

Skills-Based Training Promotes Lifelong Learning for Army 2020

■ By Maj. Gen. Larry D. Wyche



Troop redeployments from Afghanistan, force drawdown, force restructuring, and an evolving national security climate require the Army of 2020 to be diverse and adaptive and learn and respond faster than the enemy to “guarantee the agility, versatility and depth to prevent, shape and win,” according to the 2012 Army Strategic Planning Guidance.

Combatant commanders need technically proficient Soldiers who can quickly adapt to new situations, think on their feet, and work in complex environments. Skills-based training (SBT) and credentialing improve readiness and allow our logistics units to more responsibly support unified land operations of the future. These initiatives demonstrate our efforts to reinvigorate our core competencies in order to extend operational reach and enable freedom of action.

The sustainment community recognizes the need to provide commanders with personnel who are better equipped to handle the changing operational environment we face today and who can effectively work on multiple pieces of equipment. The Combined Arms Support Command (CASCOM) is delivering just such game-changing professionals, beginning with our advanced individual training (AIT) graduates.

Applying Skills-Based Training

“Nearly a decade of conflict has shown the Army that it is extraordinarily difficult to prepare Soldiers for every battlefield contingency. Instead, Soldiers and leaders must

master a set of critical core competencies that provide a foundation for operational adaptability,” according to the Training and Doctrine Command Pamphlet 525-8-2, Army Learning Concept 2015.

At the Army Ordnance School, AIT Soldiers are developing the 21st century competencies of adaptability and initiative, teamwork and collaboration, and critical thinking and problem solving by using the tenets of skills-based training. SBT promotes the development of today’s Soldiers through the practical application of knowledge and skills using operational situations. Teaching Soldiers to become critical thinkers—capable of understanding problems as they arise rather than simply repairing specific equipment items—allows them to more rapidly become productive members of their units’ maintenance teams.

SBT relies heavily on three of the basic tenets of adult learning theory: experience (including mistakes) provides the basis for learning; adults are most interested in learning subjects that have immediate relevance to their jobs or personal life; and adults learn best when learning is problem-centered rather than content-oriented.

SBT includes real-world scenarios to encourage the transfer of learning to field expectations and draws on the use of troubleshooting and diagnosing to solve problems. In other words, SBT assigns Soldiers the role of adult learners capable of taking ownership of their learning and employing critical thinking to complete tasks.

SBT differs from legacy training in several ways. Instead of relying on lectures with infrequent hands-on equipment time that consisted primarily of remove-and-replace actions, SBT decreases the number of lectures and increases the frequency of hands-on demonstrations and practical exercises focused on theory and diagnostic techniques—a dramatic shift from traditional platform instruction.

In the SBT curriculum, the program of instruction focuses on skills that can be applied to multiple systems. For example, in the military occupational specialty (MOS) 91J (quartermaster chemical equipment repair) course, Soldiers learn how to diagnose electrical faults on the 3,000 gallon-per-hour (GPH) reverse osmosis water purification unit (ROWPU).

After receiving minimal instruction, Soldiers work in small groups and practice the skills learned on the less complicated 600 GPH ROWPU. Finally, the Soldiers may demonstrate mastery of the required skills using another piece of equipment, such as the tactical water purification system. As a result, Soldiers develop confidence in their ability to transfer the learned skill from one equipment item to another. Soldiers arrive at their units better able to contribute to the mission.

SBT gives Soldiers more hands-on equipment opportunities focused on acquiring diagnostic skills applicable to systems rather than individual equipment items. More hands-on time serves to boost a Soldier’s confidence with the tools and equipment of his trade.

The Transition to SBT

The AIT course for MOS 91D (power generation equipment repairer) was the first at Fort Lee, Va., to officially transition to SBT. The course length was reduced by 24 percent. Although this result may not be typical, SBT is expected to reduce course length, barring the introduction of new technology that must be taught in the courseware. Four other Ordnance School courses have converted to SBT at Fort Gordon, Ga.

