The Army University - Army Learning Strategy
The Army University Learning Strategy

*Army Learning Strategy* will optimize the achievement of all learning outcomes, and ultimately enhancing Soldier and unit readiness. The end result is greater organizational readiness, resilience, adaptability, and mission accomplishment.

References:

a. The Army University Proclamation, 6 July 2016, Tri-signed, Sec. Army, CSA, SMA
b. General Order 2016-10, Establishment of the Army University, 22 September 2016

1. The Army University was established to align Army Professional Military and Civilian education programs under a unified academic construct. The objectives are to increase academic rigor and relevance, improve learning integration and synchronization, increase leader competence, character, and commitment, enhance the prestige of Army education, promulgate best practices and increase institutional agility to meet the needs of the Operating Force. To date, Army University has begun several initiatives or programs to address the challenges laid before us in our codifying documents.

2. The Army University Learning Strategy is a cross functional, cross-disciplined approach to define the ends, ways and means and identify our priority lines of effort to improve Army Professional Military Education.

3. The Army University seeks your feedback and collaboration at each stage of our proposed way ahead and encourages leaders at all levels to seek out new and active ways to improve Army Learning.

John S. Kren
Major General, USA
Provost, Army University
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Introduction

“In order to succeed in the asymmetric battlefields of the twenty-first century—the dominant combat environment in the decades to come, in my view—our Army will require leaders of uncommon agility, resourcefulness, and imagination; leaders willing and able to think and act creatively and decisively in a different kind of world, in a different kind of conflict than we have prepared for the last six decades.”

Robert Gates
22nd U.S. Secretary of Defense
“Reflections on Leadership”

Warfare is the most challenging of human endeavors. Much has been made in recently published literature about the increasingly complex and chaotic nature of our world. For the Soldier, the battlefield has always been volatile, uncertain, complex, and ambiguous (VUCA). That immutable truth will remain a constant into the foreseeable future. In light of this reality, the Army Operating Concept recognizes the imperative of creating a culture of career-long learning within the Army that facilitates continued development of agile, adaptive, and innovative leaders who thrive in complex environments. From time immemorial, leaders with these qualities have proven to be the decisive factor in combat.

The Army University – Army Learning Strategy seeks to establish the conditions and highlight the necessary resource investment towards the creation of a culture within the US Army that supports a career-spanning learning environment. This work continues our Army’s proud tradition of developing leaders with the skills and competencies required to thrive in the VUCA conditions of battle and win our nation’s wars.

While the United States Army has always sought to deliver the finest education and training to its leaders, the current operating environment requires a leap-ahead progression to keep pace with the rapidly changing requirements of modern warfare. Contemporary advances in learning science combined with the widespread availability of applicable technologies offer new opportunities while the intensifying strategic environment serves as a catalyst for reexamining the way we train and educate our force. This document expands upon the rationale for renewed emphasis on learning and outlines the vision, ends, ways, and means for defining an Army Learning Strategy that will serve as a roadmap for evolving the Army’s approach to learning across the force, now and into the foreseeable future.

Strategic Environment

Our nation faces numerous security challenges and increasing strategic uncertainty. The Army Operating Concept describes a dynamic and complex future operational environment that includes an increasing velocity of human interactions, growing potential for overmatch, expanding
proliferation of weapons of mass destruction, widening spread of advanced cyberspace and counter-space capabilities, and changing demographics that increasingly place operations among urban populations and in complex terrain.

Added to this growing complexity is the greater potential for regular, irregular, hybrid, terrorist, and criminal adversaries to foment instability in every region of the world. Because many of these potential adversaries remain indistinguishable from protected local populations, addressing their influence often requires nuanced political, social, and cultural interventions. Alternatively, strong states backed by powerful militaries and weapons of mass destruction may intimidate their neighbors with hegemonic influence, creating regional instability. Confronting such challenges requires an acute grasp of global politics, human dynamics, and strategic mindedness. Achieving and sustaining political outcomes will also require coordination across multiple joint, inter-organizational, and multinational partners.

The traditional battlefront is also expanding. The rapid evolution of technology coupled with an increasingly urban and interconnected global populace allows individuals and governments to challenge United States’ interests across multiple domains. In the cyber domain, information diffuses rapidly to a global audience; media outlets or even independent bloggers can quickly create sweeping, sometimes unexpected, emergent societal behaviors. Similarly, the cyber domain allows adversaries from distant locations to attack governments, infrastructure, national business interests, and even individuals. In the more traditional domains of land, sea, air, and space, rapid commercial innovation provides state and non-state actors with access to affordable technologies, challenging the traditional security apparatus, threatening overmatch, and adding the potential for an unforeseen enemy niche capability.

