Innovatively Applying Skill Acquisition Theory to the Army Learning Model

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ABSTRACT

The Army Learning Concept (ALC) for 2015 discusses a continuous adaptive learning model and multiple 21st century competencies that have been described as critical for U.S. Army Soldiers if the Army is to maintain its competitive advantage into the future. Unfortunately, neither the ALC for 2015 nor the Army Training Concept (ATC) for 2012-2020 provide an instantiation of a model or a description of how to integrate or employ new ideas or approaches into training and education programs and activities to obtain the desired 21st century competencies. Attempts at transitioning training and learning environments from traditional "brick and mortar" settings to the "point of need" leveraging new multi-media technologies and approaches are numerous and ongoing. These efforts have not been coordinated, synchronized or similarly assessed due to the lack of an integrated framework. This paper conveys a possible solution derived using experiential learning theory and skill acquisition research conducted by Dreyfus and Dreyfus (1980). The Dreyfus model is inlaid into a current military career, creating the framework for the development and use of experiential learning inventories (ELI) and competence-based assessments (CBA). Examples of existing CBA are provided and recommendations supporting the development of ELI are discussed. The data implications of this proposal are acknowledged. It is believed that if ELI and CBA are used and punctuate a career (e.g. upon initial entry, upon arrival to and exit from duty assignments, pre- and post- training/education, prior to promotions, etc.) they will help to inform the development and refinement of new and existing instructional methods and technologies useful for training and educating the current and future force. Additionally, the information obtained from ELI and CBA will help to support the efforts of human resource managers and commanders in their efforts to manage their human capital talent.

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INTRODUCTION

It's hard to read a concept, white paper, military journal article, or opinion piece without seeing "agile," "adaptive," and "innovative" as descriptive buzzwords for the future Army soldier and government civilian. Studies conducted describing the human dimension (Training and Doctrine Command, 2008) and concept documents describing desired future Army capabilities (Training and Doctrine Command, 2014) allude to the Soldier of 2025 as being an amalgam of characters from an Avengers movie or the Jason Bourne series. According to documents our soldiers will operate in a complex environment where they will need to outthink and outperform the enemy, execute mission tasks faster, and maintain what is often described as overmatch (Training and Doctrine Command, 2014). The Army Learning Concept (ALC) of 2015 and the Army Training Concept (ATC) for 2012-2020 (Training and Doctrine Command, 2011a, 2011b) both describe desired characteristics and competencies resultant from training and learning (outcomes). Enumerated 21st century competencies support the Army Operating Concept (AOC) but neither the training nor learning concepts provide enough detail on how to implement the desired Army learning model.

Research has investigated the Army's culture of learning and how to make our soldiers more adaptive thinkers and leaders (DiBella, 2010; Mueller-Hanson & White, 2005; Mueller-Hanson & Wisecarver, 2009; White & Mueller-Hanson, 2005). Work to modernize and evolve our "brick and mortar" approach to education and training has been conducted using tools (i.e., technology and experiential approaches) alluded to in the ALC (Chavez-Knott et al., 2014; Prevou & Waisel, 2014). While difficult to implement beyond level two, attempts to evaluate learning and training outcomes using Kirkpatrick's four levels (Kirkpatrick & Kirkpatrick, 2014) have also been attempted (Brimstin & Toumnakone, 2014). All of these activities further what we know about our individual training efforts to support the ALC, however, they remain desynchronized and void of a much needed larger context.

HUMAN ABILITIES, LEARNING, AND SKILL ACQUISITION

Definitions of expertise generally include reference to, or a discussion of knowledge, skills, and behaviors (KSB). Research suggests that expertise is developed over time through deliberate practice (Ericsson, Charness, Feltovich, & Hoffman, 2006). Despite these facts there exists a general belief that improving and increasing technology use during training and education will result in a force that can cognitively dominate its adversaries and that the increased cognitive ability will develop in a much shorter timeframe than is generally accepted. Not very long ago, a similar belief was held that through the increased integration and use of technology, U.S. forces would enjoy information superiority on the battlefield that would result in swift victory. Over the past 12 years authors have refuted this assumption (McMaster, 2003) and demonstrated how the increased use of technologically advanced systems coupled with a disregard for the experience and knowledge necessary to employ them has resulted in catastrophe (Hawley & Mares, 2012). Ultimately, we would like to have enlisted soldiers with the same knowledge, experience, and situational understanding as General officers and Sergeants Major. We want them to have intellectual and moral maturity well beyond their years because we recognize the complexity of the future operating environment and their role in it. To a point, educational scholars have convinced us that we need to change the way we train and educate the force. This situation is partly due to soldier access and acceptance of technology and partly due to soldier experiences in Iraq and Afghanistan over the last 14 years. To evolve our training and educational processes we are focusing on individualized training and education at the point of need. Whether we will be able to fully realize this vision is still unknown.