Soldiers and instructors alike have responded positively to the change in training strategy. Soldiers receive instruction in a collaborative learning environment with fewer slide presentations, take part in more opportunities for experiential learning, participate in peer-to-peer instruction, and engage in scenario-driven realistic training in accordance with SBT tenants.

Instructors have the opportunity to adapt lessons and use technology, such as mobile applications, simulations, videos, and other training aids to enhance the learning experience. Instructors are now facilitators, true subject matter experts guiding their students to diagnose root-cause faults in a problem-centered learning environment. All of these efforts lead to better Soldier engagement, a more thorough understanding of content, more capable technicians in the field and enhanced unit readiness.

Soldier for Life

Troop redeployments will also impact “130,000 active, Guard, and Reserve Soldiers who will reintegrate into communities each year, [equaling] more than one million [Soldiers] over the next 10 years,” according to the Soldier for Life Program website, www.army.mil/SFL.

The increased confidence and competence developed through SBT helps Soldiers attain civilian credentials for their military learning. CASCOM schools continue to work with civilian agencies and conduct pilot programs in the development of multiple credentialing programs.

Currently, the Ordnance School offers credentialing opportunities for nine military occupational specialties in conjunction with resident training. These initiatives include an Automotive Service Excellence certification pilot which began September 2012 for MOS 91B wheeled vehicle mechanics and involves Soldiers in the Advanced Leader Course and Warrant Officer Basic Course. During fiscal year 2013, 45 Soldiers will participate in this pilot program.

For Soldiers in the MOS 91E (allied trade specialist) AIT course, credentialing opportunities are available through the National Institute of Metalworking Skills. Since the program’s implementation in July 2012, more than 107 students have registered. One hundred and two students have earned one or more credentials through written and performance exams.

Other credentialing opportunities provide certification or licenses for basic electronics, computer networks, and environmental sciences. CASCOM’s transportation school is partnering with several states’ Department of Motor Vehicles to allow MOS 88M motor transport operators the opportunity to use a military skills waiver form, now accepted in 32 states, to qualify for a commercial driver’s license.

Quartermaster Soldiers in the MOS 92A (automated logistical specialist) and 92Y (unit supply specialist) Advanced Leader Course are participating in a pilot with the Manufacturing Skill Standards Council to earn a Certified Logistics Associate credential. In fiscal year 2013, 1,000 92G food service specialists in both AIT and noncommissioned officer schools have enrolled in apprenticeships with the American Culinary Federation. These apprenticeships lead to certified culinarian credentials.

Credentialing and SBT are integral to developing Soldiers who have positive attitudes toward learning. SBT develops confidence and reduces fear of learning through experiential learning, and credentialing promotes

self-confidence and lifelong learning.

Credentialing programs offered through military training institutions are just the beginning of lifelong learning opportunities available to Soldiers. These programs help ensure Soldiers are competitive whether they remain in the military or enter the civilian workforce. Commanders should encourage Soldiers to continue seeking advanced certifications, both to increase their value to their units and to broaden their job opportunities in the private sector.

Incorporating technology, collaborative learning environments, and facilitation in institutional training provides a much needed update to learning strategies that focus on the needs of the learner. Tomorrow’s Soldiers will be critical thinkers capable of diagnosing equipment faults on previously unseen equipment by applying knowledge garnered through a systems approach to training.

Using credentialing programs allows Soldiers to stay abreast of emerging maintenance trends, become better assets to their units, and acquire marketable skills. Our mandate is to develop a synchronized strategy that integrates the common ground among credentialing, force readiness requirements, lifelong learning, and educational opportunities that achieve real results.

The goal is to develop Soldiers’ abilities to become problem solvers so that they are able to think their way through situations as quickly and as efficiently as possible. This ability will have a positive effect on readiness in our Army. The successful integration of SBT initiatives and adult learning principles gives Soldiers the baseline competencies to perform their jobs effectively and efficiently as we transition to the Army of 2020.

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