LEARNING AGILITY – PREPARING LEADERS TO FIGHT AND WIN IN A COMPLEX WORLD



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The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing statement.)

ABSTRACT

LEARNING AGILITY – PREPARING LEADERS TO FIGHT AND WIN IN A COMPLEX WORLD, by Kyle D. Stilwell, 91 pages.

The implicit role of the Maneuver Captains Career Course (MCCC) is preparing leaders to command at the tip of the spear. These leaders employ their skills where experience, judgment, problem solving, and critical and creative thinking come face-to-face with the enemy. This study uses descriptive research and the grounded theories approaches to achieve a qualitative analysis of how the Army currently develops learning agility within the broader framework of leader development at the MCCC. Specifically, this study uses the MCCC, as a part of the Armor and Infantry Officer's professional military education program, to analyze an organization that intentionally seeks to develop mental agility through efforts at the institutional, operational, and individual level. Using the Korn and Ferry Five Factors of Learning Agility, this study will qualitatively assess the curriculum and organizational efforts that contribute to the development of learning agility. Broadly, the research finds that the MCCC serves as a model organization for enhancing learning agility and developing leaders, with small opportunities to further increase effectiveness across leader development domains. The recommendations are intended to further optimize leader and leadership development across the maneuver force.

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ACRONYMS

ALA	Army Learning Areas
ALDS	Army Leader Development Strategy
ALRM	Army Leadership Requirements Model
CASAL	Center for Army Leadership Annual Survey of Army Leadership
CCTT	Close Combat Tactical Trainer
EMS	Electro-Magnetic Spectrum
GLOs	General Learning Outcomes
JCATS	Joint Conflict and Tactical Simulation
MCCC	Maneuver Captains Career Course
MCICTL	Mission Command Individual Critical Task List
MCOE	Maneuver Center of Excellence
MCTEP	Mission Command Training and Education Plan
MDMP	Military Decision-Making Process
MSSP	Maneuver Self-Study Program
TEWTs	Training Exercises Without Troops
TRADOC	Training and Doctrine Command

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CHAPTER 1

INTRODUCTION

We will do what it takes to build an agile, adaptive Army of the future. We need to listen and learn—first from the Army itself, from other services, from our interagency partners, but also from the private sector, and even from our critics. Developing a lethal, professional and technically competent force requires an openness to new ideas and new ways of doing things in an increasingly complex world.

-General Mark A. Milley, "Initial Message to the Army"

At its roots, war is a chaotic and lethal human endeavor- a clash of wills to change human behavior. "Success requires the ability to outthink an opponent and ruthlessly exploit the opportunities that come from positions of relative advantage. The side that best understands an operational environment, learns and adapts more rapidly, and decides to act more quickly in conditions of uncertainty is most likely to win."¹ Developing learning agile leaders has the potential to be the critical capability that provides the U.S. Army such a decisive advantage.

Albeit a relatively new concept, learning agility is built on millennia of concepts across learning, development, leadership, and human performance fields. As will be discussed in chapter 2, there are many similarities in how learning agility is approached, but also some contention over the scope and significance of various factors related to the construct. While there is no single definition for learning agility, most theorists agree that learning agility is the speed and flexibility with which an individual learns, unlearns, and

¹ Headquarters, Department of the Army (HQDA), Army Doctrine Reference Publication (ADRP) 3-0, *Operations*. (Washington, DC: U.S. Government Publishing Office, November 2016), 1-4.

relearns how to respond to a situation. The Army and others generally define learning as the "cognitive, affective, and/or physical process where a person assimilates information, and temporarily or permanently acquires or improves skills, knowledge, behaviors, and attitudes."² Agility generally consists of the speed and flexibility with which someone can transition.³ An individual will evaluate the current situation within the context of their past knowledge and experiences, and make decisions based on their assessment of the applicability of those experiences to the current situation.⁴

Currently, the US military is on the cusp of a revolution of military affairs where multi-domain battlefields create complexities that challenge our understanding of the future character of war. The Army invests incredible time, money, and other resources in the name of professional development. In the Army Leadership Requirements Model (ALRM), the Army describes mental agility and ways to develop it. Still, mental agility fails to adequately address the speed and flexibility with which leaders learn. Leaders are required to be flexible and adapt. However, to maintain the decisive advantage in future conflict, they must also innovate. Even if not immediately called to battle, within the Army, leaders change positions about every two years. This requires rapidly transitioning and learning new responsibilities that have impacts on organizations for years to come.

² U.S. Army Training and Doctrine Command (TRADOC), TRADOC Pamphlet 525-8-2, *U.S. Army Learning Concept for Training and Education 2020-2040* (Fort Eustis, VA: TRADOC, April 2017), 45.

³ Warner Burke and David Smith, "Burke Learning Agility Technical Report: A Guide for Learning about Learning Agility," 2018, accessed November 05, 2018, https://easiconsult.com/wp-content/uploads/2018/10/burke-learning-agility-inventory-technical-report.pdf, 12.

For leaders to succeed, the lessons learned over a lifetime of experiences must be applied selectively to the problem or in anticipating future problems. Developing learning agility in leaders has the potential to increase the pace with which leaders anticipate transitions, adapt, and innovate in unfamiliar environments.

As many organizations seek high potential employees who transition quickly and adapt well, researchers within the organizational psychology and adult learning fields explored the concept of learning agility within industry.⁵ Most recently, multiple learning agility studies targeted industrial and health service sectors. However, no studies specifically target the development of learning agility and the United States Military. As such, there are also no studies that target the development of learning agility for company grade leaders. The purpose of this study is to address this gap of understanding and offer recommendations for future practice.

Background

For as long as there were nations, leaders and academics have looked to the future with concern for the growing complexity of the unknown. Still today, national and military leaders look at recent events and seek to understand the challenges to come. In the Army Operating Concept published in 2018, the Department of the Army highlights the expected challenges of conducting Multi-Domain Operations in a future fight. It states:

Four interrelated trends are shaping competition and conflict: adversaries are contesting all domains, the electromagnetic spectrum (EMS), and the information environment and U.S. dominance is not assured; smaller armies fight on an

⁵ Michael Lombardo and Robert Eichinger, "High potentials as high learners," *Human Resource Management* 39, no. 4 (2000): 322.

expanded battlefield that is increasingly lethal and hyperactive; nation-states have more difficulty in imposing their will within a politically, culturally, technologically, and strategically complex environment; and near-peer states more readily compete below armed conflict making deterrence more challenging.⁶

To meet these challenges, the Army needs leaders capable of navigating the complexities of multi-domain operations at the tactical, operational, and strategic levels. To achieve this, the Army seeks to develop agile and adaptive leaders in order to be able to execute the mission command philosophy.⁷ The army defines mission command as "the exercise of authority and direction by the commander using mission orders to enable disciplined initiative within the commander's intent to empower leaders to be agile and adaptive in the conduct of Unified Land Operations."⁸ Learning agility builds the adaptability that is at the heart of the ability to conduct mission command. A leader's trust in a subordinate to achieve their intent is rooted in a belief that they will exercise sound judgment and they are prepared for whatever they may face.

The Army Operating Concept also emphasizes that within MDO, the principles of massing and combined arms maneuver remain relatively unchanged.⁹ However, now the operating environment requires much greater synchronization at lower echelons, faster,

⁶ U.S. Army Training and Doctrine Command (TRADOC), TRADOC Pamphlet 525-3-1, *The U.S. Army in Multi-Domain Operations 2028* (Fort Eustis, VA: TRADOC, July 2018), 1-4.

⁷ Headquarters, Department of the Army (HQDA), *Mission Command Training & Education Plan FY 18-20* (Washington, DC: U.S. Government Publishing Office, June 2017), 1.

⁸ Ibid.

⁹ TRADOC, TRADOC Pamphlet 525-3-1, ix.

and with greater agility.¹⁰ As a result, company grade maneuver leaders will be expected to operate tactically with degraded communications and situational awareness, while exercising disciplined initiative to meet the commander's intent. In multi-domain formations, leaders have increasingly more technical experts, with cross-domain capabilities that offer them more opportunities to "stimulate, see, and strike key components and vulnerabilities within enemy systems."¹¹ Key to the success of these leaders is the ability to rapidly know the situation is changing, out-think, and out-transition their adversaries. When leaders are prepared for this at echelon, the Army is better able to achieve convergence at echelon.

The Army seeks to develop agile and adaptive leaders in order to be able to execute the mission command philosophy. The Army's Leader Development manual defines adaptability, as related to performance, as "an effective change in behavior in response to an altered or unexpected situation."¹² Vandergriff and Dickerson further define adaptability as, "the process of adjusting practices, processes and systems to projected or actual changes of environment. It includes the creation of innovative combined arms organizations, doctrine, systems and training concepts as demanded by the environment, allies, and the enemy. Adaptive solutions to complex problems in chaotic, unpredictable situations are based more on intuition than on analysis, deliberate

¹⁰ TRADOC, TRADOC Pamphlet 525-3-1, ix.

¹¹ Ibid.