Human Abilities

One of the keys to properly employing any learning model or skill acquisition theory is a fundamental understanding of human beings. This understanding can be acquired by viewing human activities through the lens of human abilities. Human abilities should be the foundation of the discussion of human activity because they are measurable and provide point of departure for discussions about optimization of human performance. Years of research analyzing various jobs and tasks in order to establish a taxonomical foundation for the discussion and description of human performance has resulted in a list of 52 codified human abilities (Fleishman & Quaintance, 1984; Fleishman & Bartlett, 1969). These abilities are grouped into four categories (physical, sensory, psychomotor, and cognitive). Human abilities have been used as a tool by DARPA and others to describe worker characteristics (http://www.onetonline.org, accessed 18JAN15), to investigate training in virtual environments (Cockayne, 1998; Cockayne & Darken, 2004), and the integrated training environments themselves (Hodges, 2014). Soldier development and the Army learning model (ALM) should necessarily include and use all four categories of human abilities.

Learning Theories and Learning Styles

Experiential learning is generally accepted as the preferred theory to support the training and learning environments for soldiers and the Army. "Experiential learning theory defines learning as the process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping and transforming experience" (Kolb, Boyatzis, & Mainemelis, 2000). From this description it is obvious that experience plays a central role in the theory, which makes it well suited for the Army. Experiential learning theory's origin can be traced back to the works of Dewey, Lewin, and Piaget. Experiential based learning relies on several assumptions: 1) Experience is the foundation and stimulus for learning; 2) Experience is constructed actively by the learner; 3) Learning is a holistic process; 4) Learning is constructed through social and cultural interaction; and 5) Socio-emotional contexts influence learning (Andresen, Boud, & Cohen, n.d.).

As society and the Army grapple with the best way to integrate technology into the training and learning environments, the discussion of learning styles or more accurately learning preferences has moved to the forefront of the debate. Cassidy (2004) states that several authors refer to learning preference as favoring one method of instructing over another. Despite controversy, there is a belief that learning style has an impact on performance and achievement and that efforts to integrate learning style into learning environments must be informed by research (Cassidy, 2004; Freedman & Stumpf, 1980). Learning style (i.e., the preferred approach a learner takes to accomplish a task) is different from learning preference and is influenced by age and experience. A serial learning approach (i.e., step-by-step approach with small amounts of information) is often used and appropriate when dealing with novice learners whereas a holist approach (i.e., looking at the big picture first) is more apparent and appropriate for use with experienced learners. Research on expertise and training highlight the use of these approaches with respect to part-task and whole-task training (Ericsson, 2006; Patrick, 1992).

The important takeaways from this discussion are that flexibility in the learning and training environments is important and that one size does not necessarily fit all. Equally as important is the truth that the Army is not resourced to create perfectly individualized and tailored learning environments for every soldier. In the end, the Army learning model must take these considerations into account and leverage scientifically founded learning frameworks and architectures, which support the development of the desired 21st century competencies, to structure, conduct, and evaluate soldier learning and training.

Skill Acquisition Theory

In 1980, Stuart and Hubert Dreyfus wrote a paper that offered a five-stage model described as a "normal directed skill acquisition process" that discussed the mental activities involved in skill acquisition (Dreyfus & Dreyfus, 1980). In the paper they discussed five stages of skill development and described learners at each level as either novice, competent, proficient, expert, or master. The Dreyfus brothers postulated that skill proficiency does not necessarily increase as the learner moves from concrete actions to more abstract activities, rather they suggested that abstract rules and information must be solidified by the learner through concrete actions. Dreyfus and Dreyfus offered that a thorough understanding of each of the five stages through which skilled performance is developed is essential for the construction of training and educational materials and programs. Furthermore, they emphasized that

identifying the capacities of a learner at each stage of the model was of paramount importance in order to assist in the identification of what additional capacities were needed to achieve the next stage. In 2004, Stuart Dreyfus published an updated article on the five-stage model changing the descriptions to novice, advanced beginner, competent, proficient, and expert (see Table 1 below).

