
Adaptive Soldier/Leader Training and Education (ASLTE)

An Approach to
Implementing the
Army Learning
Method

A Project of the
Asymmetric Warfare Group



ADAPTIVE SOLDIER LEADER TRAINING AND EDUCATION (ASLTE)

RE-INTRODUCING AN IDEA

This document describes a training approach for Soldier and leader preparation for mission success in any contemporary operational environment (COE). Originally published in 2009 to describe outcomes-based training and education (OBT&E), the revisions to Army learning doctrine since 2011 require some synthesis to address new issues and requirements. Like OBT&E before, the ASLTE approach promotes the development of adaptive thinking, individual initiative, collective agility and most importantly, the confidence of participants in all aspects of training and education. ASLTE enhances learning in training settings while it also encourages a more grounded understanding of complex topics in educational settings. It may offer instructors and training developers a bridge to bring training and educational philosophies and practice closer together. Broadly stated, ASLTE allows training and education to move beyond the minimalist approach of standards-based training and achieve the desired excellence and mastery our training doctrine envisions. It enables the vision of current training doctrine, and is an application of concepts associated with TRADOC Pam 525-8-2. Just as a Commander begins his training planning by visualizing his organization in combat and determining what skills are necessary to train, ASLTE brings this process to all trainers and assists them in determining what to train and for what purpose.

GENERAL

1. The Army Learning Concept 2015, enumerates the 21st Century Soldier Competencies that are meant to be the outcomes of all Army learning – (training and education). Additionally, the Army has defined General Learning Outcomes, by grade, associated with six Army learning areas. By themselves, these lists do little to change the way Army schools, lessons, and training activities affect changes in Army learner behavior. Instructors and training developers need guidance in how to design learning activities that develop competencies or allow behaviors to manifest for developmental assessment. The ASLTE approach, with its focus on the learning outcome, provides this opportunity.
2. A learning outcome, when related to training and education, is different from a training or learning objective. The difference is similar to the difference between a commander's intent and the concept of the operation. Just as intent states the broader purpose for the operation, an outcome provides a broader purpose for the training or instructional topic.
3. Outcomes include the knowledge, skills and attributes of competencies that individuals should possess, yet are difficult to measure directly or in a snap shot of individual performance. Whereas learning and training objectives depend upon, indeed require, action oriented words to frame assessment for objective measurement, outcomes provide a broader, and from a military perspective, more useful measure of effectiveness. Well-crafted outcome statements establish the framework for both the design of the learning activity as well as the assessment tools used during the activity.

4. Leaders are already familiar with assessing performance based on subjective judgment. The OER and NCOER system depend upon an experienced rater's and senior rater's ability to make judgments about competencies, skills, values and other qualitative but largely subjective aspects of individual performance within the context of a mission-oriented environment. ASLTE creates a similar assessment environment.

5. ASLTE is a good way for commanders to apply mission command concepts in training. The mission command operational concept depends upon trust, confidence and mutual understanding while employing disciplined initiative within the commander's intent.

USING OUTCOMES TO DESIGN TRAINING & EDUCATION

6. Just as a commander in the Operating force must visualize, describe and direct to effect mission command, a commander in the Generating force must visualize the desired result of the training or educational activity. The legacy of recent training doctrine relied upon Army established standards for approximately 19,000 tasks that describe all the activities and functions of Soldier performance in the various branches and specialties. Army established standards describe the *minimum acceptable level of performance* for each particular task. This performance floor is an essential requirement for Army assurance that Soldiers and units can, within certain constraints, accomplish missions in Decisive Action.

7. A performance floor is not consistent with either excellence or mastery, both of which are desired goals of Army training. Commanders desire that their units demonstrate excellence and they want their Soldiers to demonstrate the pursuit of mastery in the tasks that they routinely perform. A commander's expression of such an outcome becomes the starting point for designing training and education. The continual pursuit of mastery, including enabling the Soldier's learning to learn, is critical. Otherwise, it is unlikely that the minimum acceptable level of performance (the standard) measured at some point in time will be maintained, let alone exceeded, later and when it is needed for mission accomplishment.