¹² Headquarters, Department of the Army (HQDA), Field Manual (FM) 6-22, *Leader Development* (Washington, DC: U.S. Government Publishing Office, June 2015), 5-7.

planning and doctrine."¹³ Like learning agility, adaptability is a meta-competency that relies on the aggregated impact of an individual or a team's collective skills and characteristics. The characteristics and skills associated with adaptability (figure 1 below), share many aspects with the learning agile factors and dimensions discussed later. It follows that the purpose of increasing learning agility is to be more adaptable in order to be more effective when faced with new environments or circumstances. A leader's trust in a subordinate to achieve their intent is rooted in a belief that they will exercise sound judgment and they are prepared for whatever they face. Enhancing one's learning agility increases the speed and flexibility with which they will learn and adapt. To achieve this, adaptability is developed through exposure to a wide range of experiences in training, education, and operational assignments.

Skills	Characteristics
Quickly assess the situation.	Open-minded.
Recognize changes in the environment.	Flexible, Versatile, Innovative.
Identify critical elements of new situation.	Sees change as an opportunity.
Apply new skills in unanticipated contexts.	Passionate learner.
Change responses readily.	Comfortable in unfamiliar environments.
Use multiple perspectives through critical and	Comfortable with ambiguity.
creative thinking.	Maintain appropriate complexity in knowledge.
Avoid oversimplification.	

Figure 1. Adaptability Skills and Characteristics

Source: Headquarters, Department of the Army, Field Manual 6-22, *Leader Development* (Washington, DC: U.S. Government Publishing Office, June 2015), 5-7.

¹³ Brian Dickerson, "Adaptability: A New Principle of War," in *National Security Challenges for the 21st Century*, ed. Williamson Murray (Carlisle Barracks: U.S. Army War College, 2006), 187-206.

To better understand how the Army operationalizes leader development to achieve its mission, this section will outline the Army's strategy and programs for leader development. The Army Leader Development Strategy (ALDS) provides the strategic vision and the Army's operational approach to leader development to synchronize the leader development stakeholders across the Army. The Army defines its basic expectations of a leader in terms of their individual competencies and attributes.¹⁴ "Attributes are the desired internal characteristic of a leader – what the Army wants leaders to be and know."¹⁵ As illustrated within figure 2 (below), the categories of attributes are character, presence, and intellect. "Competencies are the skills and learnable behaviors the Army expects leaders to acquire, demonstrate, and continue to enhance – what the Army wants leaders to do."¹⁶ The Army expects its Soldiers to Lead, Develop, and Achieve.¹⁷ While the linkages shall be expanded later, learning agility, and its development as a competency, is clearly valued by the Army, as evidenced by the requirements for mental agility, innovation, prepares self, and gets results elements of the Army Leadership Requirements Model.¹⁸

- ¹⁶ Ibid.
- ¹⁷ Ibid.
- ¹⁸ Ibid.

¹⁴ HQDA, FM 6-22, 1-4.

¹⁵ Ibid., 1-3.



Figure 2. Army Leadership Requirements Model

Source: Headquarters, Department of the Army, Field Manual 6-22, *Leader Development* (Washington, DC: U.S. Government Publishing Office, June 2015), 1-4.

The operational approach to achieve the strategy encompasses three lines of effort that span the institutional, operational, and individual domains.¹⁹ The lines of effort are training, education, and experience.²⁰ "Training is an organized, structured, continuous, and progressive process based on sound principles of learning designed to increase the capability of individuals, units, and organizations to perform specified tasks or skills."²¹

¹⁹ Headquarters, Department of the Army (HQDA), *The Army Leader Development Strategy* (Washington, DC: U.S. Government Publishing Office, June 2013), 10.

²⁰ Ibid., 11.

²¹ Ibid.

Education refers to the development of competencies and attributes through exposure to foundational concepts that are later practiced in training or during operational experiences.²² The experience line of effort refers to the cumulative exposure to personal and professional events.²³ The Army intentionally develops career timelines and key developmental assignments to achieve specific experiences that support learning while operating. Ultimately, the Army seeks to balance training, education, and professional experiences to ensure a logical and continuous progression for each Soldier.²⁴

Purpose and Research Questions

The purpose of this paper is to understand how learning agility can improve leader development and education for officers at the Maneuver Captains Career Course (MCCC), and the U.S. Army at-large. A deeper analysis of the theoretical underpinnings of U.S. Army leader development and training doctrine demonstrates that each share the same foundational concepts. Therefore, the evolution and synthesis of the ideas are inexplicably linked. Similarly, there are many continuities between the approaches for developing learning agility. Specifically, both concepts value utilizing 360 feedback, leader assessments, tailored challenges, and incorporating individual reflection to help individuals grow. Both concepts share the belief that these skills can be taught and developed- that there are no "born leaders." Furthermore, many of the behaviors linked to learning agile people are already documented as favored behaviors in the Army

²² HQDA, The Army Leader Development Strategy, 10.

²³ Ibid.

²⁴ Ibid., 12.

Leadership Requirements Model and Leader Development Improvement Guide. There are countless linkages and similarities between the Army leader development program and learning agility initiatives, that each warrant study. A close examination of the two demonstrate a need for further research and analysis of the opportunities to improve leader development through the incorporation of learning agility best practices. It is the intent of this paper to further bridge the gap between the two critical constructs.

To achieve this, the primary research question is: "How can the Army improve maneuver captain leader development by enhancing learning agility competencies during professional military education?" Critical to answering this question are a few subordinate research questions. Specifically, how are individual learning agility behaviors and competencies developed in maneuver captain professional military education? What programs or practices would further enhance Company Grade Leader learning agility competencies? The answers to these questions will greatly enhance future understanding of learning agility as it applies to leader development at the Maneuver Captains Career Couse.

Definition of Terms

The Army defines leader development as "a deliberate, continuous, sequential, and progressive process grounded in the Army values. It grows Soldiers and Civilians into competent and confident leaders capable of directing teams and organizations to execute decisive action. Leader development is achieved through the lifelong synthesis of the knowledge, skills, and abilities gained through education, training, and experience."²⁵ The *Army Leader Development Program* generates a range of initiatives to produce leaders with the proper education, training, and experience to lead our Army in the future."²⁶

The Army delineates these experiences within the operational, institutional, and individual domains to logically assign roles and responsibilities for developing Soldiers (see figure 3 below). The operational level refers to deployable units that can be assigned combat, combat support, or combat service support missions. The operational training domain consists of the "training activities organizations undertake while at home station, at maneuver combat training centers, during joint exercises, at mobilization centers, and while operationally deployed."²⁷

²⁵ Headquarters, Department of the Army (HQDA), Department of the Army (DA) Pamphlet 350-58, *Army Leader Development Program* (Washington, DC: U.S. Government Publishing Office, March 2013), 1.

²⁶ Ibid.

²⁷ TRADOC, TRADOC Pamphlet 525-8-2, 46.



Figure 3. Army Leader Development Model

Source: Headquarters, Department of the Army, Department of the Army Pamphlet 350-58, *Army Leader Development Program* (Washington, DC: U.S. Government Publishing Office, March 2013), 2.

The Institutional Army refers to the "organizations and activities that generate and sustain trained, ready, and available forces to meet the requirements of the National Military Strategy and support the geographic commander, and administer executive responsibilities in accordance with public law."²⁸ They provide the centers and schools that offer initial and follow-on training for Soldiers within the Institutional Training Domain.²⁹ Finally, the military has the Self-development training domain, where an

²⁸ TRADOC, TRADOC Pamphlet 525-8-2, 44.

²⁹ Ibid.

individual purposefully "reinforces and expands the depth and breadth of [their] knowledge base, self-awareness, and situational awareness."³⁰

Together, these three domains allow for development within the Army Learning Model. The Army Learning Model is "the Army's adaptive, continuous learning model that is routinely improved to provide quality, relevant, and effective learning experiences through outcome-oriented instructional strategies that foster thinking, initiative, and provide operationally relevant context which extends learning beyond the learning institution in a career-long continuum of learning through the significantly expanded use of network technologies." ³¹ Hopefully, these critical definitions shape the readers understanding of the language most useful for analyzing learning agility and leader development processes within the U.S. Army.

Limitations

The study will assess the most critical aspects of learning agility in relationship to the Army Leader Development Programs to better understand the impact on field grade and senior leader development. While many aspects influence leader development at various echelons, this study seeks to target the development of the ability to rapidly learn and relearn based on varying contexts. Due to resource and time constraints, this study will not test the feasibility and suitability of various learning agility instruments for use in leader development programs. Similarly, this study does not assess the degree of change in learning agility or adaptability of maneuver captains based on their experiences in the

³⁰ TRADOC, TRADOC Pamphlet 525-8-2, 46.

³¹ Ibid.

course. Instead, as we will discuss later, these assessments are best suited for a longitudinal study.

Additionally, while this research necessitates a single framework for assessing how learning agility is developed at MCCC, the strengths and weaknesses of each framework merit further consideration before directly incorporating a specific framework into U.S. Army Doctrine. With further development of elemental descriptors or developmental activities, each of the learning agility constructs has the potential to surpass the others in developmental value. The literature review will conclude with a consolidated set of criteria to describe the organizational practices and individual developmental activities for enhancing learning agility.

Delimitations

As stated previously, this research will only focus on maneuver captains at the Maneuver Captains Career Course. While there are many parallels to be drawn across the service, the DoD, and industry as a whole, this research will evaluate the Maneuver Captains Career Course as an organization that seeks to develop company grade leaders and beyond for the U.S. Army.

