

In Advanced Blended Learning



U.S. ARMY EMBRACES THE INFORMAL LEARNING THAT COMPRISES 80% OF ALL LEARNING, ACCORDING TO FORRESTER RESEARCH.

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As far back as 2001, a small group of community champions responsible for the early U.S. Army communities of practice had a vision of transforming the way leaders would learn. This vision took advantage of the Internet to connect like-minded individuals with a passion for their work and blended it with formal learning structures. They integrated professional forums into the classroom as a way to stay connected to the field and keep classroom conversations relevant and focused on today's missions.

In 2004, the Army launched a pilot program to build a network of professional forums (communities of practice structured around specific jobs, specialties, functions and units). This pilot program, called Battle Command Knowledge System, was to build on the handful of individual and disparate communities already in use but not connected. The plan was for BCKS to provide the infrastructure, application, training and governance to allow the force at large to start and operate these profes-

sional communities, then connect them in a network of networks that facilitated the sharing of human capital across organizational and geographic boundaries. The existence and need for these communities predated the social network movement of Facebook and MySpace. They were born chiefly of a need to increase opportunities for connecting the network of practitioners and improving informal learning.

To achieve adaptability, agility and innovation, the military learning model should address two major issues:

The gap between what is currently taught and what should be taught - Most military instruction focuses on routine and explicit task-based skill development. However, the frequency of non-routine situations requiring tacit knowledge will likely double over the next five years. This drives a need to rapidly "learn how to learn" and leverage all the tools available to enhance that learning. This new educational model focuses on how to think and learn; it emphasizes 21st-century skills like problem-solving, critical thinking, collaboration and systems thinking.

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2The informal, experiential learning that accounts for that 70 to 80 percent of the knowledge gained on the job Learners gain knowledge through a process of personal and cooperative experimentation, questioning and problem-solving through which meaning can be constructed. By definition, learning is the development of schema that incorporates cognition, percep-

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tion and action. Schema are made meaningful by jointly carrying out activities with an "expert" in such a way that the learner gradually masters successively more difficult parts of the task through successively more complex stages. The use of professional forums as part of the learning process connects the learners and the experts and allows for that gradual development of mastery. It also connects the two learning environments and integrates current and relevant problems into the often outdated curriculum.

This is not to say all curriculum is outdated or irrelevant. On the contrary, the military does a remarkable job of mainlining and updating course material. However, the pace of operations and the generation of best practices and lessons learned have outpaced any organization's capacity to develop, yet and approve formal curriculum.

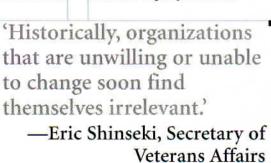
A new approach, like advanced blended learning (ABL), is needed that allows for rapidly creating current and relevant content and engaging students in courses with learners in units.

ABL is different than traditional blended learning in two important ways. First, it deliberately and systematically adds the informal, experiential learning that is critical to improved human performance. The informal



The Battle Command Knowledge System (BCKS) was born chiefly to increase opportunities for connecting the network of practitioners and improving informal learning. Photo courtesy of the authors.

Knowledge gained in the classroom can be fused with the situational awareness gained from the informal, social learning happening on the ground. This creates a just-in-time learning capability that includes social networks of expertise, peerto-peer assistance, tools and processes for improving communication and collaboration, and a "digital practice field."



learning does not replace the formal, structured training and education programs, but rather complements, facilitates and reinforces them. Second, advanced blended learning uses tools like professional forums and other Web 2.0 tools to integrate every aspect of the work and learning processes.

JUST-IN-TIME LEARNING

ABL helps leaders rapidly adapt leadership and learning styles and decision-making to situations not previously encountered. The backbone of the ABL model is the integration of formal learning with informal "on-the-job" individual, team and unit learning environments using social networking tools such as: communities of practice and professional forums; synchronous tools that enable desktop Web conferencing; and simulations.

Now, a student sitting in the classroom at Fort Leavenworth, Kansas, can connect to a group of planners in Kabul, Afghanistan, and develop a first-hand feel for the challenges the planners in theater are going through as they develop courses of action. The students in the classroom can provide input, questions and offer things to consider through the digital media. Those same students can reach out to their peers in other places of the world, using their functional professional forums, and ask for help that they can bring back to the group in Kabul. The planners

in Kabul, insufficiently knowledgeable about a specific topic required for the plan, can reach back to the classes at the Army school or connect to experts to fill in knowledge gaps. Instructors and facilitators take the scenario and, using Virtual Battle Space 2 (VBS2, a virtual reality simulation), create a three- to five-minute vignette of a particular challenge and add it to the learning library. This all takes place in a matter of minutes, since the network of professional forums and war-fighter forums is global and connects with tens of thousands of leaders.