8. Well-defined or described outcomes help trainers and training developers deliberately create learning activities that motivate and direct future behavior toward desired outcomes. This is very different from using the achievement of a baseline performance standard as the measure of learning or mastery of the task. In practice trainers using outcomes might follow this approach –

- The Army describes a particular requirement to provide Soldiers the key knowledge, skills, and attributes they require to operate successfully in any environment
- Needs analysis and feedback from the operational domain identify more needs than there is time available to address
- Prioritization of needs and allocation of scarce resources becomes a challenge of how many hours to devote to a particular task or subject; and which level is most appropriate to train the task to the standard desired.
- With an outcome in the form of an intent, the Soldier (or unit) during training has the freedom and flexibility to prioritize learning opportunities and make good tradeoffs about what to do so they will be more likely to contribute to mission accomplishment

- Trainers and developers now are able to design activities focused on the outcome and develop ways to adapt to constraints imposed by time, trainer/student ratios, and other aspects of training and education that are commonly seen as obstacles

PLANNING TRAINING USING LEARNING OUTCOMES

9. One of the values of ASLTE is that it forces all elements associated with the training and education activities to remain focused on the outcome, instead of being distracted or confounded by the inherent limits imposed by schedules, facilities, and other diminishing resources.

- The commander's stated outcome becomes the top level metric
- Trainers derive from that the knowledge, skills and attributes that must be evident in order to claim success
- Trainers then determine the indicators that support those claims (these may be performance or behavioral indicators)

10. Trainers, so equipped, can now be purposeful in their planning efforts. Regardless of the time, equipment or facilities available to them, trainers know understand the outcome and will lay out a method to achieve it. This empowers the trainer, encourages flexibility in thought and action, while similarly pre-empting rationalizations for low quality training because of minimal or absent resources.

11. As resource availability can frequently change, so too will the plan to achieve desired outcomes. This is the case for all participants and influencers in Army training and education. Combat seasoned Soldiers, for example, will not require the same approaches that might be appropriate for initial entry training. While the outcomes may be identical, the way to get there could be entirely different. ASLTE provides the trainer a focus to facilitate the differences.

12. It is important to point out that, just as mission command depends a great deal upon trust and confidence, the same is true of ASLTE. If the stated outcomes are accurate reflections of what is required, success is only apparent where those requirements describe measures of performance. Traditional measures of performance in training and education usually tend to measure the execution of methods employed rather than whether learning occurred. In the case of ASLTE, effectiveness won't truly be known until the Soldier performs in combat, but evidence of learning and development of efficacy (the foundation or capacity for effectiveness) will manifest itself in ways that allow meaningful assessment of both the Soldier (and unit) in training and the trainer in execution. It also provides for explicit or implicit self-assessment and the development of a sense of self-efficacy in both trainers and their Soldiers. ("I know when I am performing well and I know that I can perform well.")

TRAINING & EDUCATION WITH A LEARNING OUTCOMES FOCUS

13. Because the COE today is so demanding and of tomorrow largely uncertain, with little regard for where or when operations may occur, Soldiers and units are expected to have the ability and agility to perform all things well. The increasing complexity of combat creates an intense competition between the need for specialization and the general capabilities required for agility.

14. Learning outcomes can resolve this tension by motivating task direction and organization within a broadly defined scope of training and education. An exhaustive task list that meets, and only meets, an expedient interpretation of a standard, encourages a check-list mentality in which the meaning of completing one training task is justification to move on to the next training task. ASLTE, on the other hand, forces the trainer to focus on principles and fundamentals that are applicable in all but the most unusual circumstances. In this context, the meaning of completing a training task is that one has made progress toward a developmental outcome.

15. Focusing on enduring fundamentals and immutable principles does not, by itself, produce durable learning, or encourage adaptive thinking and creative problem solving. It does ensure a basis for individual or collective understanding of the purpose of training, the approach to training, and the connection between training and more complex situations in the COE. Soldiers and units that can understand the implicit and explicit inter-relationships of the myriad systems that comprise our Army's warfighting capability, from the Soldier level up through the various unit echelons, significantly improve the agility of the force as a whole. For this to happen, practicing a consistent and developmental approach to learning in all phases of training and education is useful. Training must encourage Soldier thinking and awareness just as much as we expect education to do so.