This research is intentionally limited to the current curriculum for Academic Year 2018-2019, in order to offer the most current evaluation of the programs and activities occurring at MCCC. Furthermore, where applicable, this research will only analyze the higher-level guidance directed in the Mission Command Training and Education Plan FY 2018-2020 to provide the most current strategy and approach to developing leaders. Therefore, the scope precludes countless other DoD schools that seek to achieve similar

effects across the officer, warrant officer, and enlisted career paths. Similarly, this research is time-sensitive, assessing specific courses at a single point in time.

Methodology Summary

This study will use descriptive research and the grounded theories approaches to achieve a qualitative analysis of how the Army currently develops learning agility within the broader framework of leader development. Specifically, this study will use the Maneuver Captains Career Course as a part of the Armor and Infantry Officer's professional military education program to analyze an organization that intentionally seeks to develop mental agility through efforts at the institutional, operational, and individual level.

To achieve this goal, this paper will qualitatively assess organizational behaviors that develop learning agility. Content analysis will focus on documents provided by the MCCC and the Combined Arms Center.³² In short, this study will utilize content analysis of coursework, syllabi, and Terminal Learning Objectives of the Maneuver Captains Career Course to assess overall development of learning agility. This analysis will use the Korn and Ferry Five Factors of Self-Awareness, Mental Agility, People Agility, Change Agility, and Results Agility to demonstrate what the Army does, often with broader intentions, to contribute to learning agility.³³ This will further demonstrate gaps and

³² The Combined Arms Center is responsible for synchronizing training and education programs to achieve leader development outcomes across the Army.

³³ Korn Ferry, "viaEDGE Technical Report," accessed December 17, 2018, https://www.kornferry.com/technical-manuals, 21.

opportunities for further development of learning agility competencies to enhance leader development.

Conclusions and Significance

Effective leadership and learning are intimately tied. Doctor W. Warner Burke, of Columbia University, emphasizes the volume of scholars that have proven learning is critical to leader success.³⁴ Leaders selected for their strong technical competence and expertise, who maintain a fixed mindset, are likely to stumble when the environment changes.³⁵ Instead, learning agile leaders "know what to do when they don't know what to do." ³⁶ In the Army, leaders are promoted for their potential, but their performance is the most salient indicator of potential for the rater and senior rater making recommendations to the promotion boards. Arming leaders with a better tool to assess and develop potential will greatly enhance the outcomes the U.S. Army seeks.

The implicit role of the Maneuver Captains Career Couse is preparing leaders to command at the tip of the spear. These leaders will employ their skills where experience, judgment, problem solving, and critical and creative thinking come face-to-face with the enemy. If well prepared, their learning agility translates to lethality or the preservation of lives. The complexity of the operational environment requires leaders to develop these

³⁴ Burke and Smith, "Burke Learning Agility Technical Report: A Guide for Learning about Learning Agility," 12.

³⁵ Ibid.

³⁶ Ibid.

skills within their subordinates in order to empower them and execute the mission command philosophy.

Ultimately, learning agility offers a simple framework for critical behaviors that can be simply taught and reinforced to increase the toolkit of Soldiers. By changing their learning orientation, and increasing their learning agility, Soldiers will seek out their own challenges and experiences, in addition to the ones being offered through counseling or a unit training plan. Developing learning agility is one of the most critical investments the military should make in shaping its future leaders. Therefore, it is critical to develop a deeper understanding of the learning agility origins, concepts, and developmental activities described in chapter 2.

CHAPTER 2

LITERATURE REVIEW

Out of a quest to select, assess, and develop high-potential employees, the field of learning agility emerged.³⁷ A common problem is for managers to nominate their high performers for leadership positions, only for them to fail when the previously successful behaviors no longer achieve results.³⁸ To counter this, researchers and business professionals sought to understand what made the difference between the leaders that continued to succeed, and those that petered out. As such, learning agility is an amalgamation of multiple fields and practices. Foundational to the concept are adult learning and development, theories of knowing, and experiential learning. Similarly, these theories largely inform the manner with which training and education systems are designed in the U.S. Army. Theories of knowing, meaning making, and behavioral change set the foundation for the synthesis of learning agility and its applied practice within the U.S. Army.

Adult Learning and Development Theories

The field of adult development offers many of the foundational theories and concepts that are most directly related to developing learning agility, as well as how the Army develops leaders. Throughout this paper, the role of experience in learning and

³⁷ Victoria Swisher, George Hallenbeck, J. Evelyn Orr, Robert Eichinger, Michael Lombardo, and Cara Capretta, *FYI for Learning Agility: Second Edition* (Los Angeles: Lominger International, 2014), 8.

³⁸ Ibid., 9.

development will become clear. Webster's dictionary defines learning as knowledge or skill acquired by instruction or study. An alternate definition "modification of a behavioral tendency by experience (such as exposure to conditioning)."³⁹ This section will focus on experiential learning, theories of knowing, and cognitive processes to better understand how learning agility is developed.

In "Experiential Learning: Experience as the Source of Learning and Development," David Kolb outlines in great detail the theoretical underpinnings of experiential learning.⁴⁰ While there are countless philosophers that discussed elements of experiential learning, William James offered what appears to be the first conceptual synthesis of experiential learning as it applies to education in his "Essays in Radical Empiricism."⁴¹ In these works, edited by his colleague Ralph Perry, James delves into the nuances of radical empiricism and dual knowledge theories.⁴²

In describing radical empiricism, James poses that an experience is more than just an event, but is also the interpretation of the event for an individual within the context that they bring to it.⁴³ He elaborated, "I say 'empiricism,' because it is contented to

⁴¹ Ibid.

⁴² Ibid.

³⁹ "Learning," Merriam-Webster, accessed December 12, 2018, https://www.merriam-webster.com/dictionary/learning.

⁴⁰ David A. Kolb, *Experiential Learning: Experience as the Source of Learning and Development* (Englewood Cliffs: Prentice-Hall, 1984), 23.

⁴³ William James, "Essays in Radical Empiricism," ed. Ralph Perry, accessed December 5, 2018, https://brocku.ca/MeadProject/James_I912/James_ 1912_pref.html.

regard its most assured conclusions concerning matters of fact as hypotheses liable to modification in the course of future experience; and I say 'radical,' because it treats the doctrine of monism itself as an hypothesis, and, unlike so much of the halfway empiricism that is current under the name of positivism or agnosticism or scientific naturalism, it does not dogmatically affirm monism as something with which all experience has got to square."⁴⁴ Given the contemporary context of intellectual debates over theories of knowing, James sought to balance pure experience with the meaning that people bring to those experiences.⁴⁵ This process of meaning making is critical to learning agility.

Expanding upon these ideas in his book, *Art as Experience,* John Dewey's dual knowledge theory establishes that the individual experiences and perceives an event differently based on their past knowledge and experiences.⁴⁶ Dewey places emphasis on the "perception of the relationship between what is done and what is undergone" to develop meaning for the individual.⁴⁷

Dewey also places emphasis on the concept of "learning while operating" in stating, "I believe that education which does not occur through forms of life that are worth living for their own sake is always a poor substitute for genuine reality and tends to

⁴⁴ James, "Essays in Radical Empiricism."

⁴⁵ Kolb, *Experiential Learning: Experience as the Source of Learning and Development*, 24.

⁴⁶ Ibid.

⁴⁷ Ibid.

cramp and deaden."⁴⁸ He elucidates the power in pursuing an individual's interests in their development and their readiness for the experience. Dewey emphasized the power of strong personal motivations and interest in the experience to the developmental process. Although this seems logical, it is an often-lost point in establishing developmental programs and assignments. Another major contribution from Dewey is the idea that "education must be conceived as the continuing reconstruction of experience . . . the process of and goal of education are one and the same."⁴⁹

While the focus of this paper is not based on childhood development, Dewey, Jean Piaget, and Mary Parker Follet shared the belief that a person's worldview and perspectives are based on their cumulative experience.⁵⁰ Jean Piaget offers a constructivist model that describes the progressive development of cognitive understanding of a person's environment.⁵¹ Mary Parker Follet further expanded upon the totality of experience, illustrating the interaction between the individual, their experiences, the environment, and the teacher.⁵² Ultimately, one's experiences provide the basis for how they assess and interact with their environment. Similarly, Lev Vygotsky expounded upon the idea of the zone of proximal development, or a readiness

⁴⁹ Ibid.

⁵⁰ Ibid.

⁵¹ Ibid., 26.

⁵² Ibid., 25.

⁴⁸ Kolb, *Experiential Learning: Experience as the Source of Learning and Development*, 25.

for the developmental activity.⁵³ By seeking to match challenges to experience level and readiness, a mentee is better prepared to garner maximum learning from the developmental activity.

Kurt Lewin was one of the first to form an experiential learning model.⁵⁴ Beginning with a concrete experience, an individual makes observations and reflects on the experience, then forms abstract concepts and generalizations, and tests the implications of the concepts in new situations before repeating the process.⁵⁵

Carl Rogers offered incredible clarity into the role of the individual in embracing or being available to embrace the situation they are experiencing. Rogers also further reinforced the significance of an individual's past experiences, and their propensity to relate relevant information to current situations.⁵⁶ Rogers was also a major proponent for unconditional positive regard and psychological safety as key elements in learning from experience.⁵⁷ Rogers posited that these elements must be present in order to ensure an individual's availability and motivation to learn.⁵⁸

Just as important to learning agility as experiential learning, are the cognitive processes and levels that are achieved in learning. Bloom's Taxonomy is a tiered

⁵⁵ Ibid.

