

Continuum of Learning: Combining Education, Training, and Experiences

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Abstract The United States Air Force approved creation of a Force Development Commander and assigned this new role to the Commander, Air Education and Training Command. The force development commander will execute force development policy (established by the Deputy Chief of Staff for Personnel) and will provide agility, advocacy and accountability for the force development efforts. The force development commander is charged with executing and leading the strategic development of “total force” Airmen (i.e. airmen from Air National Guard, Air Force Reserves, Regular Air Force, and Civilian Service). This action will be accomplished through a deliberate process that combines education, training, and experiences, known as the *Continuum of Learning*, to produce the right expertise and competencies to meet the operational needs. The force development commander will lead, synchronize, and operationalize deliberate development through the Continuum of Learning as a comprehensive process by identifying, assessing, integrating, advocating, and tracking requirements and resources. In these ways the force development commander ensures appropriate focus on force development initiatives to address air force secretary and chief of staff.

Keywords Air force, Continuum of learning, Force development

1. Introduction

Workforce development, an American approach to economic development, attempts to enhance a region's economic stability and prosperity by focusing on people rather than businesses. It essentially develops a human-resources strategy. [1] Successful workforce development programs [2] typically have a strong network of ties in a community, and are equipped to respond to changes in their environments. The air force notion attempts to enhance its workforce capabilities by focusing on people rather than formally stated requirements. On October 26, 2017 the air force published a new concept of operations (CONOPs) [3] articulating workforce development under the auspices of “force development”, where the workforce is referred to in the singular person “the force”.

The purpose of the concept of operations is to implement air force secretary's and chief of staff's decision to centralize authority for force development in under a new title, “Force Development Commander”, an important notion in the military system, where centralized control

(and accompanying responsibility) is key to successful ventures.

The commander of the organization called the air education and training command (AETC) has been designated as the single commander with authorities to execute the force development mission for the air force. The force development commander as the accountable agent, will be responsible for the transformation of the force development environment to create and sustain the Air Force as a learning organization, and deliver mission-ready Airmen with the competencies gained through education, training, and experiences via the Continuum of Learning.

2. Literature Review

The air force's strategic master plan [4] directed the air force to increase agility by strengthening their culture of adaptability and innovation in *development and education*, amongst other things. The master plan articulated five strategic vectors identifying priority areas for investment, institutional change, and operational concepts, and the very first vector was to *Provide Effective 21st-Century Deterrence*, highlighting the “nuclear mission remains the clear priority...”.

Agility is to be enhanced by long-term investments in

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Published online at <http://journal.sapub.org/edu>

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workforce development and education, specifically related to recruiting and new options for service, retention, and education to unlock a capacity for comprehensive education in order to develop workforce members who are critical and creative thinkers. The directed-method was to implement an agile, individually tailored approach to life-long education, and eliminating superfluous demands from already encumbered schedules.

Aside from the air force, the U.S. House of Representatives directed the defence secretary to “take appropriate steps to refocus the military member education to ensure it is adequately covering, across-the-board, the essentials of nuclear deterrence policy and operations (including such concepts as strategic stability and escalation control)”. [5] The emphasis on nuclear deterrence can easily be understood in the wake of the 2015 non-proliferation treaty review conference, largely deemed a miserable failure. [6] The notion of a transformation of education and development overall is clear in the master plan, and since its publishing the transformation has expanded from the nuclear mission [7] to the development of the workforce writ large.

Currently, force development is managed by committees spread throughout the air force, and these committees are also commonly referred to as “tribes” to highlight the tribal behaviour that can often seem to contradict the common-good, an undesirable quality in any large bureaucracy.

The current force development structure does not adhere to a repeatable process for developing occupational competencies for functional communities. A comprehensive assessment strategy is required for assessing institutional and occupational competencies. The air force does not effectively leverage the analytics required to anticipate, create decision space for, and actively respond to crises in critical skills or end strength; the results negatively affect institutional readiness.

Currently, there is no optimal organization to define and develop the workforce as required in the next decade and beyond. It is illustrative to note, leadership of the air force envision creation of exceptional leaders, but no single entity is charged with the responsibility to fulfil this vision. Accordingly, return-on-investment is insufficiently measured and assessed, resulting in ineffective and inefficient utilization of gained competencies. The air force did not (currently) have a coherent approach to assess the effect learning activities have on mission capability from a functional or the perspective of the capabilities of the entire workforce.

3. Materials and Methods

This manuscript contains substantial direct quotes in addition to paraphrased verbiage from the concept of operations itself [3], and this citation serves to honour the original source, while the authors’ paraphrasing largely translates the original document from the professional

military parlance to nominal societal parlance. Additional clarifying verbiage has been introduced to make the topics more smoothly readable by a non-military audience.