16. Well-designed ASLTE learning activities promote conditions to allow Soldiers and units to demonstrate agility, show initiative and creativity, grow confidence and competence in ambiguity, while fostering a climate that encourages freedom to try different solutions to challenging problems. These conditions rarely emerge in training that only seeks attainment of a momentary performance standard as the objective. With outcomes as the purpose of training, performance is not limited or constrained, and the trainer can revisit a task or sequence of tasks as often as necessary under changed conditions with increasing complexity.

17. Constant repetition, though variations on a basic theme, is less onerous on the training audience than the contrived re-training of a particular task to the already demonstrated standard of performance. In other words, if the task, mastered under some condition, repeated in the same way, bores the Soldier and has a debilitating effect on learning. Training that ignores a Soldier's existing knowledge or experience, that requires achieving a standard of performance that is seemingly arbitrary, or is excessively procedural has little chance of maintaining a Soldier's attention; it depends almost exclusively on some form of artificial extrinsic motivator – none of which increases the likelihood of learning or durability.

18. Rather than a view of task mastery that treats all tasks equally and in isolation, ASLTE considers task mastery within the broader context of the intangible attributes and competencies required in a mission setting. Neither Soldiers nor units accomplish a single task, and move on to another task in the execution of a mission. In task-based training, the task is isolated as an end to itself. Condition statements are, by design, supposed to establish a framing context for the Soldier or unit, but rarely do. In ASLTE, the totality of Soldier or unit performance becomes important. The Soldier comes to understand the relationship between an individual and the unit as well as the linkage among tasks. How well the mission is accomplished is more important than specific procedures; constraints such as time are not confused with criteria for mission success. Mastery evolves from repetitive exposure to both competence and opportunities for improvement (i.e., the capacity for efficacy) in essential tasks in order to solve the current problem within the constraints

at hand. This concept applies equally from an individual-level response to a problem as it does to a unit level response to a mission.

USING LEARNING OUTCOMES TO ASSESS PERFORMANCE

19. Resourcing decisions depend a great deal upon a degree of confidence associated with reports that describe readiness measured against a range of standards accepted as meaningful indicators of future performance. Unfortunately, those same standards can obscure the realities of military operations and the associated impact of *intangible* human factors in solving complex problems.

20. Our leadership doctrine does account for human factors and this is why performance appraisals focus on values, characteristics and attributes subject to the judgment of an experienced rater. Though the OER attempts to make judgments of character in the absolute (yes/no), the NCOER is less demanding; raters in practice rarely are so finite in their appraisal. The same seems true when assessing training and education. Assessment is and should be a leader's judgment of performance weighed against their knowledge and experience. The experiential basis for such judgments reveals the dangerously misleading and false dichotomy between subjective and objective assessment in this context. Training *evaluations* have their place but should never assume a degree of prominence greater than a commander's assessment. An approach that bridges this gap would seek both subjective accuracy/validity and objective precision/reliability.

21. When focused on naïve objectivity (assessments that could be done by a novice), measures of performance can pervert the purpose of training and education. (Did the learner do X, Y and Z in the proper sequence; rather than did the learner accomplish the mission, without harm to equipment or others, regardless of performing steps in a certain sequence.) Without the currency and relevance that novices are incapable of considering, mere verifiability and repeatability are insufficient to assure development of the Soldier. Evaluations tend to focus on specific aspects of the nominal "training and education" process rather than on the results. Trainers, whose own performance evaluation depend upon these rating factors, begin to operate so as to maximize the arbitrarily observable aspects of their instruction and minimize the role of their own expertise as a Soldier and instructor. On the other hand, if instructors focus on the outcomes in their students' learning, their experience as a Soldier and instructor becomes a critical foundation for good training.

22. Consider establishing a range of performance that uses the standard as the base line for performance while extending upwards toward full achievement of the desired outcome. This can provide a measure of effectiveness that works as well for the training audience as for the organization providing the training. It does not diminish or negate the essential Army requirement to achieve a minimal level of performance (the Army standard) but it does raise expectations for increasing levels of qualitatively improved performance. As a baseline, for example, use a standard to assess improvement or capacity for improvement instead of a particular level of performance, however achieved at a moment of time. Capacity for improvement reflects the intangible personal performance attributes our Army finds valuable; such as confidence, initiative, accountability, etc.