⁵⁶ Ibid., 28.

⁵⁷ Ibid.

⁵⁸ Ibid.

⁵³ Kolb, *Experiential Learning: Experience as the Source of Learning and Development*, 25.

⁵⁴ Ibid., 32.

framework for assessing an individual's level of mastery of a topic.⁵⁹ Bloom's Taxonomy was developed by multiple researchers following a series of conferences on elevating thought in higher learning.⁶⁰ The mastery levels are: Knowledge, Comprehension, Application, Analysis, Synthesis, and ultimately Evaluation. In 2001, Anderson et al. further revised Bloom's Taxonomy to Remembering, Understanding, Applying, Analyzing, Evaluating, and Creating.⁶¹ The major changes were intended to reflect an evolution of cognitive processes, elevating synthesis and creating new ideas over evaluation.⁶² The U.S. Army currently uses the original Bloom's Taxonomy mastery levels as a metric of evaluating individual comprehension when designing curriculum through the developmental stages of a Soldier's career.

Ultimately, the theoretical elements discussed in this section directly or indirectly form the foundation for the constructs and assessments that measure and develop learning agility. This is significant because while learning agility may be an innovative approach, the foundations are timeless and have been rigorously tested. This helps a leader, supervisor, or coach that seeks to develop a learning agility opportunity area to go

⁵⁹ Max Engelhart, Edward Furst, Walker Hill, and David Krathwohl, *Taxonomy of Educational Objectives, Handbook I: The Cognitive Domain,* ed. Benjamin Bloom (New York: David McKay Co Inc., 1956).

⁶⁰ Donald Clark, "Bloom's Taxonomy of Learning Domains," Concepts of Leadership, accessed December 12, 2018, http://www.nwlink.com/~donclark/hrd/bloom .html#intro.

⁶¹ Lorin Anderson and David Krathwohl, *A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives* (New York: Pearson, Allyn & Bacon, 2001).

⁶² Clark, "Bloom's Taxonomy of Learning Domains."

beyond the current literature for further understanding and activities. Similarly, this understanding helps to demonstrate that learning agility is conceptually grounded, and not a temporary fad within organizational development.

Learning Agility

Within the context of other academic subjects, learning agility as a formal concept is generally new. While many agree with previously discussed definitions of learning agility, how to measure it, how to develop it, and how to use it has been the subject of much debate and research. The evolving quest to develop individual potential within the industrial-organizational psychology field led scholars to the synthesis of multiple concepts and the emergence of learning agility as a distinct construct. This section will discuss the initial union of the concepts of learning agility, movement towards a single definition, and the instruments developed to measure learning agility competencies.

There is great consistency in the definition of what learning agility is. Learning is defined as the "cognitive, affective, and/or physical process where a person assimilates information, and temporarily or permanently acquires or improves skills, knowledge, behaviors, and attitudes."⁶³ Agility consists of the speed and flexibility with which someone can transition.⁶⁴ Within the learning agility construct, Lombardo and Eichinger defined learning agility as "the willingness and ability to learn from experience, and subsequently apply that learning to perform successfully under new or first-time

⁶³ TRADOC, TRADOC Pamphlet 525-8-2, 45.

⁶⁴ Burke and Smith, "Burke Learning Agility Technical Report: A Guide for Learning about Learning Agility," 12.

conditions."⁶⁵ Derue, et al, sought a narrower focus, "a person's speed and flexibility in learning from experience in organizations."⁶⁶ Burke also embraces the elements of speed and flexibility, but elaborates that "learning agility is defined as the engagement in learning behaviors to enhance the capacity to reconfigure activities quickly to meet the changing demands in the task environment."⁶⁷ An individual will evaluate the current situation within the context of their past knowledge and experiences, and make decisions based on their assessment of the applicability of those experiences to the current situation.⁶⁸

While the definitions for learning agility have considerable congruence, the elements of and contributors to learning agility remain a basis for academic discussion. Hoff and Burke posited that the first instrument to measure learning agility indicators and behaviors, albeit unintentionally, was the Prospector Survey ® in 1997.⁶⁹ While the survey was not intended to assess learning agility, Spreitzer, McCall, and Mahoney developed the instrument to assess potential for international executive leaders.⁷⁰ This

⁶⁸ Ibid.

⁶⁵ Michael Lombardo and Robert Eichinger, "High potentials as high learners," *Human Resource Management* 39, no. 4 (2000): 322.

⁶⁶ D. Scott DeRue, Susan J. Ashford, and Christopher G. Myers, "Learning agility: In search of conceptual clarity and theoretical grounding," *Industrial and Organizational Psychology* 5, no. 3 (2012): 274.

⁶⁷ Burke and Smith, "Burke Learning Agility Technical Report: A Guide for Learning about Learning Agility," 12.

⁶⁹ Ibid., 3.

⁷⁰ David Hoff and Warner Burke, *Learning Agility: The Key to Leader Potential* (Tulsa, OK: Hogan Press, 2018), 19.

instrument considered "end-state" (gets results) and "learning oriented' competencies in assessing potential."⁷¹ Specifically, the instrument assessed the following behaviors: "Uses feedback, is culturally adventurous, seeks opportunities to learn, is open to criticism, seeks feedback, and is flexible."⁷² At the time, the developers found that the learning components were not directly predictive of performance assessments.⁷³ It is key to note that this is likely the result of the current organizational cultural model of assessing performance from results alone, rather than incorporating metrics for learning and development.⁷⁴

As the conceptual foundation for learning agility solidified, multiple scholars developed initial means to measure the construct. Hoff and Burke credit Lombardo and Eichinger with developing the first tool to intentionally measure learning agility, the Choices Architect, in 2000.⁷⁵ In conjunction with the Center for Creative Leadership, the group evaluated 200 organizational leaders across five domains: self-awareness, mental agility, people agility, change agility, and results agility.⁷⁶ They concluded that their measurement tool was predictive of future potential and advocated using learning agility

⁷² Ibid.

⁷³ Ibid.

⁷⁴ Ibid.

⁷¹ Hoff and Warner Burke, *Learning Agility: The Key to Leader Potential*, 19.

⁷⁵ Burke and Smith. "Burke Learning Agility Technical Report: A Guide for Learning about Learning Agility," 3.

⁷⁶ Ibid.
as a selection tool.⁷⁷ While these elements and conclusions were not universally embraced, it sparked interest across academia and organizational development fields seeking to optimize their employees' performance. Their initial findings also demonstrated that learning agility is not related to intelligence, personality, or goal orientation (with the exception of an individual's openness to experience).⁷⁸

Following the publication of their results, an academic fervor around learning agility created much convergence and divergence of ideas among researchers and professionals to be addressed in the following paragraphs. In 2012, given the multitude of competing conceptual frameworks, DeRue et al. sought to provide a net assessment of the prevailing concepts within the learning agility construct in the paper "Learning Agility: In Search of Conceptual Clarity and Theoretical Grounding." While written after much of the research below, their research is lauded by contemporary theorists as the most comprehensive collection of the theoretical frameworks that shaped each of the contemporary theorists' views on learning agility. Ultimately, the paper illustrates the theoretical synthesis of elements of cognition, adult learning, social-organizational psychology, and leadership theories. It also posed the more-narrow definition of learning agility as the speed and flexibility with which one learns and responds to new situations that is used in this paper.⁷⁹

⁷⁷ DeRue, Ashford, and Myers, "Learning agility: In search of conceptual clarity and theoretical grounding," *Industrial and Organizational Psychology* 5, no. 3 (2012): 260.

⁷⁸ Ibid.

⁷⁹ Ibid., 259.

From 2004 to 2010, Korn and Ferry International developed and published *FYI*® for Learning Agility and has since updated it to include four assessments directly related to learning agility.⁸⁰ The first three utilize the same five factors: Self-Awareness, Mental Agility, People Agility, Change Agility, and Results Agility.⁸¹ The Choices Architect ® is a multi-rater assessment to evaluate learning agility, which is best suited for individual development.⁸² The Learning From Experience[™] interview guide is administered by a trained facilitator following a set protocol that helps an interviewer understand the context of how an individual learns from experience.⁸³ Later, Korn and Ferry developed the viaEdge[™] which is an online based self-assessment of learning agility strengths and weaknesses.⁸⁴ Finally, Korn and Ferry International developed the Korn and Ferry Assessment of Leadership Potential. Though this measure assesses learning agility, it also addresses multiple other elements they believe contribute to a leader's potential, such as drivers, experience, leadership traits, and others.⁸⁵ These tools are marketed for development, as well as selection.⁸⁶

⁸¹ Ibid.

⁸² Ibid.

⁸³ Ibid.

⁸⁴ Ibid.

⁸⁶ Korn Ferry, "viaEDGE Technical Report," 20.

⁸⁰ Korn Ferry, "viaEDGE Technical Report," 21.

⁸⁵ Korn Ferry. "Korn Ferry assessment of leadership potential: Research guide and technical manual," accessed December 17, 2018, http://static.kornferry.com/m edia/sidebar_downloads/KFALP_Technical_Manual_final.pdf.media/sidebar_downloads/ KFALP_Technical_Manual_final.pdf, 8.