3.1. The New Paradigm

The new paradigm leverages contemporary innovations and is designed to produce a more agile system focused on development of the workforce via a single record of learning, developmental special experiences, modular, accessible and blended learning that takes place in what is henceforth referred to as the “air force learning ecosystem”.

3.1.1. Force Development

Force development is defined here formally: A deliberate process of preparing airmen through the continuum of learning with the required competencies to meet the challenges of the 21st Century. The continuum of learning is a career-long process of individual development where challenging experiences are combined with education and training to produce a workforce with the tactical expertise, operational competence, and strategic vision to lead and execute the full spectrum of the air force’s missions. Force development entails the deliberate development of functional and cross-domain competencies at the individual and team level and how the organization creates talent.

3.1.2. Airman’s Learning Record

One key to successful implementation of force development in the air force is a comprehensive record of all learning achieved during the course of an Airman’s career. Currently, an airmen’s learning is documented in multiple (not integrated) record systems including educational transcripts, training records, professional duty performance reports, and ancillary training transcripts. There is presently no tracking mechanism for competencies. The airmen’s learning record is a centralized location to record all learning, whether it occurs in a specialized training or education program, on-the-job, or even off-duty. The airman’s learning record will enhance the ability to analyse the readiness of the air force by capturing an Airmen’s knowledge and skills gained throughout the Continuum of Learning (training, education, and experiences), documenting progress and achievements, and identifying gaps and opportunities for growth tied to mission accomplishment from both an enterprise perspective as well as an individual level. Analysis of skill/knowledge gaps can be conducted for individuals, military units, military functions, or air force-wide, and these analyses will be used to drive developmental investments and decisions to ensure maximum force readiness while maintaining agility. Currently, analyses of skill/knowledge caps are conducted at the higher levels to drive generation of requirements what establish developmental investments and monetary decisions. The new force development commander (also the commander of the air force’s education and training command) will be the core function lead for education and

training the workforce with duties to project, prioritize, and advocate for resources associated with learning. The roles and duties of the core function leads are defined [8] to satisfy the vision set forth in [3] as the following.

3.1.2.1. Core function leads

Core function leads draft and use support plans to address initiatives within their specific Core Function. These plans include a general narrative of contributions to their specific core function and a list of proposals, identifying legal and policy barriers.

3.1.3. Developmental Special Experiences

Individual workforce members will be provided opportunities (notionally via regular military assignments), to provide the appropriate experiences and exposure to earn competencies.

3.1.4. Modular, Accessible Learning

Learning opportunities will be broken into small pieces (which can be linked) including small course offerings that facilitate on-command and on-demand learning by allowing airmen to access the specific learning when and where needed. Learning content will be rapidly updated with relevant material and information to stay relevant and responsive to the needs of workforce development leaders.

3.1.5. Blended Learning

Airmen need access to learning, through a combination of interactive applications, games, videos, visits by mobile education or training teams, online interactions, capstone events, distance learning, and in-residence courses.

3.1.6. Air Force Learning Services Ecosystem

The new ecosystem term is defined as a combination of information technology infrastructure, technologies, services, and support resources available to help Airmen learn anytime and anywhere. The ecosystem provides the on-demand and on-command backbone of teaching, learning, cataloguing, and assessing which enables both content and faculty management, planning, and design to create the next generation of airmen.

The concept called *competency-based learning* implements outcome-focused learning with assessments that focus on what airmen know and can do as a result of developmental investments. Competencies, both institutional and occupational, become a common currency between learning marketplaces that include academia, industry, and military venues of education, training, and experience. The force development commander becomes the exchange overseer of this currency and its use in these marketplaces.

3.2. Time-frame and Scope of Implementation

The workforce development commander will implement initial operational capability milestone actions immediately

to include the redesign of the existing continuum of learning and coordinate with other agencies to build partnerships. Upon approval or program plans (written by subordinate parts of the air force to implement the concept of operations declaration) by the air force secretary and chief of staff, the new workforce development commander will begin transiting authorities and associated functions, with an anticipated date of full operational capability by Fall of 2019.

3.3. Air Force Statement of Needs

In this concept of operations, the air force has declared a need for a single commander to execute force development policy. This single commander will work with various staff agencies charged with management of personnel including the war fighting integration capability, and the functional communities to determine future competencies required for the workforce to achieve future capabilities. This commander will develop the process, systems, and learning opportunities through the continuum of learning to meet these requirements. Individual members of the workforce need the ability to plan, manage, and engage in learning and development activities, while leaders, supervisors, and mentors need the ability to plan, manage, and assess the value of learning opportunities to increase their mission capability.

3.4. New, Single Commander for Workforce Development

Creating a single commander for workforce development implements Air Force doctrine that calls for “centralized command and decentralized execution” with authority and accountability assigned to a single entity.