Table 1. Description of Dreyfus Skill Acquisition Model from (Dreyfus, 2004)

Skill Level	Components	Perspective	Decision	Commitment
1. Novice	Context free	None	Analytic	Detached
2. Advanced beginner	Context free and situational	None	Analytic	Detached
3. Competent	Context free and situational	Chosen	Analytic	Detached understanding and deciding; involved outcome
4. Proficient	Context free and situational	Experienced	Analytic	Involved understanding; detached deciding
5. Expert	Context free and situational	Experienced	Intuitive	Involved

Note: Components: This refers to the elements of the situation that the learner is able to perceive. These can be context free and pertaining to general aspects of the skill or situational, which only relate to the specific situation that the learner is meeting. Perspective: As the learner begins to be able to recognize almost innumerable components, he or she must choose which one to focus on. He or she is then taking a perspective. Decision: The learner is making a decision on how to act in the situation he or she is in. This can be based on analytic reasoning or an intuitive decision based on experience and holistic discrimination of the particular situation. Commitment: This describes the degree to which the learner is immersed in the learning situation when it comes to understanding, deciding, and the outcome of the situation—action pairing.

The significance of the description of the Dreyfus model and the emphasis on identifying learner capacities at a given stage, and those necessary to achieve the next, play an important role in the discussion of the proposed framework for the ALM.

Competency Modeling

Competency modeling supports the identification of critical and non-critical knowledge, skills, and behaviors (KSB) for an individual job, military occupational specialty (MOS), branch, or career. This modeling is necessary if learner capacities are to be known as suggested by the Dreyfus brothers. Tools exist to support the development of generic and industry specific competency models. A web search into competency modeling revealed such a tool on a website sponsored by the U.S. Department of Labor, Employment, and Training Administration http://www.careeronestop.org/competencymodel/ (accessed 04JUN15). An example of a competency model from the site is provided in Figure 1. While efforts to develop methodologies and job task analyses for the military have been done, no examples of competency modeling were identified during the research for this paper.