Finally, the increasing growth and urbanization of at-risk societies poses serious issues. Operations in vast urban environments require new approaches to account for the tremendous scale and interconnectedness of modern cities. Shear population growth in select areas has led to the development of megacities that often spill over political boundaries, with accompanying issues of pollution, congestion, and poverty. Potential impacts from climate change/variability can further exasperate these challenges, threatening to disrupt stability, increase refugee flows, create conflicts over basic resources, and act as a catalyst for those seeking to gain control of vulnerable populations. Together, these pressures and challenges increase the likelihood the US Army will be called on to support national and international disaster assistance and disease response efforts at an unprecedented scale.
Learning Implications of the Strategic Environment

The complexity of current and future operational environments places tremendous cognitive demands on Army professionals. Our leaders require a greater breadth and sophistication of knowledge and skills. They must be able to think broadly and contextually about the nature of conflicts and have a working knowledge of the environment and an understanding of the geopolitical, cultural, linguistic, technical, and tactical factors that impact operations. They must be able to think critically, develop creative solutions to complex and ill-structured problems, and make decisions with strategic, operational, and tactical implications—often with incomplete, ambiguous information. They must also be able to think independently and act decisively while meeting the commander’s intent and adhering to the highest moral and ethical standards. Further, the increasing rate of technological growth and corresponding pace of societal changes necessitate that Army leaders learn and grow continuously as committed, life-long learners.

To develop this envisioned future force, the Army must dramatically increase its ability to effectively and efficiently cultivate the cognitive capabilities of all Army leaders. We must outpace our adversaries by developing our capacity to accelerate, optimize, and adapt learning—from the topmost organizational levels down to the individual knowledge, skills, and behaviors of our Soldiers and Civilians.

Towards that end, the Army must evolve its conceptualization, delivery, and management of training, education, and other learning opportunities. While many of the traditional means of individual and collective learning will endure, others must be supplemented or replaced by improved learning techniques and enhanced technology solutions. The Army and the joint force must retain a learning advantage over our adversaries. In our competitive, fast-paced global environment, where technology provides nearly instant and ubiquitous access to information, we cannot risk failure through complacency, lack of imagination, or resistance to change.

Vision

“We want leaders that are tough, resilient, that can think and out-fight and out-smart the enemy. We want them to be adaptive and agile and flexible. And we want them not only competent, but we want leaders of character.”

General Mark A. Milley  
39th Chief of Staff of the U.S. Army

The Army Operating Concept recognizes the imperative to create a culture of career-long learning within the Army that facilitates the continued development of “agile, adaptive, and innovative leaders who thrive in conditions of uncertainty and chaos and are capable of visualizing, describing, directing, leading, and assessing operations in complex environments and against adaptive enemies” (Army Operating Concept, p. 40).
This Army University – Army Learning Strategy serves as principal guidance for aligning Army training, education, and operational learning experience to meet those demands identified in the Army Operating Concept. This strategy operationalizes the U.S. Army Learning Concept for Training and Education 2020-2040 (ALC-TE), and marks the Army’s investment in developing professional Soldiers and Civilians who have superior levels of competence, character, and commitment; who possess a diverse set of knowledge, skills, and behaviors; and who can rapidly adapt to new and unpredictable threats in today’s complex and chaotic world. ALC-TE describes a systematic approach to future learning, and articulates a clear culture shift to leader-driven learning. This approach centers on combining experience with an adaptive blend of learner-centric training and education to enable development of mission-capable Soldiers, Army civilians, and cohesive teams.

This Learning Strategy provides a roadmap for the policy, procedures, and resourcing mechanisms needed to meet current and future Army readiness requirements. This strategy converges the broad range of learning opportunities (e.g., training, education, directed learning, informal learning, just-in-time training, self-development, and operational assignments) and covers all four cohorts of Army leaders, including officer, warrant officer, noncommissioned officer (NCO), and Army Civilian personnel. This strategy describes the ends, ways, and means to optimize these stakeholders’ many learning opportunities, holistically incorporating all of their learning experiences within a resilient organizational learning system that responds to evolving operational demands.

**Vision Statement**

An Army of professionals who meet readiness challenges today and tomorrow by learning faster, adapting more quickly than adversaries, and who have the leadership, technical, tactical, and problem-solving skills to thrive in complex and chaotic environments.
Ends, Ways, and Means

In strategic plans, the “ends, ways, and means” respectively describe the desired end states, methods for achieving those ends, and the resources needed to take those actions. In other words, \( \text{ends} = \text{ways} + \text{means} \).

Ends

For the Army University – Army Learning Strategy, the ends (as described in the Vision, above) are to enhance learning across the Army by creating a learning enterprise that develops agile, adaptive, innovative, and trusted leaders who are able to build cohesive, competent, professional teams capable of successfully accomplishing all assigned missions in every environment imaginable.

Ways

The “ways” define the strategies, tactics, and procedures needed to attain the “ends.” These include three lines of effort that correspondingly relate to the learning environment, the individuals who help craft and facilitate learning, and the embedded learning content and assessments. When taken together, the recommended actions will cultivate a learning ecosystem that enables a career-long, progressive, and holistic program of learning across all domains and career fields and for all four cohorts of Army leaders (i.e., officer, warrant officer, NCO, and Civilian).