3.4.1. Duties of the Commander of Workforce Development

The Force Development Commander will execute policies for force development established by the air force’s personnel staff agency, rather than develop the policies itself. The commander will engage with major commands, industry, academia, and joint and international partners to synchronize and leverage new technologies, learning approaches, and learning opportunities across and, where appropriate, beyond the air force’s military enterprise. The commander will need to quickly establish a governance structure to oversee the development of education, training, and experiences to achieve the desired institutional and occupational competencies, providing transparency across the learning enterprise to maximize the potential of every member of the air force.

3.4.1.1. Document, analyse, and invest

The new workforce development commander will oversee, coordinate, document and prioritize formal and informal education and training, while making learning more accessible to all members of the workforce, identifying and reducing redundancies, assessing and addressing knowledge gaps, and investing in solutions that benefit the learning enterprise, all-the-while seeking to maximize

return-on-investment via deliberate education and training opportunities to meet requirements. The new commander will capture, document, credit or credential, and track competencies garnered through experience, assignments, deployments, and developmental special experiences [9] akin the activities of the American Council on Education (ACE) [10], requiring a need to work with other agencies to create optimal developmental special experiences for deliberate competency development opportunities as well as requiring collaboration across with industry, academia, and joint and international partners.

3.4.2. Limits on Authority

This centralized authority does not imply control of developmental actions within other major commands in the air force. Major commands are responsible for organizing, training and equipping their forces. Major commands are defined by their assumption of a specific portion of the overall mission of the air force, and a defining characteristic of such commands is the duty to organize, train, and equip workforce members. The new commander of workforce development will aid these major commands in making their offerings more effective and efficient by providing feedback on their developmental opportunities and will also provide information technology-based services and professional expertise in areas such as instructional design and content development contracts to drive innovation. The feedback and services provided will allow major commands to decide which of their developmental opportunities are paying the best return-on-investments and what other opportunities might be available that will produce better results.

3.5. Future Actions

3.5.1. Headquarters of the Air Force

Although the concept of operations was formally coordinated through the air force's headquarters, that headquarters must still formally transfer of this workload from their staffs to the new commander of workforce development and garner the approval of the air force's secretary and chief of staff.

3.5.2. The New Commander of Force Development

Consider the questions of "whom", "what", and "how". The concept of operations articulates "who" and "what", but not "how". That final question is described in documents called program plans. The new commander must draft and execute the program plan to implement the new paradigm.

The Force Development Commander must not:

- Exceed the scope of force development.
- Manage or control Air Force policy.
- Replace functional authorities, development teams, career field managers, or usurp policy aspects
- Encroach upon existing Air Force major command responsibilities to organize, train and equip their forces.

The new commander of workforce development will operationalize force development, a subset of talent management efforts of the air force staff, and utilize the redesigned continuum of learning to deliberately develop the force. The new commander will be accountable and charged to advocate for institutional, functional, and cross-functional requirements.

3.6. Risks

A major risk associated with implementing the new vision of a single commander charged with responsibilities for workforce development, lies in the lack of Congressional support. Additional risks include inadequate resourcing to implement the new paradigm, possible inability to separate policy from execution (recall prohibitions in section 3.5.2.1), inability to build the required learning information technology infrastructure/backbone and ecosystem, duplication of force development-related efforts amongst major commands (resulting in redundant spending for learning), philosophical internal/external conflicts with existing process and/or policy owners could impede implementation. The potential also exists for the inability to produce analytics required to anticipate, create decision space for, and actively respond to future development requirements. Furthermore, there are inherent risks with modifying any business process. Utilizing the new paradigm, it is possible to discover not enough workforce members have developed with the appropriate education, training, and experiences such that future conflicts are at risk.

4. Conclusions

The United States Air Force approved creation of a Force Development Commander and assigned this new role to the Commander, Air Education and Training Command. The force development commander will execute force development policy (established by the Deputy Chief of Staff for Personnel) and will provide agility, advocacy and accountability for the force development efforts. The force development commander is charged with executing and leading the strategic development of "total force" Airmen (i.e. airmen from Air National Guard, Air Force Reserves, Regular Air Force, and Civilian Service). This action will be accomplished through a deliberate process that combines education, training, and experiences, known as the Continuum of Learning, to produce the right expertise and competencies to meet the operational needs. The force development commander will lead, synchronize, and operationalize deliberate development through the Continuum of Learning as a comprehensive process by identifying, assessing, integrating, advocating, and tracking requirements and resources. In these ways the force development commander ensures appropriate focus on force development initiatives to address air force secretary and chief of staff.

ACKNOWLEDGEMENTS

Whilst, most of this manuscript parrots the most important citation [3] belonging to D.R. Roberson, a major architect of the new vision belongs to M. Stafford, formerly Provost of the air force's education university, and who now assists the new force development commander implement this vision.

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