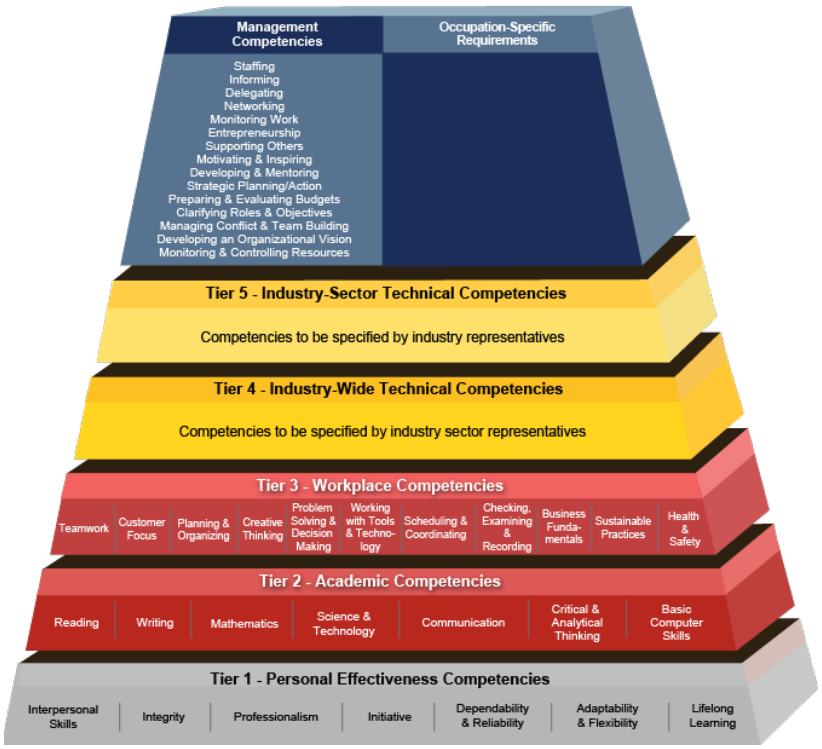

Figure 1. Generic Building Block Competency Model

PROPOSED FRAMEWORK

Figure 2 depicts the author's view of a military career that is supported by Vandergriff (2011). The view leverages characterizations of expertise that have been used within the tradecrafts. The time in each career phase is generally consistent (with some exceptions) with the current timelines for enlisted soldiers, non-commissioned officers (NCO), and officers. For example, the first 10 years of an officer or enlisted career is very much focused on becoming the best tactical leader possible. The next 10 years focus on developing operational leaders at the battalion and brigade combat team (BCT) level. For the majority of soldiers retirement is taken at the 20-year mark but for those chosen to continue, the years between 20 and 30 are spent mastering the operational level and becoming strategic leaders. New talent management processes and procedures may affect how the proposed framework is employed but it will not eliminate its usefulness. In other words, the framework is adaptable. The focus of effort in each of the career phases alludes to the professional developmental focus for soldiers within that phase. At the apprentice phase, the focus is on proficiency of the skills and processes necessary to employ manpower and machines for combat within a given specialty. While there is a desire to develop strategic thinking at this level, we must not disregard the primary need to develop specific task proficiencies. More research is needed to determine an appropriate level of strategic thinking in this and all other phases. At the Journeyman phase the focus shifts away from task execution (skills) to decision-making ability. From this point forward the majority of the developmental focus is on the cognitive human abilities associated with leadership and decision-making. In the figure, milestones indicate the currently recognized schools attended by officers, enlisted soldiers, and NCOs that are in some cases required for promotion and assignment. The recommended learning environment (LE) structure offered is supported by the literature covering both learning and the development of expertise. The LE structure indicates that new or novice soldiers require more structure and their learning is more serial whereas more experienced soldiers require less structure and tend to be more holistic learners. An understanding of this structure is important when discussing the holistic development of the soldier (i.e. cognitive, physical, social) and it should be used to assist in the development of learning and training environments focused on the 21st century competencies.

