suite’s secret. Assistant commissioners, bureau chiefs, and front-line supervisors also need to understand and use this knowledge.

So how can the leadership team help others in the organization—those with responsibilities for actually producing the results—to learn, understand, and use this knowledge? Unfortunately, they cannot tell it.

Tacit knowledge comes in many forms about many subjects. You have plenty of it. For example, you know how to ride a bicycle. But you didn’t learn how from a book or a lecture. In fact, nobody taught you how to ride a bike—at least not in the traditional way we think about “teaching.”

Yes: A parent or friend explained some general concepts. Mostly, however, he or she helped. This master of the bicycle helped you, the apprentice, with some technical things: How to get on the bike. How to steer. How to stop (very important).

Then, you the apprentice got started, with the master holding on—then (unbeknownst to you) letting go. As an apprentice, you benefitted from the guidance of a practiced master.

Indeed, before our ancestors invented explicit knowledge—that is, before they even invented language (an essential prerequisite for specifying and conveying explicit knowledge)—they had long been using, conveying, and learning tacit knowledge.

Whether the knowledge concerned how to conduct a productive hunt or find the best berries, the tribe’s masters taught the apprentices by example. Indeed, the apprenticeship has been very effective at helping neophytes learn a skill, a strategy, or an idea—a concept that requires a subtle appreciation of the context, the vagaries of the people involved, and (as always) the purpose to be achieved.

Certainly, the need for the apprenticeship did not end with the invention of language. For language cannot make the tacit explicit. Indeed, many famous artists, scientists, and artisans started their careers as apprentices: Leonardo da Vinci, Benjamin Franklin, Paul Revere, Abraham Lincoln, Henry Ford.

The master-apprenticeship approach to conveying tacit knowledge is well established. It is much more effective to demonstrate how to do it, to ask the apprentice to do it, to help the apprentice learn why what worked or didn’t work, and then to ask the apprentice to do it again. Repeating this iterative process of guidance, practice, observation, and analysis is how masters help their apprentices learn their tacit knowledge—how they help an apprentice become a master.

Experienced public executives—those masters of performance leadership—have a responsibility to help their staff learn their tacit knowledge. To do so, they need to be constantly explaining not only what they are doing but also why. What is their cause-and-effect principle that is guiding their strategy? Why are they employing different strategies in different circumstances?

They need to be constantly telling stories—and explaining their meaning. A good story will inevitably be dramatic. But it is not the drama but the subtlety that conveys the intricate complexity of the tacit concepts.

In reality, however, the master can only guide the apprentices. The master has to help the apprentices learn on their own. Then, at some point, the master has to let go.