As the Korn and Ferry construct is one of the first, and most developed,

frameworks for learning agility, it is useful to understand the elements that contribute to the Five Factors. Korn and Ferry define the learning agility factor Self-Awareness as "the degree to which an individual has personal insight, clearly understands his or her strengths and weaknesses, is free of blind spots, and uses this knowledge to perform effectively."⁸⁷ As a factor, Self-Awareness consists of five dimensions: Personal Learner, Feedback Oriented, Reflective, Emotion Management, and Self-Knowledge.⁸⁸ A selfaware individual is constantly placing themselves in new and challenging situations, with the intent to learn from experience, feedback, and reflection.⁸⁹

The factor Mental Agility is defined as "a broad curiosity about the complex issues, challenges, and novel situations that leaders face daily, and sets the stage for effective problem solving." ⁹⁰ From this curiosity, an individual identifies connections and associations across topics.⁹¹ The learning agility factor Mental Agility consists of six dimensions: Inquisitive, Broad Scanner, Connector, Essence, Complexity, and Manages Uncertainty.⁹² It is not about intellect, but rather transitioning through various elements

⁹¹ Ibid.

⁸⁷ Korn Ferry. "Korn Ferry assessment of leadership potential: Research guide and technical manual," 26.

⁸⁸ Swisher et al., *FYI for Learning Agility: Second Edition* (Los Angeles: Lominger International, 2014), 31.

⁸⁹ Ibid., 33.

⁹⁰ Korn Ferry, "Korn Ferry assessment of leadership potential: Research guide and technical manual," 26.

⁹² Swisher et al., FYI for Learning Agility: Second Edition, 67.

of understanding complexity.⁹³ Given that Mental Agility is also included in the Army Leadership Requirements Model, it is useful to briefly compare and contrast the constructs. In Field Manual 6-22: *Leadership*, the U.S. Army simply defines mental agility as "the "willingness to approach problems from different viewpoints and to hold and work on opposing ideas until identifying the best solution."⁹⁴ Indicators as a strength can include: "modeling a flexible mindset, anticipating changing conditions, engaging in multiple approaches when assessing, conceptualizing, and evaluating a course of action."⁹⁵ The Army leadership manual also poses that those low on mental agility demonstrate inconsistency adapting to changing situations. They may also focus on immediate problems and first order effects in decision-making.⁹⁶ Ultimately, there appears to be almost complete alignment in the Korn Ferry and U.S. Army approaches to understanding and developing Mental Agility.

The factor People Agility is defined as "understanding the value of getting work done with and through people, being attuned to individuals' needs and motivations, and typically skilled at reading people with an effective influencing style." ⁹⁷ People Agility consists of six dimensions: Open Minded, People Smart, Situational Flexibility, Agile

⁹⁵ Ibid., 6-5.

⁹⁶ Ibid.

⁹³ Swisher et al., FYI for Learning Agility: Second Edition, 67.

⁹⁴ HQDA, FM 6-22, 5-3.

⁹⁷ Korn Ferry, "Korn Ferry assessment of leadership potential: Research guide and technical manual," 26.

Communicator, Conflict Manager, and Helps Others Succeed.⁹⁸ While People Agility has many common linkages to emotional intelligence, it is critical to the construct of learning agility. Skill within these dimensions are required for agile learners to learn and grow from interactions with others and the feedback they offer.⁹⁹

The factor Change Agility is defined as "embracing change and taking wellreasoned risks even in the face of that change. It includes openness and acceptance of change and willingness to balance the risks and trade-offs vs. waiting."¹⁰⁰ Change Agility consists of six dimensions: Continuous Improver, Visioning, Experimenter, Innovation Manager, and Comfort Leading Change.¹⁰¹ Learning agile individuals seek to use their broader understanding of the environment to inform opportunities to improve themselves, organizations, and processes.

The factor Results Agility is defined as "being energized by new, tough assignments and overcoming obstacles to achieve stretch work objectives. It includes the enjoyment of being judged against external standards of achievement."¹⁰² Results Agility consists of six dimensions: Drive, Resourcefulness, Presence, Inspires Others, and

⁹⁸ Swisher et al., FYI for Learning Agility: Second Edition, 117.

⁹⁹ Ibid.

¹⁰¹ Swisher et al., *FYI for Learning Agility: Second Edition*, 167.

¹⁰⁰ Korn Ferry, "Korn Ferry assessment of leadership potential: Research guide and technical manual," 26.

¹⁰² Korn Ferry, "Korn Ferry assessment of leadership potential: Research guide and technical manual," 26.

Delivers Against the Odds.¹⁰³ This factor goes beyond getting results, but includes how the individual behaves in a cyclic process where success or adversity fuel continued progress.

Burke Nine Dimensions of Learning Agility

Another principle theorist for learning agility is W. Warner Burke. The 2017, *Learning Agility: The Key to Leader Potential*, serves as one of the most recent resources for researchers, practitioners, and leaders to understand and develop learning agility competencies. Like DeRue et al., it seeks to demonstrate the critical need for leaders across all industries to develop learning agility. It offers a broad conceptual understanding of the theoretical underpinnings and offers a refined tool to assess and provide feedback on learning agility competencies. For each competency, it offers possible activities to practice and enhance these competencies. It presents the Burke Nine Dimensions of Learning Agility: Flexibility, Speed, Experimenting, Performance Risk Taking, Interpersonal Risk Taking, Collaborating, Information Gathering, Feedback Seeking, and Reflecting.¹⁰⁴

¹⁰³ Swisher et al., FYI for Learning Agility: Second Edition, 209.

¹⁰⁴ Hoff and Burke, *Learning Agility: The Key to Leader Potential*, 22.

Table 1.Burke Nine Dimensions of Learning Agility	
Dimension	Definition
Flexibility	Being open to new ideas and proposing new solutions.
Speed	Acting on ideas quickly so that those not working are discarded and other possibilities are accelerated.
Experimenting	Trying out new behaviors (approaches, ideas) to determine what is effective.
Performance Risk Taking	Seeking new activities (tasks, assignments, roles) that provide opportunities to be challenged.
Interpersonal Risk Taking	Discussing differences with others in ways that lead to learning and change.
Collaborating	Finding ways to work with others that generate unique opportunities for learning.
Information Gathering	Using various methods to remain current in one's area of expertise.
Feedback Seeking	Using various methods to remain current in one's area of expertise.
Reflecting	Slowing down to evaluate one's own performance to be more effective.

Source: David Hoff and Warner Burke, *Learning Agility: The Key to Leader Potential* (Tulsa, OK: Hogan Press, 2017), 29.

One of the distinguishing features of the Burke Learning Agility Inventory is that it takes an intentionally behaviorist approach to measuring and developing learning agility. Hoff and Burke contend that all the previous measurements were limited by measuring more than learning agility and sought to develop much by developing an instrument that specifically measures observable behaviors. By measuring observables, it allows for untrained observers to assess an individual without a need for deep understanding of the underlying theoretical framework, yet maintaining the ability to influence performance and long-term potential. The text also offers robust recommendations for integration of learning agility in training, orientation, and induction programs. It also details activities for performance management and development, integration within succession planning, and organizational development interventions.

Organizational Support to Learning Agility

Additionally, support to learning agility at an organizational level is a critical factor in how quickly and effectively learning agility is developed at an individual level. Arun Pradhan is a practitioner in the field of learning and development, as well as the creator of the LEARN2LEARN application.¹⁰⁵ Pradhan's works integrate theory and practice to allow individuals and organizations learn and grow.¹⁰⁶ His application focuses on many of the continuities with the previously discussed learning agility authors: learning mindset, people agility, learning from failure, reflection and behavioral practices to enhance learning agility, experiential learning, people agility, inquisitiveness, reflection, and more.¹⁰⁷ It also covers areas of focus and attention, memory, cognitive processes, and sense-making.¹⁰⁸

In 2018, Pradhan published "Learning Agility: Building Learning Organizations" in Learning Solutions Magazine, where he posed an innovative framework that synthesized key elements for organizational support to developing individual learning agility.¹⁰⁹ As illustrated in Appendix E, these elements are: leadership and vision for learning agile workers; campaigns and communication; measurement, analytics, and

¹⁰⁵ Arun Pradhan, "Learning Agility: Building Learning Organizations," *Learning Solutions Magazine*, 2018, accessed November 04, 2018, https://www.learningsolution smag.com/articles/learning-agility-building-learning-organizations.

¹⁰⁶ Ibid.

¹⁰⁷ Your Incredible Brain, "LEARN2LEARN," Learntolearnapp.com, 2018, accessed November 4, 2018, http://www.learn2learnapp.com/.

¹⁰⁸ Ibid.

¹⁰⁹ Pradhan, "Learning Agility: Building Learning Organizations."

recognition; stretch projects and experimentation; and diverse teams with collaboration and knowledge sharing.¹¹⁰ Together, these elements define the vision, culture, systems, and processes to support the development of learning agility within an organization. If stripped of learning agility elements, it would look very similar to an organizational change model. However, due to the psycho-social contextual aspects of learning and developing learning agility, an organization's support, or lack thereof, is directly related to the enhancement of learning agility. Although the framework is a newer element within the learning agility sphere, it appears that this model offers a useful tool for leaders and organizations to understand their role in developing learning agile workers. While not specifically selected as a frame for analysis within this paper, future research could evaluate how organizational support to learning agility can enhance leader development within the operational and institutional development domains across the U.S. Army.

