



Performance Enhancement . . . WITHOUT THE STEROIDS

By Mr. John Arata

Scene 1: Exterior shot of an Engagement Skills Trainer (EST) 2000. Many Soldiers are near the facility, gathered around noncommissioned officers (NCOs) who are attempting to conduct “hip pocket” training. Others are grumbling, and you hear comments like “Hurry up and wait,” “What a snafu,” and “This is all ate up.” Cut to an interior shot, looking over the shoulder of the instructor/operator (I/O), who is punching buttons on a keyboard with increasing frustration. The system won’t boot up properly, and the Soldiers who are there for predeployment training are getting more and more impatient.

Scene 2: Interior shot of a typical office. A Soldier is working on a computer, muttering with frustration as she tries to use the Help feature of the word processing program so she can reformat a page into two uneven columns.

Scene 3: Exterior shot of a muddy road. The NCO in charge of vehicle recovery is studying a fuel truck mired in a rut. Another truck with a winch is in the background. A second NCO approaches and reminds the first NCO that they have to minimize environmental impact on the watershed they’re in and that they must be careful not to damage the historic spring house that is nearby. The NCO in charge looks concerned and continues to pace around the site.

What do these three scenarios have in common? Each shows a Soldier who has been formally trained but now can’t make effective use of that training on the work site. It could be a case where the original training was sufficiently detailed but the tasks haven’t been performed routinely since the learning event, so the Soldier no longer remembers how to apply the knowledge.

It could be a case where the original training covered only the basic tasks typically performed, and the Soldier was given a detailed reference manual to use to determine how to accomplish tasks not covered in the learning event. Or it could be a case where the original training gave the Soldier the ability to perform the basic tasks, assuming he or she would be able to independently adapt that knowledge later to meet the needs of more advanced or unusual situations.

Need for Knowledge

We often need to learn (or remember) how to perform specific tasks on the job. We may take a few moments to try to use support systems, such as the Help feature on the word processing program, but if that doesn’t meet our knowledge need, then we will quickly move on and seek the information from other sources. That source will typically be someone we see as a “go-to” person—an expert in the subject. We all know people we consider experts in specific areas: the one who can always clear the jammed copier, the one who can always start the chain saw, or the one who can quickly get the information we need out of the database. These sources of knowledge are the backbone of informal learning, the learning that occurs outside of a formal class, learning event, or system.

Informal Learning

Informal learning makes use of knowledge that has not been “captured” and often exists only inside someone’s head. To access that knowledge, we must locate and communicate with the owner. We might talk to a coworker in the office, phone someone at another office, or use e-mail

or instant messages to communicate and learn informally. A Bureau of Labor Statistics report¹ (see graph on page 32) shows that we learn more than 70 percent of what we know about our jobs through these informal processes and contacts. The people from whom we learn informally are usually present in real time, although not always in the same physical location. We each need access to experts who can answer our questions and with whom we can explore the information, practice applying it, make mistakes, and practice some more.

Seven Principles of Learning

From extensive fieldwork, the Institute for Research on Learning developed seven Principles of Learning² that provide important guideposts.

- *Learning is fundamentally social.* While learning may seem to be simply about the process of acquiring knowledge, it actually encompasses a lot more. Successful learning is often socially constructed, which can make the process both challenging and powerful.
- *Knowledge is integrated in the lives of communities.* When we develop and share values, perspectives, and ways of doing things, we create a community of practice.
- *Learning is a participatory act.* The desire to participate in a community of practice, to become and remain a member, is a motivator to learning. This is a key dynamic that helps explain the power of apprenticeship and the success of mentoring and peer coaching.
- *Knowing depends on practicing.* We gain knowledge from observing and participating in situations and activities. The depth of our knowledge depends on the level of our engagement.
- *Engagement is inseparable from empowerment.* We perceive our identities in terms of our ability to contribute and to affect the life of communities of which we are—or want to be—a part.
- *Failure to learn is often the result of failure to participate.* Learning requires access to information and the opportunity to contribute our own knowledge or experience.
- *We are all natural lifelong learners.* Learning is a natural part of being human. We all learn what enables us to participate in the communities of practice to which we want to belong.

Performance Support Through Communities of Practice

So how can we begin to capture that informal knowledge, or “village wisdom,” and make it more accessible to all Soldiers? You may have noticed the phrase *community of practice* above. Communities of practice are groups of people who share a concern or a passion for something they do and learn to do it better as they interact regularly. Three characteristics are crucial:

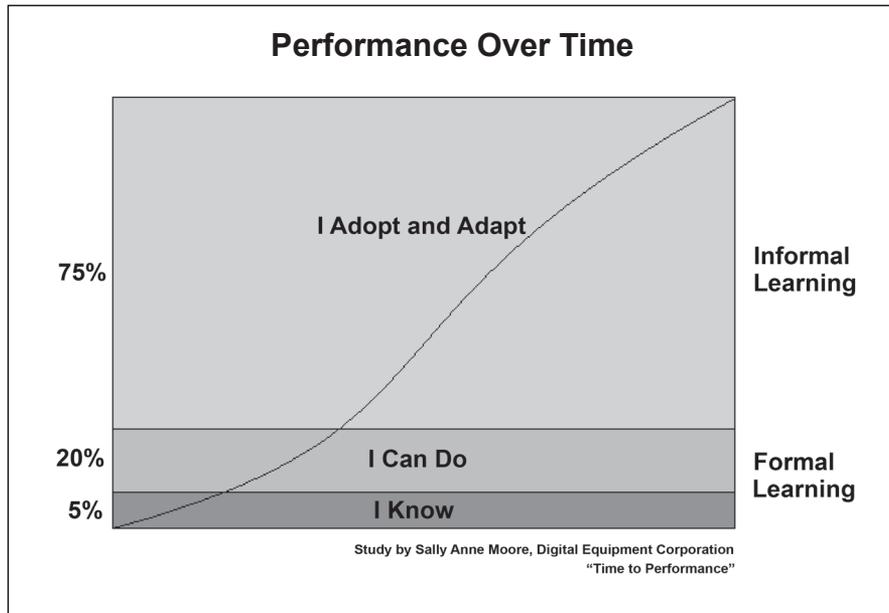
- *The domain.* A community of practice is not just a network of connections between people. It has an identity defined by a shared area of interest. Commitment to, and competence in, that area distinguish community members from nonmembers.
- *The community.* Within their domain, members engage in activities and discussions, help each other, and share information. They build relationships that help them learn from one another. While members must interact and learn together, they do not necessarily work together or at the same site.
- *The practice.* A community of practice is not simply a community of interest, such as a group of people who like old cars. Members of a community of practice are practitioners who develop a shared menu of resources: experiences, stories, tools, and ways of addressing recurring problems. This shared practice takes time and sustained interaction. The development of a shared practice may be conscious or seemingly coincidental. Community members may make a concerted effort to collect and document the techniques and lessons they have learned into an accessible knowledge base. By contrast, coworkers who often have lunch together may not realize that their lunch discussions are an important source of knowledge about how to perform their jobs. Still, in the course of their conversations, they will have developed a set of stories and tools that are used in their shared practice.

These three characteristics constitute a community of practice. If we can develop, support, and improve all three at the same time, we can sustain the community as a venue for developing and sharing knowledge.

What a Community of Practice Does

Communities develop their practice through a variety of activities. Here are some typical examples:

<i>Problem solving</i>	“Can we work on this special event plan and brainstorm some ideas for transportation? I’m stuck.”
<i>Requests for information</i>	“What’s the IP (Internet protocol) address for the networked printer?”
<i>Seeking experience</i>	“Has anyone dealt with a Soldier in this situation?”
<i>Reusing assets</i>	“I have a training program I developed last year. You can take it and tweak it for your unit.”
<i>Coordination and synergy</i>	“Can we meet at the airport and carpool to the conference?”
<i>Discussing developments</i>	“What do you think of the new computer-aided design system? Does it really make projects go more quickly?”
<i>Documentation projects</i>	“We have ‘fixed’ this problem five times now. Let’s write down the process we’re going to use so we don’t have to keep reinventing the wheel.”
<i>Mapping knowledge and identifying gaps</i>	“Who knows what information, and what information are we missing? What other groups should we connect with?”



In communities of practice:

- Practitioners (community members) have collective responsibility for managing the knowledge they need, recognizing that they are in the best position to do this.
- There is a direct link between informal learning and job performance.
- There aren't formal structural limitations. Instead, there are connections between people that bridge organizational and geographic boundaries.

What the Future Holds

The United States Army Maneuver Support Center (MANSCEN) is developing additional ways to help support individual and collective performance through traditional formal learning events, processes, and programs and through the exploration and implementation of performance support and informal learning processes. The Maneuver Support Knowledge Network (MSKN) at <https://www.us.army.mil/suite/page/275589> is the official location where the MANSCEN Directorate of Training places current and relevant information related to the maneuver enhancement brigade (MEB); brigade special troops battalion (BSTB); and special subject doctrine, training, and leader development. This site supports field units and Soldiers and requires an Army Knowledge Online (AKO) login.

Informal Learning in Action

Replay Scene 1: The EST 2000 I/O is punching buttons on the keyboard with increasing frustration. The system won't boot up properly, and the Soldiers who are there for predeployment training are getting more and more impatient. Finally, the I/O gets on the phone and calls the dedicated help desk. Together, the I/O and the expert at the help desk work through the problem, quickly returning the system to service.

Replay Scene 2: The Soldier had been muttering in frustration as she tried to use the Help feature of the word processing program in an effort to reformat a page into two uneven columns. Now she stops, looks around, and finds the office word processing "guru," who is able to quickly teach her the steps she needs to modify the document.

Replay Scene 3: A second NCO approaches the NCO in charge of recovering a fuel truck stuck in a rut and reminds her that they have to minimize environmental impact on the watershed. They also must be careful not to damage the nearby historic spring house as they free the fuel truck from the mud. The NCO reconnoitering the vehicle recovery asks the second NCO for advice, and the two collaborate and reach a decision on the best way to safely recover the mired fuel truck while minimizing collateral damage.



Mr. Arata is Chief, Department of Career Studies, at the MANSCEN Directorate of Training, Fort Leonard Wood, Missouri. Previously, he served as Chief, Tactics and Leadership, for the United States Army Engineer School. In 2006, Mr. Arata became one of the first 270 training professionals in the nation and is the first Department of Defense employee to achieve credentialing through the American Society for Training and Development as a Certified Professional in Learning and Performance. He holds a bachelor's in natural resources from The Ohio State University and a master's in human resources administration from Central Michigan University.

Endnotes

¹ M.A. Loewenstein, J.R. Spletzer, "Formal and Informal Training: Evidence from the NLSY," Research in Labor Economics, U.S. Department of Labor, Vol. 18, 1999, pp. 402-438.

² Institute for Research on Learning, Menlo Park, California, 1999.