The approaches described below do not stand alone; they must be considered and enacted in conjunction with actions recommended in other Army personnel development strategies, including the Army Leader Development Strategy, The Army Human Dimension Strategy, U.S. Army Talent Management System: Force 2025 and Beyond, and The U.S. Army Learning Concept for Training and Education as well as the various strategies, pamphlets, and regulations that outline the specific learning competencies and requirements of each of the Army’s four cohorts. (See Annex C for additional integrating details.)
The Army Learning Strategy is a critical integrating strategy in support of (and supported by) the Army’s key leader development focused strategies.

The table below summarizes the three lines of effort and their supporting objectives.

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**Line of Effort No. 1: Learning Environment**

Advances in learning technologies and cognitive science have greatly expanded our ability to create learning environments that facilitate superior outcomes by tailoring, scaling, and adapting to individuals’ past performance and current learning needs. This ensures Army Soldiers and Civilians learn most effectively and efficiently, whether in formal institutional settings, directed learning, self-development, and informal contexts, or at the immediate point of need in operational
environments. The following supporting objectives will enable the creation of a learning environment that embodies these features.

1.1 Develop Rigorous and Relevant Learning Content

All Army learning emphasizes the acquisition of critical leadership, technical, tactical, and problem-solving skills for real-world applications. To effectively support this, learning content must be rigorous and relevant. Rigorous learning systems establish and reinforce professional standards tied to desired performance outcomes. This involves promoting learning well beyond simple content knowledge and instead cultivating learners’ intellectual abilities to solve never-before-seen problems. Similarly, learning systems must be relevant to the authentic performance contexts in which Army leaders will operate. Relevant learning helps learners effectively transfer and apply their knowledge and skills in real-world operating environments.

The effective application of learning theory can help develop more rigorous learning systems, and the careful design of diverse, integrated curricula can make education and training experiences more relevant. To be rigorous and relevant, our learning system must include quality learning content combined with highly effective delivery strategies and tactics that expose learners to both well-structured tasks (e.g., assembly/disassembly of weapon systems) and less-structured problems (e.g., synchronizing joint fires for major combat operations). To achieve this, we must increase the value placed on learning science principles, such as educational theory and instructional techniques, and actively support their applied practice. Applying that methodology, we must take a comprehensive approach to curriculum development, seeking to blend aspects of both “training” (preparation for known tasks) and “education” (strengthening the intellectual ability to solve problems never before encountered)—along with high-yield instructional design and delivery approaches—into an integrated continuum. Achieving this will require us to profoundly redesign the range of formal and informal training, education, and operational learning experiences, including their intersections, instructional strategies, and embedded learning tactics.

1.2 Create a Persistent, Learner-Centric Professional Development Ecosystem

To realize the outcomes described in Supporting Objective 1.1, we will need to strategically apply learning technologies to create a cohesive multi-device learning system—available anytime, anywhere, and persistent across an individual’s career. To optimize learning outcomes, the system must support adaptation to learners, their contexts, and operational needs. Thus, it must be data driven and interoperable across diverse technologies and systems. It must also flexibly scale to incorporate new technologies or processes, and it should include collaborative capabilities that allow for the incorporation of collective tasks and social networks. Finally, it must actively complement the other forms of formal learning (e.g., schoolhouse classes or training exercises).

This cohesive multi-device learning system is an addition to, not a replacement of, the past traditional learning system. But, it is a major addition and it will shift many key portions of learning away from being formally bound by time and place into a learning process that is continuous, timely, and expressly relevant to each learner’s tasks, state, and situation. Once realized, this persistent “professional development ecosystem” will help bridge the gaps between
learning experiences, enable big-picture performance data collection, and through analysis of those data inform “meta-adaptation” (or learning path planning) across other learning experiences. In turn, this will enable better facilitation of informal learning, enhanced delivery of on-the-job performance support, a greater ability to capitalize on lessons learned in operational contexts, and, ultimately, greater overall learning efficiency and effectiveness.

1.3 Build a System for Managing Learning Performance Data

The backbone of the ecosystem described in Supporting Objective 1.2 is data. Making effective use of information we receive from each individual’s learning experiences requires significant improvements to how we collect, validate, share, store, and analyze learning performance data. Line of Effort No. 3 (Learning Assessments and Evaluations) specifically addresses the collection and analysis of meaningful data. Correspondingly, this supporting objective focuses on how learning data are organized and authorized.

To support greater interoperability across systems and enable sophisticated data analyses, the Army must implement an outcomes-based performance management system that uses competency frameworks to systematize learning content and operational performance definitions. This system should formally define the competencies needed for various billets, jobs, and tasks, including technical and tactical capabilities (many of which are already well established in Army doctrine) and latent variables such as leadership, decision-making, and problem-solving. Furthermore, the system should build upon new learning and competency development by providing the opportunity to reinforce learning while resisting the inevitable “knowledge decay” of key outcomes over time.