Evaluation

For the purposes of continued qualitative analysis within this research, it is necessary to proceed with a clear definition of learning agility and its dimensions. This section will address the continuities and most notable differences. After careful consideration of the stated criticisms and potential limitations that may be present with using a broader approach to learning agility, it is deemed that the Korn and Ferry 5 factors and 27 dimensions are most-appropriate for analyzing the Maneuver Captains Career Course. Some criticize Korn and Ferry for lumping in elements of leadership and

¹¹⁰ Pradhan, "Learning Agility: Building Learning Organizations."

personality traits.¹¹¹ However, Korn and Ferry explicitly embrace that for an individual to be most learning agile, they must achieve the right balance across all of these factors and dimensions. Later, DeMeuse, Dali, and Hallenbeck also argued for a measure on "psychological constructs that predict learning agility," and argued that learning agility is more of a "meta-competency" that must be present to develop other competencies.¹¹² They argued that a learning agility instrument should focus on the impact of pastexperience, self-awareness, and the ability to handle complexity.¹¹³

For example, while Presence can be argued as being tangentially related to learning agility, projecting confidence and poise enhances one's ability to remain in a challenging situation and inspire others to completion, thus allowing lessons to be learned that would otherwise be lost.¹¹⁴ Similarly, Korn and Ferry pose that these elements are critical to learning agility given that experiential learning is largely dependent on "socially contextual elements."¹¹⁵

Furthermore, the literature review exposed many continuities among learning agility theories. All researchers appear to agree that learning agility is measurable, can be developed, and is useful for selection of future leaders. Similarly, each of the competing

¹¹³ Ibid.

¹¹⁴ Swisher et al., FYI for Learning Agility: Second Edition, 225.

¹¹⁵ De Meuse, Dai, and Hallenbeck, "Learning Agility: A Construct Whose Time Has Come," 119.

¹¹¹ Hoff and Burke, *Learning Agility: The Key to Leader Potential*, 21.

¹¹² Kenneth De Meuse, Guangrong Dai, and George Hallenbeck, "Learning Agility: A Construct Whose Time Has Come," *Consulting Psychology Journal: Practice and Research* 62, no. 2 (2010): 119.

instruments demonstrate rigorous analysis of the construct for validity and reliability, with similar findings following thousands of samples. Although it is not the intention of this author to recommend an assessment for use by the military, the continued validity and reliability assessments provide reinforcement of learning agility as a distinct and measurable construct.

Close analysis of the Burke nine dimensions compared with the Korn and Ferry 5 factors of learning agility elucidate more similarities than differences. Both are deeply rooted in experiential learning, adult development, and social-industrial psychology. Both were rigorously tested for reliability, validity, and other empirical analysis metrics across thousands of samples and are being used within corporate settings.

Ultimately, as of publication, the literature supporting the Korn and Ferry 5 factors and 27 dimensions offer the most breadth and depth for evaluating and describing the elements of learning agility within a leader development environment like the Maneuver Captains Career Course. More specifically, each dimension goes beyond definition and offers indicators of skill, less skill, and overuse of the skill, and provides lengthy lists of developmental activities to develop an individual within each dimension.¹¹⁶ Although the Burke Learning Agility Inventory may offer more depth indicators within unpublished copyrighted material, the Korn and Ferry literature offers the greatest detail for use in a qualitative analysis of the MCCC, as well as specificity of developmental activities across the dimensions.

¹¹⁶ Swisher et al., FYI for Learning Agility: Second Edition, 2.

Similarly, despite the appearance that Korn and Ferry are measuring a broader version of learning agility, this is acceptable because these elements are complementary to the current Army leader development system and the Army Leadership Requirements Model. Where it expands beyond the more limited scope offered by Burke, there is significant overlap with the developmental activities already offered within the Leader Development Improvement Guide. This is likely to enhance common understanding and the ease of incorporation within existing structures.

Limitations of Learning Agility

Although learning agility has clear advantages, it has limitations as well. Hallenbeck explores the misconception that learning agile individuals are the panaceas of all problems.¹¹⁷ Learning agile leaders are likely to flourish in a first-time complex environment in unchartered territory, but are less useful when dealing with problems that must follow a clear path that necessitates technical expertise.¹¹⁸ Similarly, Korn and Ferry pose that learning agility is about appropriate balance of the skills and behaviors associated with each factor. After describing each skill and its importance, they offer indicators of less skilled workers, indicators of overuse of a skill.¹¹⁹

Furthermore, there are ethical implications associated with measuring learning agility as well. Many theorists and consulting firms offer learning agility solutions for

¹¹⁷ George Hallenbeck, *Learning Agility: Unlock the Lessons of Experience* (Greensboro: Center for Creative Leadership, 2016), 32.

¹¹⁸ Ibid.

¹¹⁹ Swisher et al., FYI for Learning Agility: Second Edition, 33.

talent management purposes. However, without further study of how these assessments are balanced across demographics, it has potential limitations for use in selection and promotions. Instead, it is the belief of the author that learning agility instruments and their developmental activities are best used for professional and personal development purposes, especially when guided by leaders, counselors, and coaches.

Literature Review Summary

In summation, the construct of learning agility represents the synthesis of a myriad of theoretical concepts that are instrumental to preparing and developing future leaders for complex environments. A review of the most relevant literature further reinforces the significance of, need for, and future benefits to be garnered from studying learning agility within the context of the Maneuver Captains Career Course. This review allowed for the selection of the most appropriately matched criteria for completing an analysis of the MCCC program, as well as critical considerations for future work.

CHAPTER 3

RESEARCH METHODOLOGY

This study will use descriptive research and the grounded theories approaches to achieve a qualitative analysis of how the Army currently develops learning agility within the broader framework of leader development. Specifically, this study will use the Maneuver Captains Career Course, as a part of the Armor and Infantry Officer's professional military education program, to analyze an organization that intentionally seeks to develop mental agility through efforts at the institutional, operational, and individual level. Using the Korn and Ferry Five Factors: Self-Awareness, Mental Agility, People Agility, Change Agility, and Results Agility, this study will qualitatively assess the curriculum and organizational efforts that contribute to the development of learning agility.¹²⁰ Data collection techniques consisted of open source document analysis from the MCCC and the Combined Arms Center. The primary documents utilized are the Mission Command Training and Education Plan: FY 18-20 (MCTEP) and the August 2018 version of the MCCC Task Workbook. The Army Learning Areas and the General Learning Outcomes within the MCTEP provided a broad framework for understanding institutional support to learning agility. The MCTEP demonstrates how the tasks and outcomes trained at MCCC were nested within the broader institutional vision for enhancing adaptability and agility. The MCCC Task Workbook serves as the crosswalk to demonstrate back to the Combined Arms Center how these objectives are met within the course. Where necessary, course material was collected from MCCC to validate the

¹²⁰ Korn Ferry, "viaEDGE Technical Report," 21.

linkages between the lesson, and the perceived impact on learning agility. All tasks were reviewed for their contributions towards developing learning agility and a refined list of tasks was developed for further analysis (see Appendix C). Finally, this list of tasks was evaluated to refine the developmental tasks that most enhanced learning agility. This analysis will demonstrate what the Army does, often with broader intentions, to contribute to learning agility. This will further demonstrate gaps and opportunities for additional development of learning agility competencies to enhance leader development. This study will not include personal interviews, surveys, focus groups, observations or other means of human research.

CHAPTER 4

ANALYSIS

In chapter 2, a review of the literature and field of learning agility yielded a framework for analyzing how the Maneuver Captains Career Course develops learning agility. This chapter will seek to answer two main questions. First, how are individual learning agility behaviors and competencies are taught in Maneuver Captains Career Course? This will be accomplished by analyzing the most developmental activities at the MCCC, within the broader Army Learning Areas and General Learning Outcomes, against the Five Factors of Learning Agility. Second, this chapter will seek to answer how the Maneuver Captains Career Course as an institution supports learning agility. The answers to these questions will greatly enhance future understanding of learning agility as it applies to leader development at the Maneuver Captains Career Course.

In order to scope the analysis appropriately, this section focuses on the developmental activities that provide the greatest opportunities to develop learning agility. The MCCC uses multiple tools to internally track and report all individual and collective training tasks trained in the program. The most comprehensive list at the time was the August 2018 version of the MCCC Task Workbook. This was used to initially screen every task trained at the MCCC for its impact on learning agility. This list was refined in Appendix B to show the multitude of tasks trained at the MCCC that are significant to enhancing learning agility. Each item was selected for directly enhancing one or more learning agility factor. These were then further refined to select the events that most enhance learning agility.

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Before moving on from the less related tasks, it is important to give due credit to the value of classroom discussion of even seemingly tangentially related topics. For example, while learning to plan obstacles and employ indirect fires, the classroom discussion of the tasks almost always ties back to the mission variables (Mission, Enemy, Time, Troops, Terrain, and Civil Considerations) and the Operational Variables (Political, Military, Economic, Social, Infrastructure, Information, Physical Environment, and Time). These discussions bear out the second and third order effects of their employment and further enhance the speed and flexibility of apply previous knowledge and adapting it to new experiences. However, the tasks in this section are selected for having the greatest impact and potential to enhance learning agility.