In ABL, learning moves from the classroom to the work team — and becomes ubiquitous. In this way, learners are linked to the operational world, and the operational world for its part is linked back to expertise and tools required for just-in-time learning. By extending the "classroom" to our everyday life, content (real world problems with actual solutions) is generated from the "field."

EVOLVING INSTRUCTOR ROLES

As the paradigm of learning changes, so do the roles and responsibilities of those engaged in formal education. Instructors serve now as facilitators of learning and enable learners both in classrooms and in units by providing access and connecting groups of expertise, linking those who need the resources. Instructors act more as coaches, asking more difficult questions and challenging assumptions of both students in the classroom and those they are connected with from the field. The cadre of personnel at our schools serve as professional forums leaders, topic facilitators and mentors. They link community and classroom into one continuous community of learners. Curriculum developers, rather than creating fictitious scenarios, capture and package real-world

events in a matter of hours for wider distribution and learning. They must become masters at tying events to learning objectives and building learning in chunks by using simulations and virtual worlds that can be laced together, used today, updated in minutes, or discarded when no longer relevant.

LESSONS LEARNED

The informal, social learning that is at the heart of ABL drives creativity and innovation by ensuring that insights, lessons learned and experiences are captured and shared. Stories and concepts are transformed into vignettes, judgment exercises and decision games. These, in turn, generate reflective experience in other individuals, teams and units.

Some examples from the U.S. Army include

- >> Professional Forum-Transition teams use interviews with returning Military Transition Team members to set a situation and generate a conversation.
- >> Oral Histories by the Command and General Staff College record the challenges and experiences of returning OIF/OEF veterans and apply knowledge engineering to distill out lessons learned.
- >> The StrykeNet uses both the SLA Marshall video series of decisions in combat and quarterly live Webinars to capture stories, turn them into vignettes, build simulated scenarios around the vignette, and then acculturate a wide cohort of leaders preparing to join the Stryker Brigade Combat Teams.

KM AND LEARNING

Knowledge management (KM) is a key component of advanced blended learning. The U.S. Army defines two types of knowledge:

Information analyzed to provide meaning and value or evaluated as to implications for operation (explicit knowledge).

Comprehension gained through study, experience, practice and human interaction providing the basis for expertise and skilled judgment (tacit knowledge).

Explicit knowledge can be expressed, written down and managed as an artifact. Tacit

knowledge is the knowledge in our heads. It is often inexpressible and can only be transferred in conversations or through deliberate methods used in knowledge engineering.

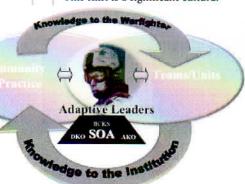
Discovering and accessing explicit information is important, but the actual transfer of tacit knowledge is vital to increased earning and knowledge within an organization. The only way to increase the transfer of tactic knowledge is to increase the people-to-people interactions in a deliberate and practical way. Communities of practice, professional forums, war-fighter forums and synchronous Web conferencing are all means to connect a geographically dispersed group of leaders. The result is an expanded experiential base for fighting forces and the establishment of a framework for continuous learning as knowledge gained in the classroom is applied in operations, thus generating new knowledge.

As leaders collaborate and share knowledge gained from their experiences, leader development is transformed. In this way, leaders and the teams they lead can become learning organizations, continuously and rapidly transferring tacit knowledge.

CONCLUSION

Successfully implementing ABL across the enterprise will depend on many factors that include the imagination, courage and determination of our educational leaders to understand Gen X and Y and how they learn and work, and embracing the innovative spirit that led the way in so many previous initiatives.

This shift is a significant cultural



Knowledge management is a key component of advanced blended learning. Illustration courtesy of the authors.

ABL Tools Required

- >>Tools that complement and reinforce the existing processes while taking advantage of Web 2.0 technologies and social network norms.
- >>Judgment exercises, Decision games, Leadership puzzles, Communities and Forums, Wikis, Blogs, Web conferencing
- >>Practical ways to leverage collaboration tools to increase opportunities for peer-to-peer communication and experiential learning.
- >>Accommodate different expectations and learning styles of Generation X and Y leaders.

change. Some will not be capable of the change, others will be slow. Some have already recognized the need and understand the power of weaving these new technologies and approaches to form new learning environments that transcend classrooms.

Former Army Chief of Staff and current Secretary of Veterans Affairs Gen. Eric Shinseki said in a recent open letter to veterans: "Historically, organizations that are unwilling or unable to change soon find themselves irrelevant." As we stand at the crossroad, approaches like advanced blended learning and Web 2.0 tools offer us opportunities to update our learning environments and make them more relevant and effective.

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