Each competency should include a modular breakdown of supporting knowledge, skills, abilities, behaviors, and experiences, which may be nested into multiple subordinate levels. Successful completion of learning experiences (whether in formal, informal, or operational contexts), should award credit (or micro-credit) towards these outcomes. A technological system supported by policy, processes, and organizational culture will need to track learner progress towards competency performance goals. Similarly, the system will need to manage credentialing to determine the processes for awarding credit, verifying and validating achievements, and assuring individuals actually possess the capabilities their records indicate. Finally, this system must integrate with Army and DoD Human Resources technologies to allow for better talent management processes in assigning personnel to jobs that best match individuals’ capabilities or best support their continued development for future leadership positions.

Line of Effort No. 2: Learning Leaders

Army tradition holds and demands that every Soldier is a leader. To enhance our learning system, every Soldier (and Civilian) must also become leaders in learning. More precisely, all Army leaders (e.g., NCOs, officers, warrant officers, and Army Civilian) must take on greater responsibility for developing their subordinates, assessing their capabilities, actively creating learning opportunities, and remediating observed knowledge and skill gaps. This is the best way to improve individual performance and overall unit capability and unit readiness. To meet this
charge, leaders will require greater proficiency with key learning science principles such as how to design learner-centric efforts to mitigate performance issues.\(^1\) It also requires organizational commitment to a learning culture that stimulates learning, thinking, and skill retention. Across the Army, \textit{“learning”} cannot be viewed as some discrete and unconnected event, conducted on a training range or in a classroom and removed from day-to-day operational duties. Rather, learning must be highly valued, prioritized, and continuous. It must become the norm. Inculcating this attitude means creating a culture where every activity—whether engaged in a field exercise or conducting a routine daily task—is viewed as a potential learning opportunity. The following supporting objectives will aid achievement of these goals.

\subsection{Enhance Facilitator Quality}

Learning leaders, whether in operational roles or assigned to training and education billets, require enhanced proficiency in the facilitation of learning. Research overwhelmingly shows that more capable learning professionals engender substantially better outcomes among their students. Additionally, the use of less adept instructional design and delivery techniques leads to negative—not merely stagnant—outcomes.\(^2\) While the Army already benefits from a variety of subject-matter experts, these experienced personnel must also possess a complementary set of knowledge and skills drawn from the learning sciences. For example, leaders across the Army should enhance their abilities to recognize teachable moments, stimulate and sustain learner motivation, ask

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\(^1\) For example, picture a platoon sergeant teaching his infantry platoon how to identify potential improvised explosive devices (IEDs). An average NCO in today’s Army might describe the basic principles, reading from published best practices, and then tell a few personal examples. While this sort of “instructor-centric” training has value, research shows that active, inquiry-oriented, learner-centric methods yield much greater retention and help learners transfer knowledge and skills into real-world use. In this example, the platoon leader might ask his Soldiers questions to stimulate their thinking, assign pairs of Soldiers to each diagram different IEDs and then explain their diagrams to the rest of platoon, or he might even hide fake IED models along their physical training route and challenge the platoon to spot them during their morning run. The point is, knowing the variety of instructional tactics available, as well as when each is most appropriate for his particular situation, can make the difference between Soldiers truly \textit{learning} the material versus merely exposing them to information (that they later forget and cannot apply).

The same is true for the delivery of feedback; that is, naïve feedback delivery (e.g., “you missed question three”) is substantially less effective than more skillfully framed and appropriately delivered feedback (e.g., “wait, before you go on, look at question three from the enemy’s perspective; how might that change your answer?”).

If leaders across the Army could learn some of these basic principles of learning science, it would substantially improve their effectiveness—not just in formal learning settings (like classrooms) but across the wide range of informal learning, coaching, and mentorship opportunities all leaders encounter. Even a small improvement per leader in terms of his/her subordinates’ learning outcomes, retention, and transfer would have profound impacts when multiplied across the entire Army.


\(^2\) For example, see Hanushek, E. A. (2011). How much is a good teacher worth? \textit{Education Next, Summer 2011}, pp. 41-45. This analysis integrated data from numerous other studies to evaluate the empirical relationship between teacher quality and student lifelong outcomes; it found a direct linear relationship between good—or poor—quality teaching and increased—or diminished—lifelong benefits.
effective questions, provide actionable feedback, adjust and manipulate the learning environment, and be adept at placing learners in what John Dewey described as a state of "perplexity, confusion or doubt" to encourage inquiry and reflective thinking.3

Developing subordinates has always been a leadership responsibility and this supporting objective does not change that tradition. Rather, it calls for the Army to better prepare leaders to effectively design, deliver, and assess the learning opportunities for which they are already responsible by training and educating leaders on basic learning science principles, instructional design techniques, and learning assessment methods. Further, those personnel explicitly assigned to training and education billets must meet a higher bar, which will mandate that they acquire additional professional development in learning science principles.

2.2 Enable Development of Personal Learning Networks

Increasingly, successful Soldiers and Civilians must be self-learners, seeking out new knowledge and skills without institutional direction, actively monitoring and exchanging the latest news and information. The Army must continue encouraging this kind of self-learning by facilitating the development of personal learning networks. For the purposes of this Army Learning Strategy, "personal learning networks" are intended to reflect a form of social learning that enables frictionless, direct connections between learners and learning facilitators above and beyond formal settings.