CONSIDERATIONS FOR IMPLEMENTING ADAPTIVE SOLDIER/LEADER TRAINING AND EDUCATION

23. Commanders, trainers and training developers seeking to create learning opportunities designed with outcomes in mind should consider the following:

- The crawl – walk – run (or tell – show – do) approach to training remains a valid methodology in the context of ASLTE. Each training opportunity offers a perspective on the Soldier’s development.
- The task deconstruction and step-wise method of training or teaching complex tasks remains equally valid as an approach to promote preliminary learning, but ASLTE provides a different perspective on what the steps can be. In particular, it stresses that the way one achieves a particular step in training, not just the achievement, is important with respect to one’s capacity to progress *at* the next level not just *to* the next level.
- Training or education that requires only rote repetition or evidence of declarative learning has only marginal value and is highly perishable. Such training or education does not promote thinking, adaptive capacity, creativity, initiative, accountability, and only moderately affects confidence – all things that leaders value in their subordinates.
- Instructor preparation is of greater importance than even required for task or objective oriented training. This does not necessarily require more time in instructor preparation. It does require a better understanding of what it means to be prepared for instruction. Trainers must understand how to operate within the commander’s intent in a learning environment. Experience, knowledge, imagination and creativity are the key criteria for selecting trainers. Most significantly, they need to believe that their efforts to promote learning in training and education have command support and are underwritten.
- Curricula and training developers need constant reminders that the outcomes are most important in design. Their requirement is to generate learning activities that promote many opportunities to reach the outcomes in a sequential and developmental fashion. Ultimately, the intent of lessons should be to provide constraints and guidance as opposed to limitations and prescriptions.
- Outcomes shape the assessment measures and their associated instruments. The focus is bifurcated in that assessment considers the performance and behavioral indicators of the training audiences as well as the means used by the trainer to achieve them. Linking these two ideas is important for the commander to have any meaningful data for analysis.
- The Army standard for a task remains valid and any training or education that fails to achieve this deserves no further support or allocation of resources. However, the standard is only the starting point and, without elaboration, has little value to the student and trainer. Tasks, for Soldiers in training or in education, are missions - which are problems that need solving, that become increasingly complex by altered situations that demand greater application of cognitive ability (although not necessarily application of a greater cognitive ability).
- Soldiers (and trainers) will make mistakes. Any training or education that is devoid of mistakes in execution should be suspect as not promoting learning. Constant, short,

sharply focused AARs are of greater value than carefully scripted activities that mimic perfection but require inordinate time to practice and are unrealistic. They have greater value because they directly influence the capacity for improvement, the capacity for becoming effective, and one's understanding of these capacities.

- Commanders should be ready to contest regulations and practices of long-standing that may impede ASLTE and ALM guidelines. This is no less than commanders would do with restrictions that impede performance in combat. Many such restrictions were designed to marginalize the possibility of errors by attempting to impose artificial controls that would be absent in the real execution of a mission. By applying CRM and prudent measures, commanders can do what commanders are expected to do – prepare Soldiers and units to accomplish difficult missions in Decisive Action.

CONCLUSION

24. Much is expected of the Soldiers that make our Army. It is almost immaterial that the culture, life styles and educational opportunities of the population barely meet the Army's need. The Army's values and demands of character are essential aspects of what makes us the most capable landpower force in the world. The training and education we provide must sustain that capability. We must also be the most capable Generating force in the world. Training that is designed to achieve the Army standard will not assure excellence in execution, nor does it account for the enhanced confidence that follows achieving a level of mastery in executing a mission.
25. The Army standard is a necessary guarantee to the People and our Government that Soldiers, leaders and units can perform as designed and expected. Training to a determined level of competence and proficiency can consume significant resources. To both achieve and sustain, training should aim beyond mere competence and proficiency.
26. Leaders are accountable for mission accomplishment with the resources available to them. Soldiers are accountable for their actions at the point of decision. Training must therefore flow from the leader's vision of how they will accomplish the mission and it must generate confidence for the Soldiers who must execute the mission. ASLTE empowers leaders by fostering initiative and accountability, empowers trainers to produce meaningful results, and empowers Soldiers with the knowledge and confidence about their capacity to be effective - and why that is important.
27. Much is expected of the Soldiers that make our Army. The ASLTE approach is a tactical link the strategy described in the Army Learning Concept. It enables the operational concept and mission command as outlined in doctrine to Army training requirements and empowers our Soldiers for success in DA.