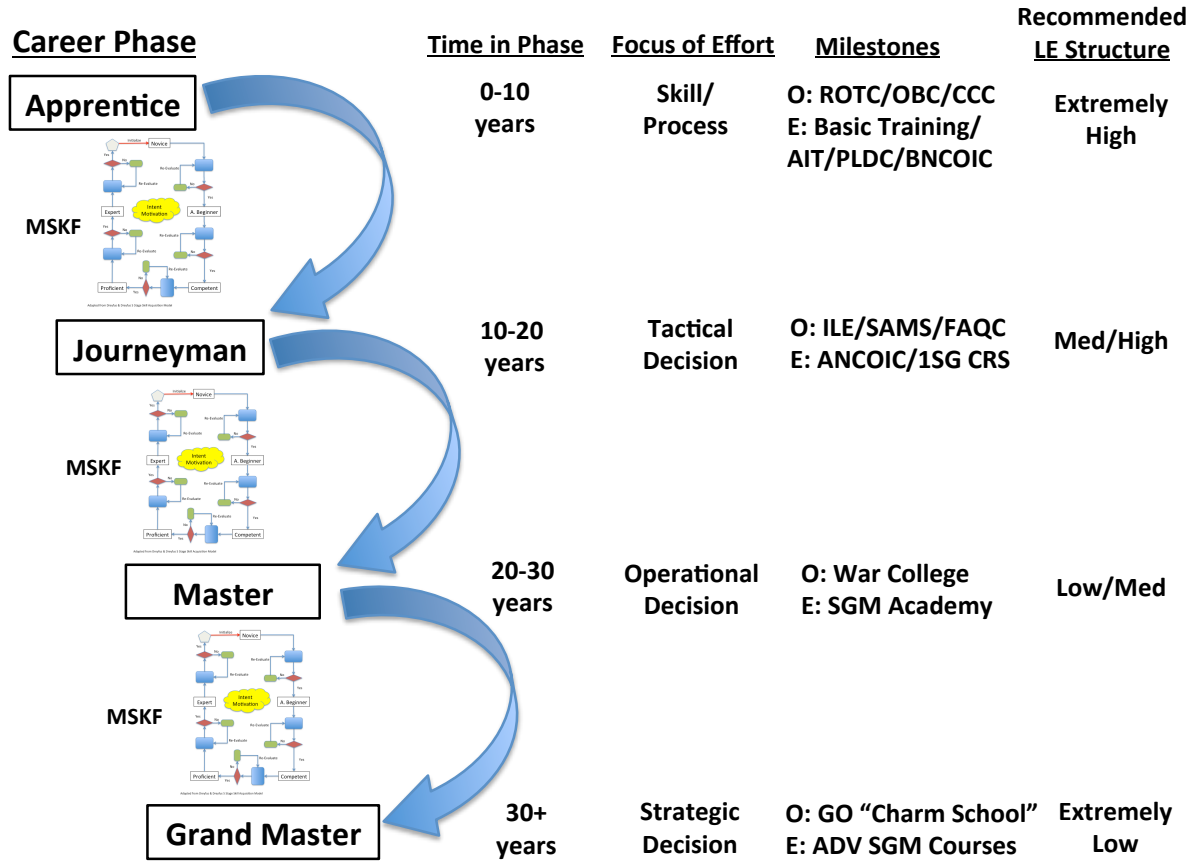

Figure 2. Overview of a military career

Given the view of a military career in Figure 2, Figure 3 provides an explanation and graphic for the proposed Military Skill and Knowledge Acquisition Framework (MSKF) that can be used to support and provide structure for Army learning and training environments. The MSKF uses the skill acquisition theory from Dreyfus (2004) and explicitly augments it with a process to conduct competence-based assessments (CBA) and experiential-learning inventories (ELI). MSKF is offered as a proposed framework on which to structure and organize military training and learning for discrete events as well as throughout a career as described in the Army Learning Concept (ALC) for 2015 and the Army Training Concept (ATC) for 2015-2020. Figure 3 depicts and explains the process of the MSKF.