In this case, "learning facilitators" include, but are not limited to, unit trainers, institutional faculty, subject-matter experts, and eventually artificial intelligence systems. Importantly, learning facilitators must be available to Soldiers and Civilians at their points of need (e.g., a mechanic in theater struggling to make a field repair should be able to contact an expert for support immediately).

The learning network should enable on-demand, technology-supported matching of individuals with learning facilitators who can answer questions, address misconceptions, and provide encouragement. The system should also encompass a wide array of content resources and should allow individuals to curate content, collaborate, and establish enduring connections across their careers.

2.3 Recruit and Empower Skilled Curriculum Developers

Effective curriculum development requires a team of instructional system specialists, facilitators, and subject-matter experts—who, collectively, not only understand the content but are skilled in

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3 For example, picture a situation where an officer is leading her team through mandatory Operational Security (OPSEC) training. An average officer in today's Army might gather her Soldiers in a classroom and then read to them from a dense slide-deck. Likely, few of the Soldiers will retain meaningful lessons, and many will feel disengaged and unmotivated by the learning environment. A more skillful facilitator might use that same time to, for instance, divide her team into small groups that each teach one OPSEC principle to the rest—but from the perspective of various threats attempting to collect sensitive information. By using creative approaches—grounded in learning science principles—the officer could turn a mundane chore into an engaging activity that fosters greater motivation and yields more retention.
learning principles and their practical applications. Their competence must extend well beyond a mere understanding of the analysis, design, development, implementation, and evaluation (ADDIE) process. In short, we must cultivate more effective curriculum development teams that are empowered to make decisions about learning design and delivery, and are sufficiently valued and resourced, are needed throughout the Army learning enterprise.

Faculty, staff, and other personnel assigned to formally author learning content must be held to the highest standards. We should expect curricula to meet 21st century learning standards, including the incorporation of high-yield instructional tactics, integration of appropriately aligned assessments, and inclusion of critical thinking skills for solving ill-defined as well as more traditional well-structured tasks. It is relatively easy to call for curriculum developers to address such standards. Without appropriate oversight, resourcing, and empowerment, however, we will not achieve the necessary levels of performance. Similarly, we must find a way to balance regulatory and bureaucratic requirements (e.g., resource documentation in lesson plans, multiyear program of instruction development processes), with our desire to support agile curriculum deployment. This is essential for continued dominance in all learning domains.

Line of Effort No. 3: Learning Assessments and Evaluations

As described in Supporting Objective 1.3 (Build a System for Managing Learning Performance Data), the Army learning system must be able to collect, validate, share, store, and analyze learning performance data (structured and unstructured data) with greater breadth, precision, and validity. This will require improved data capture and measurement capabilities, technologies and policies for validation of data, secure data warehouses to store information, algorithms that meaningfully analyze the data, and systems that allow us to take action based on those analyses. Improved data management is not limited to learners’ data. We must also build processes for evaluating the efficacy of the learning system itself and its various subordinate parts. This is essential to ensuring its long-term health and viability amidst continuously evolving conditions. Three supporting objectives will help accomplish the overall goals in this line of effort.

3.1 Improve the Breadth, Quality, and Utility of Learning Assessments

Learning assessments measure, verify, and help track the outcomes of education, training, directed learning, self-development, and operational assignments (experiences). To support the sort of learning outcomes described in the introduction, the Army will need an expanded set of assessments, particularly ones that can accurately capture and diagnose complex, unobservable, and latent knowledge, skills, and behaviors. These assessments have many forms, from traditional paper-based quizzes to observed performance on training ranges, or from operational experience with technical tasks to documented behaviors that infer proficiency with critical-thinking skills.

To be most effective, this expanded set of measures will need to be multidimensional and collected in realistic contexts. Further, the measures require improved psychometrics compared to status quo assessments, such as greater reliability, sensitivity, repeatability, and integration into a larger assessment schema. These assessments must be part of a dynamic process, occurring continuously
throughout a career documenting mastery of both task-based knowledge and skills as well as latent competencies. In other words, assessments must measure outcomes across the full spectrum of the learning taxonomy, from lower-order actions to sophisticated, higher-order knowledge, skills, and behaviors.

Importantly, data collected from the assessments must be meaningfully analyzed and used to inform actions. The information produced by these assessments should directly enhance future learning, support program evaluations, improve facilitator and course development and feed learner profiles. For example, assessments prior to education and training events can establish a baseline and inform tailored learning, or aggregated assessment data at career inflection points can help determine an individual’s fit for a particular career field, specialty, or assignment.

3.2 Implement Learner Profile Portfolios

“Learner profile portfolios” are digital records of the learning outcomes and validated competencies a person possesses as a result of their training, education, and experiences. Where Supporting Objective 3.1 (Improve the Breadth, Quality, and Utility of Learning Assessments) describes the need to enhance collection and analysis of learning data, this supporting objective emphasizes the storage and display of that information, so it can enhance professional development and talent management decisions.