Setting the Conditions: Institutional Support for Learning Agility

From the Chief of Staff of the Army, to the Small Group Leaders in the MCCC classrooms, the Army's vision and strategy are in direct alignment with enhancing learning agility, albeit in slightly different terms. This section will outline the Army's strategy and system for developing leaders in as much as it supports learning agility and how it connects to the MCCC curriculum. For clarity of language, it is important to note that in many cases, the Army broadly defines most of its learning experiences and processes as leader development. Training, education, and experience are instrumental in developing leaders that are capable of conducting mission command. This link becomes more and more apparent the deeper one looks at how the Army operationalizes leader development from a strategy to the user level. Furthermore, this information is critical to understanding how the broader institution explicitly sets the conditions for enhancing learning agility through leader development.

The Army Leader Development Strategy (ALDS) provides the strategic vision, and the Army's operational approach to leader development, to synchronize the leader development stakeholders across the Army. The ALDS outlines seven imperatives to guide the operationalization of the strategy:

• Commitment to the Army Profession, lifelong learning, and development.

• Balance the Army's commitment to the training, education, and experience components of leader development.

• Manage military and civilian talent to benefit both the institution and the individual.

• Select and develop leaders with positive leader attributes and proficiency in core leadership competencies for responsibility at higher levels.

• Prepare adaptive and creative leaders capable of operating within the complexity of the operational environment and the entire range of military operations.

• Embed Mission Command principles in leader development.

• Value a broad range of leader experiences and developmental opportunities.¹²¹

The Mission Command Training and Education Plan (MCTEP) operationalizes

the Army's Mission Command Vision and Strategy across cohorts and grades.¹²² It

serves to horizontally and vertically nest the operational approach to the development of

the knowledge, skills, and attributes required of leaders at echelon.¹²³ The MCTEP

establishes Army Learning Areas (ALAs) to define clear points of emphasis for training,

¹²¹ HQDA, *The Army Leader Development Strategy*, 10.

¹²² HQDA, Mission Command Training and Education Plan FY18-20, vi.

¹²³ Ibid.

education, and development across the institutional, operational, and self-development domains.¹²⁴

The Army Learning Areas are the Army Profession and Leadership, Mission Command, the Human Dimension, and Professional Competence.¹²⁵ Within these ALAs, the U.S. Army established General Learning Outcomes (GLOs) to further refine the broad requirements within each learning area.¹²⁶ For example, within the Human Dimension ALA, GLO 7 requires "Soldiers and Army Civilians demonstrate capacity in critical thinking. This GLO includes Applied Critical Thinking and Groupthink Mitigation, Strategic Thinking, Problem Solving, and Decision Making."¹²⁷ For reference, all fourteen GLOs are available in Appendix A. These GLOs are used in conjunction with the Mission Command Individual Critical Task List (MC ICTL) to clearly define the key knowledge, skills, and abilities that must be developed through the lifecycle of a Soldiers Career.¹²⁸ These holistic requirements are available for reference in Appendix B: Army Learning Areas Desired Knowledge Levels by Cohort.

Within Training and Doctrine Command (TRADOC), major proponents lead a Center of Excellence that is responsible for training and force modernization across the DOTMLPF-P spectrum. To understand the broader applicability of analyzing the

¹²⁵ Ibid.

- ¹²⁶ Ibid., 7.
- ¹²⁷ Ibid., 8.
- ¹²⁸ Ibid., 4.

¹²⁴ HQDA, Mission Command Training and Education Plan FY18-20, 3.

Maneuver Captains Career (MCCC) it is useful to understand where the course fits within the broader Army Officer Professional Development System. The Army stratifies its professional development multiple ways along the lifecycle of a Soldier's career. For the officer corps, officers are cohorted by the year they access into the Army as Second Lieutenants. While some specialized fields, such as lawyers and doctors, may access later, they then follow a similar cohorting by branch and year group. These cohorts allow the Army to ensure that Soldiers generally receive parity in professional education, key developmental assignments, and broadening opportunities.

Given the various needs by field and grade, the Army has a litany of governing regulations and branch specific guidance that establish the vision, objectives, and outcomes for each branch. For Officers, many of these branch specific requirements are further outlined in DA PAM 600-3, Commissioned Officer Professional Development and Career Management. Each of the schools uses the ALAs, GLOs, and MC ICTL to remain focused on the universal standards for the force, while maintaining the ability to influence specific requirements based on changes in the operational environment and branch needs. The MCCC has the ultimate responsibility to incorporate all of these requirements and outcomes in its curriculum.

In summation, although the Maneuver Captains Career Course is where the rubber meets the road for developing leaders and enhancing learning agility for Combat Arms Officers, the vision, strategy, and operational approach are designed and crafted by the greater institutional Army and Branch requirements. The next section will focus on how the Maneuver Captains Career Course nests within the strategic guidance to set the conditions for enhancing learning agility and leader development for maneuver leaders.

Analysis of the Maneuver Captains Career Course

This section will focus specifically on how individual learning agility behaviors and competencies are developed in the Maneuver Captains Career Course. Although there are countless developmental experiences throughout the course, this analysis will highlight the experiences that most greatly enhance learning agility. After surveying the course curriculum, lesson plans, and evaluation criteria for the 22-week program, the most developmental activities are found throughout the execution of the operations process at Company and Battalion levels, and simulated operations in the Close Combat Tactical Trainer. A third powerfully developmental opportunity is referenced in the Maneuver Self-Study Program (MSSP) developed by the Maneuver Center of Excellence for all maneuver leaders.

Learning Agility and the Operations Process

Learning agility is greatly enhanced through the execution of multiple iterations of the operations process at the Maneuver Captains Career Course. The operations process is how the Army plans, prepares, executes, and continuously assess in order accomplish assigned objectives and missions. To achieve this, commanders and staffs use deliberate problem-solving processes to understand, plan for, and supervise the execution of operations. At the Battalion and above level, organizations utilize the Military Decision-Making Process (MDMP). At the Company and below levels, leaders use Troop Leading Procedures. At the MCCC, leaders receive training on both and practice them in great detail throughout the Company and Battalion Phases. The key steps of each process and their parallel timelines are evident in figure 4 below. Given the significance of their contributions to enhancing learning agility across all five factors, and their interconnectedness within the operations process, both are discussed together.



Figure 4. Parallel Sequencing of Planning Processes

Source: Headquarters, Department of the Army, Field Manual 6-0, *Commander and Staff Organization and Operations* (Washington, DC: U.S. Government Publishing Office. June 2016), 10-2.

While self-awareness is enhanced through participation in the operations process at an individual and staff level, it also has opportunities for further development. The subject content serves as an indicator to trigger the need for growth in the knowledge, skills, and abilities required to conduct the operations process. However, without explicit attention to the area, some of Captains may not yet recognize the significance of their deficits beyond an academic assessment. Additionally, self-awareness could be further enabled at the end of the exercise with a guided self-assessment, more explicit peer feedback, and self-reflection on their role in planning and staff processes. Discussion of effective and ineffective behaviors, communication styles, and undiscussed complexities can inspire individuals and the group to improve their processes and approach in future uncertain situations.

Arguably the greatest factor influenced during the operations process is Mental Agility. The Mission Analysis and Course of Action Development phases require a commander and staffs to leverage their collective skills, knowledge, and attributes in order to solve a problem. In planning for offense, defense, and stability tasks, Army doctrine provides countless frameworks to help develop situational understanding and simplify complexity. Commanders consider the mission variables of (Mission, Enemy, Time, Troops, Terrain, and Civil Considerations) and the Operational Variables (Political, Military, Economic, Social, Infrastructure, Information, Physical Environment, and Time). These considerations, and their effects on the mission, are developed at length in the classroom, applied within Tactical Decision-making Exercises, and experienced in Training Exercises Without Troops (TEWTs) on the actual terrain. They develop detailed staff estimates with major conclusions, recommendations, facts, assumptions relevant to the Commanders decision-making. Equally important, they describe limitations and constraints, identify gaps in capabilities, and propose recommendations to mitigate risk. The mission analysis process helps ingrain in soldiers the need to assess what they think they know, and where necessary, quickly relearn new information, techniques, and

approaches to be successful. As this analysis takes place before the start of planning each mission, it greatly enhances the mental and learning agility of each student.

Another learning agility factor most developed in the operations process is People Agility. MDMP and TLPs are collaborative processes that emphasize critical and creative thinking. Group dynamics bring out incredibly valuable lessons of mitigating group think and managing conflict. Leaders are required to evaluate the information they are presented with and refine their understanding and response to the environment or situation. Frequently, this creates conflicting viewpoints that must be worked through for the process to continue. In a time-constrained environment, the operations process creates opportunities for teamwork and positive follower behaviors. The various scenarios and group dynamics require flexibility and behavioral complexity from each Captain.

Additionally, endeavoring to solve complex problems through the operations process also enhances Change Agility. While this is not a primary focus during the finite periods of the missions within the operations order, the operations process emphasizes leader actions when the plan is failing and course corrections are required. Similarly, the cyclical nature of the operations process drives constant assessment of the planning and execution, with the implicit assumption that Commanders and staffs are continuously improving the plans and processes.