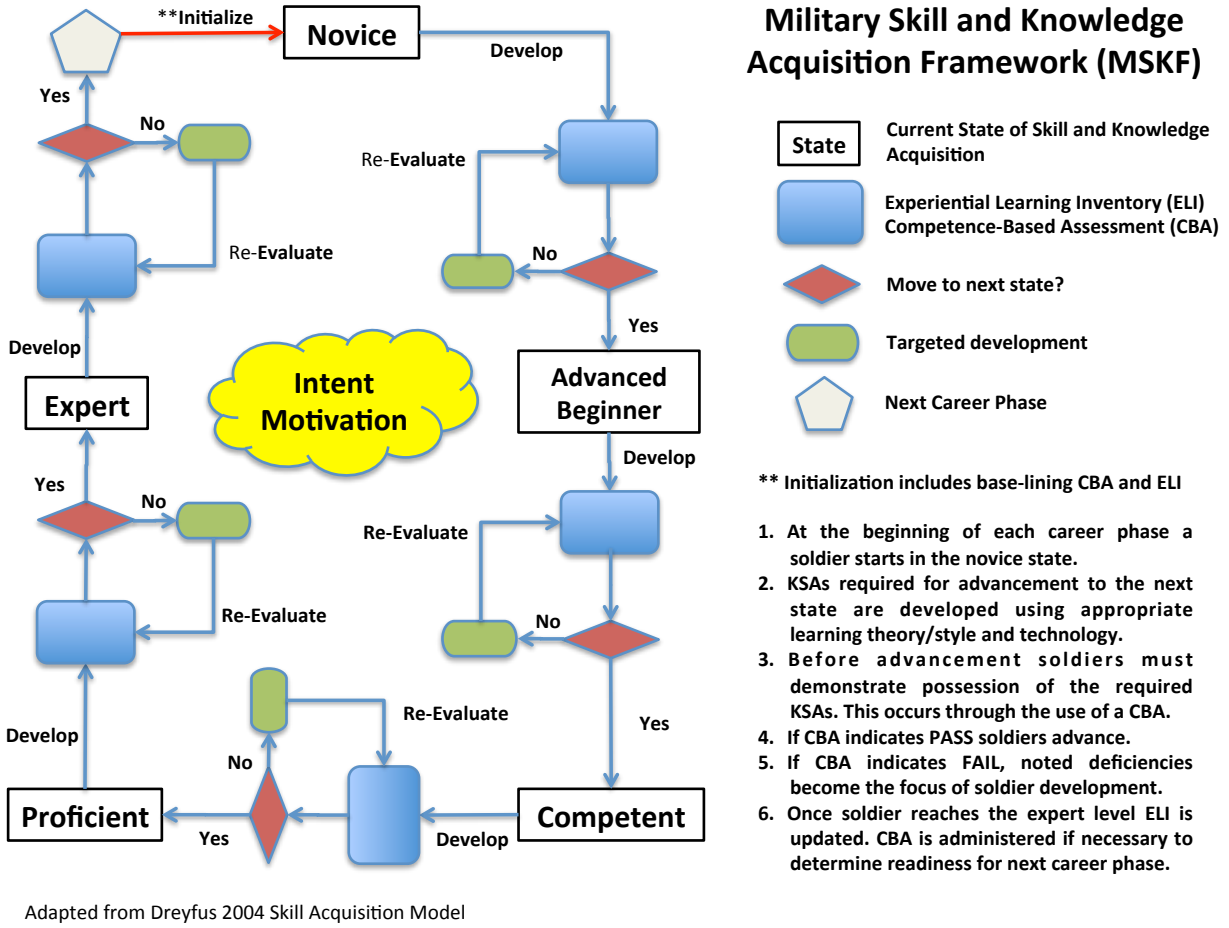

FIGURE 3. Military Skill and Knowledge Acquisition Framework

Rationale Behind the Framework

Every member of the military begins their career (enlisted or officer) as a novice. Through basic training, ROTC or academy education, soldiers are taught the basics of military values, traditions, and their chosen or assigned military occupational specialties (MOS). Over time and through training and discovery learning [commonly referred to as on the job training (OJT)] skills and knowledge are acquired, which provide the basis for officer and enlisted evaluations that lead to promotion, assignment or movement into a new job within a phase, or to a new phase of a career. Usually about the time a soldier has become a relative expert (proficient) in a position or at a task he or she is moved, promoted, or given new responsibilities, placing them once again at the level of the novice in a new situation. As soldiers mature they require less time and training to move from novice to expert given that many of the tasks and some of the knowledge are repetitive and become automated. This description is based on the author's experience as a military officer over the last 22 years. Army Doctrine Publication 7-0 (Training and Doctrine Command, 2012) is the official document that discusses training and leader development for the United States Army.

As envisioned for practical use, MSKF provides a structure that a commander or educational/training developer can use to flesh out soldier development in line with the ALC and ALM. With the MSKF a commander, talent manager, and training developer can overlay their requirements to identify possible education or training paths and gates for success. Layering institutional, organizational, developmental, operational, and technology requirements over the framework will enhance the identification of gaps because it will provide traceability from the soldier to the requirements. As explained in the figure, the framework is used to shape the development of a single soldier within a career phase. The MSKF is grounded in skill acquisition theory but it is also believed that it can be used to guide soldier development within each state of a career phase.

Keys to MSKF Implementation

The keys to successful implementation of the framework fall in line with the earlier discussion of experiential learning theory. While intuitively obvious to some, these activities have and are continuing to bedevil those individuals responsible for determining what core competencies and KSBs are required for the development of areas such as soldier cognitive dominance.

- Key #1: Identify the core competencies required of the soldier military occupational specialty, assignment, etc.
- Key #2: Identify and prioritize soldier characteristics and where/when those characteristics should be manifest.
- Key #3: Identify existing learning and training venues and assess how they support the development of the 21st century competencies.
- Key #4: Identify current and emerging technologies that support the development of soldier characteristics supporting soldier competencies.

Recent discussions surrounding talent management and human dimension initiatives within the Army and in the Office of the Secretary of Defense (OSD) have reinforced that these activities are very important to the successful implementation of personnel system reform. With these pieces of information in hand, commanders as well as training and education providers will be better able to formulate focused competence-based assessments (CBA) and understand what aspects of personal experience gathered using experiential-learning inventories (ELI) should be of central focus within their particular area of interest.

Experiential Learning Inventory (ELI)

The goal is to tailor education and training to the individual so as not to waste time and money, but the Army currently lacks sufficient mechanisms to help determine what soldiers know at any given point in time during their careers. Aside from the Armed Services Vocational Aptitude Battery (ASVAB), which is administered prior to entry and is described as "a multiple-aptitude battery that measures developed abilities and helps predict future academic and occupational success in the military" (http://official-asvab.com, accessed 11JAN15), few if any other formal methods exist that support the identification or management of learning and talent. A recent discussion with a senior NCO within Training and Doctrine Command (TRADOC) revealed that soldier experiences are now being captured during and after Army Individual Entry Training (IET). Capturing soldier experience from day one is a considerable improvement and a first step in being able to help career managers manage talent. To make this first step even stronger, it is recommended that the Army collect as much data as possible about the individual soldier prior to IET. This ELI would serve as the true starting point for talent management and should capture civilian life experiences that may impact or help tailor individual education and training programs. This ELI should be periodically updated throughout a career to capture additional details about the enrichment of the repositories of civilian and military experiences. Captured and used over time, this information will support better assignment and promotion decisions. ELI's should be given at the same time as the ASVAB for enlisted members and during initial entry to ROTC or the Academy for officers. Examples of information that might help to shape training, education, and assignment include: travel experiences across or outside of the United States; experiences living in a foreign country; extracurricular activities outside of the norm such as computer programming; Boy/Girl scout achievements, wilderness experiences and exposure; and an interest in or exposure to various forms of video games. To be effective, ELI must be mapped back to necessary soldier KSBs for assignments and promotion throughout a career.