Learner profile portfolios provide access to, and visualization of, learners’ performance summary information. The portfolios should display individuals’ performance data (as described in Supporting Objective 3.1) as well as their summary competency scores, mapped against competency frameworks (as discussed in Supporting Objective 1.3). This will support career, education, and performance counseling. It will also provide leaders, Soldiers, and Civilians with an interactive tool to help plan career goals, better match talents with job requirements, guide selection for professional education, aid succession planning, inform assignments and promotions, and help visualize professional development pathways.

Importantly, it is foundational in a learner-centric approach that the information within the portfolios be “owned” by the individual learner, him/herself. It can (and should) be used to inform other decisions throughout a person’s military career, but ultimately it should belong to the Soldier or Civilian it describes. This means that individual learners can autonomously access and use their own data, at any time throughout their careers or even outside of the military (albeit adhering to security regulations). This concept fits with the Army’s commitment to Soldiers for Life. For instance, providing transitioning Soldiers their portfolios (which translate their Army training, education, and operational experiences into competency scores that industry and academia can better understand) will aid them in seeking post-Army educational and employment opportunities.

3.3 Conduct Program Evaluations

The preceding two supporting objectives focused on the measurement, data management, and analysis of learner data. This supporting objective similarly includes those actions but focuses them on the Army’s learning enterprise, rather than the learners within it. This supporting objective recommends the use of continuous program evaluations to monitor whether the right
content and learning environments are being effectively designed, developed, and deployed. Such program evaluations essentially measure the effectiveness of the Army Learning Strategy, its implementation, and supporting technologies, policies, and systems. Continuous evaluation of these components is critical to identify and evaluate deficiencies, uncover pockets of excellence, determine root causes of unexpected (particularly good or poor) performance, and ensure the learning system continues to effectively and efficiently support the Army’s mission.

**Means**

The Army University - Army Learning Strategy must leverage, enhance, and focus existing investments in learning facilitators, learning content, learning strategies, assessments, and technology-enabled learning to achieve the identified learning outcomes to support the Army’s current and future missions.

The means to achieve the above-stated goals of the Army Learning Strategy’s lines of effort are all currently present. We will achieve the outcomes described in this strategy by leveraging, enhancing, and focusing existing investments in learning facilitators, content, learning strategies, assessments, and an interoperable technology-enabled learning environment. TRADOC, through the Combined Arms Center, Army University, and established governance forums such as the Army Learning Coordination Council, will maintain academic governance and oversight of existing resources and will re-prioritize, re-focus, and synchronize efforts as necessary to ensure achievement of the goals of this strategy.
Conclusion

This strategy outlines the rationale and key implementation components required to evolve the Army’s learning enterprise, broadly defined to encompass education, training, directed learning, informal learning, self-development, on-the-job support, and operational learning experiences. This strategy is intended to intersect, integrate, and inform resource efforts across many other Army initiatives, such as the Army Leader Development Strategy, The Army Human Dimension Strategy, U.S. Army Talent Management System: Force 2025 and Beyond, and The U.S. Army Learning Concept for Training and Education 2020-2040.

This Army University - Army Learning Strategy includes three lines of effort which recommends the following: (i) optimize learning outcomes by developing a persistent, technology-supported learning ecosystem that integrates career-long formal and informal learning experiences; provides anytime/anywhere access to learning; adapts to individuals’ personal and operational needs; and uses competency frameworks and associated credentialing to systematize and validate individuals’ capabilities; (ii) increase the responsibility for all leaders to foster improved learning outcomes, and provide the professional development they need to meet this demand. Similarly, the Army must help learners develop their own networks to support self-directed social learning and enhance curriculum development; and (iii) improve the quality of learning assessments. This includes being more deliberate about identifying what data to collect, how and where assessments take place, how learning data are analyzed, and how those data are stored and visualized.

Learning is critical to the Army. Our personnel carry a heavy burden in the evolving global military environment. They must be prepared to perform a broader range of actions, across all phases of war, and across an expanded set of missions. They must possess the decision-making skills to operate independently within a mission command environment and to solve problems they were not specifically trained to confront, because so many challenges they face will be novel. They must have the capacity to operate on intent, balance their tactical actions within the framework and context of higher echelon goals, and integrate multiple domains of sophisticated skills (e.g., soldiering skills, sociocultural understanding, emotional intelligence, resilience, and self-reflection) all within a joint, interagency, intergovernmental, and multinational context.

Implementation of this Army Learning Strategy will help meet these demands, while also optimizing the achievement of all learning outcomes, and ultimately enhancing Soldier and unit readiness. The end result is greater organizational readiness, resilience, adaptability, and mission accomplishment.
# Annexes

## Annex A: Army Learning Strategy Road Map

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Annex B: Glossary

ADDIE .................................................. Analysis, Design, Development, Implementation, and Evaluation
AEAS .................................................. Army Enterprise Accreditation Standards
AES .................................................. Army Education System
AOC .................................................. Army Operating Concept
ALDS .................................................. Army Leader Development Strategy
ALS .................................................. Army Learning Strategy
ATS .................................................. Army Training Strategy
AWFC .................................................. Army Warfighting Challenge
CAL .................................................. Center for Army Leadership
CG .................................................. Commanding General
DOTMLPF .............................................. Doctrine, Organization, Training, Materiel, Leadership and Education, Personnel, and Facilities
FDO .................................................. Fire Direction Officer
HDS .................................................. Human Dimension Strategy
KSBs .................................................. Knowledge, Skills, and Behaviors
LoE .................................................. Line of Effort
LMS .................................................. Learning Management System
MCCoE ................................................. Mission Command Center of Excellence
NCO .................................................. Noncommissioned Officer
POI .................................................. Program of Instruction
QAO .................................................. Quality Assurance Office
SME .................................................. Subject Matter Expert
SO .................................................. Supporting Objective
TRADOC ............................................... Training and Doctrine Command
TMS .................................................. Talent Management Strategy
TTPs .................................................. Tactics, Techniques and Procedures
VUCA .................................................. Volatility, Uncertainty, Complexity, and Ambiguity
Annex C: Integrated Strategies

The *Army Learning Strategy* supports, and is supported by, several other ongoing implementation strategies, which all ultimately seek to optimize the Army’s ability to develop agile, adaptive, and innovative leaders. These mutually complementary efforts will be closely linked and aligned within this strategy’s governance process to ensure synchronization and unity of effort. Specific relationships to key Army strategies are as follows:

**Human Dimension Strategy (HDS)**

The overall goal of the HDS is to “Improve Army Soldiers’ and Army Civilians’ cognitive, physical, and social components through assessment, training, education, and experience to build a more agile and adaptive army that wins the nation’s wars.” The supporting objectives of this strategy that apply to the *Army Learning Strategy* are:

1. **Supporting Objective 1.1 – Intellectual Optimization.** Develop Soldiers and Army Civilians with the intellectual diversity and capacity through innovative and individualized learning programs to enhance warfighting essential task and accomplish the Army mission. (Office of Primary Responsibility: Army University)

2. **Supporting Objective 3.2 – Education.** Increase educational effectiveness and agility through academic rigor and relevance, faculty development, accreditation, and credentialing to prepare Army professionals to succeed in complex environments. (Office of Primary Responsibility: Army University)

**Talent Management Strategy (TMS) (DRAFT)**

The TMS includes several “pillars” of effort, and its “Developing” and “Employing” pillars are both central to the goals of the *Army Learning Strategy*. Specifically, the “Educate” sub-pillar of Developing seeks to “optimize the current Army Education System” to develop the knowledge, skills, attributes, competencies, and learning outcomes required to maintain Army readiness and warfighting abilities. Employing, meanwhile, seeks to better understand the skills each Soldier possesses, so that they may be better assigned to jobs in accordance with each individual’s unique skill-set.

**Army Leader Development Strategy (ALDS)**

The ALDS includes three lines of effort (i.e., Education, Training, and Experience) each applied across three domains (i.e., Institutional, Operational, and Self-Development). The “Education” line of effort most closely aligns with (and is strongly reflected in) the *Army Learning Strategy’s* depiction of a continuous, progressive, learner-centric, competency-based learning environment.
in which education—together with training and experience—help cultivate “prepared leaders who can exercise mission command to prevail” in diverse, complex, and evolving Army operations.

**AWFC #9: Improve Soldier, Leader, and Team Performance**

The vision, mission, and end state of the *Army Learning Strategy* matches closely with the Army Warfighting Challenge (AWFC) #9, which focuses on developing resilient Soldiers, adaptive leaders, and cohesive teams committed to the Army professional ethic and capable of accomplishing missions in environments of uncertainty and persistent danger. The primary offices of responsibility for AWFC #9 are the Human Dimension Capability Development Task Force (HD CDTF) and Mission Command Center of Excellence (MCCoE).

AWFC #9 most closely aligns with *Army Learning Strategy* Line of Effort 1 (Learning Environment; including Supporting Objectives 1.1, 1.2, and 1.3) and Line of Effort 2 (Learning Leaders; including Supporting Objectives 2.2 and 2.3). The seven AWFC #9 learning demands listed below should assist as key enablers to the *Army Learning Strategy*:

1. **Talent Management.** How can the Army best recruit, assess, develop, and manage Soldiers and Army Civilians throughout their life cycle, with increased focus on individual competencies and attributes, to build effective teams and meet Army needs?

2. **Human Performance Research and Assessment.** How can the Army best continuously improve the cognitive, social, and physical performance of Army Professionals through the conduct and application of research, development, and assessment?

3. **Holistic Health and Fitness.** How can the Army best enhance Soldier and Army Civilian health and readiness through a personalized and holistic program that improves human performance and resilience?

4. **Team Building.** How can the Army best provide training guided by mission command to forge diverse individuals and organizations into cohesive teams based on mutual trust and unity of effort?

5. **Social Intelligence.** How can the Army best develop trusted professionals as effective team members, who thrive in complex social environments, adapt to diverse cultures, communicate effectively, and build relationships?

6. **Army Profession.** How does the Army reinforce an ethos of trust that supports honorable service, military expertise, stewardship, and esprit de corps?