Competence-Based Assessment (CBA)

The New Oxford American dictionary defines competence as the ability to do something successfully or efficiently. Competency has been described as "the capability of applying or using knowledge, skills, abilities, behaviors, and personal characteristics to successfully perform critical work tasks, specific functions, or operate in a given role or position" (Ennis, 2008 p.4). Any organization that uses competence-based assessment must recognize that it is implicitly accepting the notion or idea that for every role there is an agreed-upon notion of competence, which can be elicited and command consensus (Wolf, 2001). Future concepts for Army capabilities acknowledge the need for competence-based development and the Air Force is also focusing effort on what it calls mission essential competencies (Symons et al., 2006; Bennett, 2013). To be useful, CBA must be clearly tied to measurable requirements within each stage of soldier development and at each level of the career phase. Competence-based evaluations are not new to the Army. Several of the better-known examples are the Bradley Crew Gunnery Skills Test (BCGST), the Tank Crew Gunnery Skills Test (TCGST), and the practical land navigation test administered at the various schoolhouses in the Army. CBA are practical assessments that use various metrics (e.g., time, tests) to determine whether or not a soldier is prepared to execute more complicated tasks in more complex environments. CBA, like the TCGST, currently include evaluations of both tacit and explicit knowledge. It is generally agreed upon in the communities that use these tests that they provide evidence that soldiers possess the necessary KSBs for executing armored vehicle gunnery.

Challenges with Implementation of CBA and ELI

Several challenges to introducing or increasing the use of CBA and ELI within the Army's training and learning environments exist. One is how to identify and capture soldier achievements that support the identification of domain-specific competence prior to new training, education, or job assignment. An example of how this is being attempted, is the experience API used within the Generalized Intelligent Framework for Tutoring (GIFT) (Sottilare et al., 2012). The experience API is used to populate a long-term learner model, which is analyzed prior to new experiences, to determine domain competency. Another challenge is that the adaptive training community disagrees on what variables, formats, and granularity of data are most important for their models. The data and information are necessary to support macro-adaptive decisions like course and lesson selection. Determining the levels of detail required in any CBA or ELI will increase or decrease the authoring burden of those instruments and will impact the level of adaptability of the training or learning environment. The relevance and ease of use of the instruments is another concern. Solutions that are viewed as non-intuitive and or irrelevant will not be acceptable.

The introduction (or the increased use of) CBA and ELI in the training and educational systems of the Army will also generate additional requirements related to management of the resultant big data. This proposal and others like it, generated from recent talent management forums, continue to highlight the requirement for an Army plan on how the service is going to manage the volumes of data both generated and consumed. Ethical concerns over the collection and use of the data as well as its security and storage top the list of issues and concerns. The need for trained personnel (e.g. data scientists) and technical network solutions (e.g. cloud computing) to address the increasing challenge of big data are acknowledged but further discussion of them is beyond the scope of this paper and the author.

POSSIBLE FUTURE SCENARIOS

Armor Enlisted Crewmember Assignment

The following is offered as conceptual example of possible MSKF employment for the enlisted cohort. An Armor tank crew consists of a tank commander (TC), gunner, driver, and loader who each have specific tasks that make up their crew duties. As a general heuristic, new soldiers (i.e., Privates) begin their duties in a tank crew as loaders. This is due to their limited experience on an actual tank and because the position requires the least amount of KSBs to be successfully executed. Over time and with exposure, training, and successful completion of parts or all of the TCGST, soldiers generally progress from the loader station to the driver, gunner, and finally TC positions in that order. Sometimes, movement is forced due to personnel changes/losses and often the decisions are solely based on TC professional military judgment (PMJ). While PMJ is widely recognized and accepted within military circles, it is rarely supported by quantitative data or analysis. Use of the MSKF can add rigor to this process.

Situation

For a loader, the most important tasks are to safely and quickly retrieve rounds from the ammunition rack and load and arm the main gun based on the commands given by the TC. He is additionally responsible for the maintenance and operation of the machine gun at his station within his assigned sector of responsibility. Due to inexperience on a tank, loaders are generally assigned additional responsibilities that will help them develop additional skills like assisting the driver with vehicle automotive maintenance or the gunner with turret and main gun maintenance. There is no question that the loader is in the apprentice career state and it is assumed that he is a novice within his MOS. Within the existing system, a decision to move the loader to a position requiring a greater level of KSBs (e.g., driver) would be based purely on his level of performance to date and his potential as judged by the TC.

During the course of normal summer permanent change of station (PCS) moves, a unit determines that it will have to make personnel adjustments prior to its upcoming gunnery cycle. The goal for Armor units is to maintain as many qualified TC/gunner combinations as possible. This requires that few if any gunners or TCs be removed from their currently qualified crew to replace someone lost on a different crew. Maintaining TC/gunner teams reduces ammunition resource requirements and maintains higher unit readiness levels. Based on projected losses the commander determines that three new gunners are required in the unit. Using the current heuristic, three drivers within the unit would most likely be moved up into the gunner positions but this procedure may not produce the best result for the unit. The way of discovering that today is through trial and error.