7. **Intellectual Optimization.** How can the Army best develop innovative and individualized learning programs to equip Army Professionals with the intellectual diversity and capacity to succeed in complex environments?
AWFC#10: Develop Agile and Adaptive Leaders

AWFC#10 calls on the Army to “develop agile, adaptive, and innovative leaders who thrive in conditions of uncertainty and chaos and are capable of visualizing, describing, directing, leading and assessing operations in complex environments and against adaptive enemies.” The Center for Army Leadership (CAL) and MCCoE are the primary offices of responsibility for this AWFC, which includes the following learning demands. These will be integrated into, and help inform, the continued evolution of the Army Learning Strategy:

1. How can the Army accelerate the development of cognitive capabilities in support of leadership requirements?
2. What are the requirements for the development of agile, adaptive, and innovative leaders?
3. What specific institutional systems and processes must adapt to provide the level of agility and adaptability the Army requires and how will the adaptation occur?
4. How can the Army identify and assess required leader capabilities that enable an adaptive leader and an agile force?
5. What are the most effective developmental tools the Army can provide leaders to enhance the value derived from cumulative experiences?
6. What are the science and technology implications for the future development of leaders?
7. How can the Army support the development of “mutual trust” and cohesive teamwork in its units and organizations?
Annex D: Governance Process, Leads, and Focus Areas

This annex describes the Army Learning Strategy governance process, primary offices of responsibility, and focus areas.

The Army Learning Coordination Council will serve as the primary means for implementation of the Army University - Army Learning Strategy. The Army University, acting in its role as the office of primary responsibility for implementing this strategy, will establish committees and subcommittees under the Army Learning Coordination Council Charter to develop the policies and governance procedures necessary to ensure the successful accomplishment of the goals for each line of effort as previously outlined in this document.
Annex E: Directed Learning and Self Development Learning

Self-development is planned, goal-oriented learning that reinforces and expands the depth and breadth of an individual’s knowledge base, self-awareness, and situational awareness. Here, we purposefully realign the previous Army lexicon of Structured Self-Development (SSD) and other required distance or distributed learning with the concept of “Directed Learning” activities to recognize a separation of mandatory or directed learning requirements versus voluntary self-development. Directed Learning is required learning of Soldiers and DA Civilians, typically as part of a required course or element of instruction. Usually associated with required distance education or training requirements for an Institutional Army course, Directed Learning may take place while the individual is in the Operational Force or Institutional Force in preparation for entrance into a subsequent course of instruction (e.g., pre-arrival writing assignment is required for officers prior to the start of CGSS). In contrast, true self development is not mandated by the Army – although specific self-development courses may be recommended (Guided) by proponents or unit leaders. The Army recognizes two types of mutually supporting Self-development learning: Guided and Personal. Figure E.1 illustrates the purpose of both types of Self-Development Learning.

Self-development is not mandatory, prescriptive, or necessarily structured, as these types of Directed Learning developmental requirements are mandatory and lie outside of self-initiated pursuits.
Annex F: Cohort Learning Focus

This *Army University - Army Learning Strategy* is not intended to produce a “one-size-fits-all” learning system. (In fact, a core tenet of the strategy is personalization and tailoring.) Instead, this strategy recognizes that desired learning outcomes, learning delivery requirements, roles, levels of specialization, and leadership expectations will vary by cohort and echelon.

For example, commissioned officers are expected to have a broad foundation of knowledge, skill sets, competencies, and experiences to enable functional area understanding; they develop leadership skills early in their careers in order to command units, establish policy, and manage resources across diverse areas of responsibility, initially from company and battalion level operations to eventually leading change at the strategic levels. Noncommissioned officers must possess a strong foundation due to their leadership responsibilities as standard-bearers and role models who train, educate, and develop subordinates, and they must possess specialized knowledge of their field. Warrant officers possess a high degree of specialization in a particular field. Warrant officers command aircraft, maritime vessels, and special units; provide quality advice, counsel, and solutions; and maintain, administer, and manage the Army’s equipment, support activities, and technical systems. Army Civilians possesses specialized knowledge early and must continue to expand their knowledge throughout their career, while also serving as leaders in the latter stages, affirming their roles as members of the Army team and their special contribution to organizational stability and continuity. Finally, all cohorts at all echelons must understand and practice mission command philosophy in order to achieve organizational goals and missions.

Numerous Army regulations, pamphlets, and strategy documents, such as those outlined below, further outline the designated roles of each cohort, the goals of each cohort’s education system, and the specific learning outcomes and strategies unique to the professional development of each cohort. This *Learning Strategy* provides the vision and creates the conditions needed to develop the learning environment necessary for these specified strategies to succeed.

- *AR 350-1: Army Training and Leader Development* (19 AUG 2014)
- *The Army Warrant Officer Strategy 2025: In Support of Force 2025 and Beyond* (29 MAR 2016)
- *DA PAM 600-3: Commissioned Officer Professional Development and Career Management* (4 DEC 2015)
- *ALARACT 121/2012 - Civilian Education System (CES) Policy Changes* (27 April 12)