Decision Supported by MSKF

If an ELI had been completed upon initial entry (i.e., initialization) and kept up to date throughout IET (i.e., development), the TC (at the decision point) might know for example, that during his high school years the newly assigned loader on his tank worked as a mechanic on heavy machinery in Kansas where he received a professional certification. Additionally, during high school he took classes in advanced electronics and was accepted to Kansas State University to study electrical engineering before his family lost their farm due to severe drought and he had to join the Army to support them. Throughout his entire childhood, the soldier was a baseball star and honor roll student. The CBAs conducted on the soldier during IET, developed from the POI and proponent specified KSBs, demonstrated that the soldier had attained or mastered all of the KSBs associated with the novice state level of development. Information provided from a new whole soldier assessment that measures physical, cognitive, and social attributes, revealed that the soldier has enhanced peripheral vision, above average inductive and deductive reasoning, and mathematical cognitive abilities, as well as excellent psychomotor abilities of rate control, reaction time, wrist-finger speed, arm-hand steadiness, and control precision all necessary abilities for a solid gunner.

With this information – used in conjunction with the soldiers observed performance – the TC may forgo moving his driver into the gunner's seat and instead place the newly assigned loader there. Conventional wisdom suggests that the driver, who has more experience in the Army, would be the better candidate for the job but the information provided through the use of the MSKF, specifically the CBA and ELI, provide the TC with an additional information to consider. In this scenario it may be prudent to take both the driver and the new loader into the gunnery simulator and compare their performance on specific gunner tasks before making a final decision. It could be that both the driver and new loader are equally qualified based on the comparison. That in turn provides the commander with another option to fill one of the other gunner seats. Conversely, ELI and CBA conducted on the driver may indicate that he is not yet prepared or qualified to execute the requirements of a gunner and that specific KSBs require additional attention.

Officer Branch Selection

Commissioned officers receive their branch assignments prior to graduation while they are still cadets. Branch assignments are based on many factors, two of which are officer preference and needs of the Army. If the MSKF was applied to students in ROTC and at the academies, and ELI and CBA were obtained, the KSBs of cadets could be better aligned with the KSBs of the branches and functional areas. This better fit could help to decrease officer attrition and the bleeding of talent that is spoken of within the DoD. Attributes like the ELI and CBA mentioned are being piloted at West Point in an attempt to determine their usefulness in officer branch selection and assignment. Time will tell if officers believe that these efforts were in fact helpful.

CONCLUSIONS

The MSKF is offered as a way to help structure and implement the Army learning and training concepts and models. As it stands, the AOC describes a very ambiguous and complex future operating environment. Acknowledgement that the DoD's human capital management system does not and will not fully meet the needs of the department in the future has prompted the Undersecretary of Defense to tackle talent management reform. Part of talent management is workforce development and employment. Talent Management working groups (military, civilian, and technology) have been ordered to identify current and future challenges as well as potential areas for solutions. Their ideas have helped shape parts of this paper. The Army continues to struggle to define the attributes associated with its three human dimension lines of effort (cognitive dominance, realistic training, and institutional agility) so that they are identifiable and measurable. This creates difficulty for subordinate organizations as they try to nest their supporting activities. While it will not solve all of the current challenges facing the Army, the MSKF will help to provide structure to the ALC and ALM and support both the institutional and operational Army in their efforts to assist the shaping of a new talent management system. What the MSKF proposes – that is different and aligns more with current requirements for adaptive learning and talent management – is a cyclical requirement of formal assessments on which to base promotion and assignment to higher levels of responsibility.

RECOMMENDATIONS

As the Army moves ahead with the ALM, it should work to institutionalize the use of ELI on all members starting at the time of contracting to obtain as much data as possible about the individual soldiers. ELI formats should be standardized. Conducting a pilot using the MSKF in coordination with Recruiting Command, the Center for Initial Entry Training, the Combined Arms Center, one Center of Excellence, and one unit should be attempted to determine whether or not MSKF implementation would be beneficial. The Army should conduct analysis to determine where and when it makes sense to execute CBA and ELI throughout a career. Lastly, the Army should address who should be responsible for the data generated by CBA and ELI and at what levels that data should be used, stored, and secured.

ACKNOWLEDGEMENTS

I would like to thank Dr. Farzana Nabi, and Dr. Robert Sottilare for their insights and feedback on this paper. Their support was greatly appreciated.

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