Furthermore, multiple repetitions of operations process at MCCC greatly enhances Results Agility. Combat arms officers are expected to get results, and this is deeply engrained in the training and assessment culture at MCCC. Company and Battalion level operations orders are critical tasks that must be completed to a high standard to continue. These orders are key developmental events for each Captain- a demonstration of their personal knowledge, technical and tactical competence, and decision-making ability in a time constrained environment with limited resources. The time constraints placed on the Captains challenge them to complete all the tasks associated with a thorough and detailed plan. Just as in combat, they must quickly evaluate information, make assumptions, assume and mitigate risk, and make decisions. Their presence throughout the process is critical to inspiring subordinates' action and confidence. They are expected to execute within doctrine, while also thinking outside of the box to leverage external enablers or resources like non-governmental agencies or information collection assets to accomplish the mission.

A review of the five factors of learning agility against the operations process clearly demonstrated MDMP and the TLPs create a perfect laboratory to enhance all factors of learning agility at the Maneuver Captains Career Course. The depth of analysis and application of complex conceptual frameworks in a group setting creates an incredible environment for rapidly developing learning agility. With minor modifications to how it trains the operations process, the MCCC can further accelerate and maximize the development of learning agility for its maneuver leaders.

Simulations: The Close Combat Tactical Trainer

Captains at the MCCC utilize the Close Combat Tactical Trainer (CCTT) and the Joint Conflict and Tactical Simulation (JCATS) to execute virtual operations on networked systems to practice mounted maneuver and mission command. While these simulators are very different in appearance and approach, they both create an environment for leaders to apply and develop an abundance of their skills in leading maneuver formations with speed and flexibility. Beginning with the CCTT, each simulator replicates the ergonomics of the communications equipment and fire-control systems within the Abrams Main Battle Tank, Bradley Fighting Vehicle, and the Reconfigurable Vehicle System (to replicate multiple other vehicles as required). Inside the vehicle simulator, each Captain replicates the roles of the crew, gaining valuable technical experience and understanding of the requirements of the Soldiers they will lead. However, the most development occurs in the Tank or Vehicle Commander seat. In this role, the Captain must incorporate everything they learned previous with speed and flexibility to match the dynamics of the situation. The CCTT simulations exercises greatly enhance learning agility across all five factors.

The CCTT greatly enhances self-awareness for a leader across multiple areas. Foremost, this exercise demands each Captain to utilize all previously learned skills at a rapid pace. They must use their technical knowledge of the vehicles fire control and communications systems, while developing understanding of the tactical situation, making decisions and communicating them with the crew and adjacent units simultaneously. Although only virtual battle, these simulators partially replicate many of the emotional responses of commanding Soldiers in battle (excitement, accelerated heartrate, etc.). Moreover, knowledge gaps or weaknesses are immediately visible to the leader and reinforced later in the after-action review. Soldiers generally recognize these areas and make the adjustments while operating.

Similarly, Mental Agility is greatly enhanced in the CCTT. Inside the simulated vehicle, the Captains are rapidly transitioning through cognitive processes to account for effects of terrain, weather, conventional and unconventional enemy forces. Prior to execution, staff groups seek to understand the situation through intelligence preparation

of the battlefield. Once in the simulator, the Captains must evaluate the situation and determine if the indicators they are seeing validate their assumptions or represent a change in the environment. Leaders must rapidly decide how to respond to these changes and communicate effectively across their formation.

The CCTT simulations enhance people agility in multiples ways. Leading a company attack requires situational understanding and trusting the judgment of your subordinates. Leaders must be able to read their people and be open to their recommendations. They must be able to communicate their understanding of complex situations clearly and concisely over mission command systems to higher and subordinate commands.

Additionally, the CCTT contributes the development of Results Agility as well. There are a finite number of opportunities for a maneuver leader to develop their presence in leading a maneuver formation in a combat environment. Operations orders briefings to their peers before the mission allow each Captain to practice briefing in a manner that inspires others to accomplish the mission, a critical skill for actually leading troops in combat. The simulation also provides the opportunity to develop command presence and confidence while fighting.

Conversely, the elements of Change Agility are not directly developed in the CCTT simulations exercises. However, this is unnecessary. Given the stated objectives of the exercise, and the short duration missions it is intended to replicate, this is appropriate and merits no modification.

Transitioning to the other simulator used at MCCC, Captains utilize the Joint Conflict and Tactical Simulation (JCATS) to execute their Battalion level plans against a dynamic enemy in a virtual environment. JCATS is similar to CCTT in that it is a simulator that allows commanders and staffs to exercise mission command in executing their plans against an enemy force. The system provides simulated battle damage assessments for both sides and allows leaders to learn valuable lessons concerning tactical employment, sustainment, and mission command processes. JCATS has the potential to demonstrate the convergence of countless operational and mission variables in time, and therefore broadly enhances mental agility and elements of self-awareness as discussed with CCTT. When used in concert with the operations process to further respond to a dynamic scenario, it has the potential to enhance people agility and results agility (as discussed at length in the operations process section above). Like CCTT, Change Agility is not, nor should it be, developed within the context of the simulation. Accordingly, JCATS provides most of the same benefits of the CCTT, but without the tactical feel of a combat vehicle simulator.

Ultimately, multiple repetitions on the simulated battlefield in CCTT and JCATS are two of the most developmental opportunities for enhancing learning agility at MCCC. They require maneuver leaders to broadly scan and assess complex environments, selectively apply lessons from the classroom and experience, and make decisions in a time constrained environment. Multiple opportunities to fight and lead in simulated combat yield countless lessons that are discussed and dissected within after-action reviews. Although these are incredibly developmental already, there remain further opportunities to enhance learning agility and leader development in these training events. These opportunities are discussed further in chapter 5.

The Maneuver Self-Study Program

After initially reviewing the course curriculum at MCCC, it appeared that there was a significant opportunity to better synchronize the course with the self-development domain. However, further research beyond MCCC to the broader Maneuver Center of Excellence (MCoE) demonstrated that the MCoE has developed a robust Maneuver Self-Study Program (MSSP) that is complementary to the MCCC curriculum and directly supports the Army Leader Development Strategy and developmental framework within FM 6-22. As a program that seeks to enable a leader's development across the leadership requirements model, the MSSP incorporates elements that support the enhancement of every dimension within the learning agility factors. Adequately documenting how every dimension is developed through the MSSP would largely replicate FM 6-22 and the Army Leader Development Strategy. Given this, the examples below will selectively document how specific activities within the MSSP enhance learning agility. It is also important to note that the level of development in each area vary based upon the decisions of the individual and potentially their supervisors and mentors. Ultimately, the Maneuver Self-Study Program is one of the best examples of a community of practice enhancing learning agility by enabling self-study of technical and conceptual competencies.

The Maneuver Self-Study Program has the potential to greatly enhance selfawareness. The MSSP site encourages and enables maneuver leaders to start or remain on a path of continuous learning by demonstrating the value that continuous learning provides to the profession. The Branch Culture and Heritage section places emphasis on the importance of warrior scholars in the Profession of Arms for military operations to succeed in a complex world.¹²⁹ The site provides a curated collection of dozens of the most commonly cited books, professional journals, and articles for maneuver leaders. Each section also includes reflective questions that allow the leader to further internalize lessons and make meaning from their new knowledge. The program's emphasis on understanding the effects of war prepare leaders for emotional management when faced with chaotic and unfamiliar conditions of conflict. The topics covered go well beyond tactics and small unit leadership, but provide depth and breadth for a leader to better see learning opportunities and select areas they most seek to improve in. This depth and breadth of topic areas also serves to inspire inquisitiveness as leaders discover new perspective or methods to learn about a topic. The program provides multiple means of discovery, from recorded podcasts and videos, to recommended books and articles, and even military gaming applications.

The MSSP also greatly enhances mental agility for maneuver leaders. The depth and breadth of the consolidated resources enable leaders to survey a wide range of topics and then dig into their interest areas. The materials allow leaders to see the continuities of conflict mixed with the changing situational context that makes each battle unique. The program recommends leaders study doctrinal manuals, lessons learned publications, professional journals, and online discussion forums, to become well-versed in the complexities of tactical operations and their implications. The program also recommends dozens of books on branch history, combat operations, and deeply understanding regional

¹²⁹ U.S. Army Maneuver Center of Excellence, "Maneuver Self Study Program," Learning Adaptation and Innovation, accessed February 18, 2019, http://www.ben ning.army.mil/mssp/Learning%20Adaptation.

threats within their cultural contexts. Ultimately, the program seeks to help leaders to accelerate their learning and making connections when faced with new or uncertain conditions.

Similarly, the MSSP contributes to the development of people agility in many ways. The MSSP encourages maneuver officers to take the frameworks learned from doctrine in the classrooms and apply it to historical leaders. For example, the site's consolidation of the Foreign Policy Research Institute's podcasts analyzing the Great Captains of U.S. military history provide a richness of context to help evaluate and reflect on applied leadership. The recommended reading lists also encourage leaders to understand the psychological and social aspects associated with leading Soldiers in combat. This further enhances their behavioral complexity when working with others and helps them apply these lessons while leading Soldiers in the future.

The MSSP also sets the conditions for enhancing change agility. With its emphasis on the importance of history to professional development, the MSSP provides countless examples to serve as a broad foundation for understanding organizational and institutional inflection points that required adaptation and innovation. The "Learning, Adaptation, and Innovation" elements of the program highlights that "war audits how well military institutions and states prepare during periods of relative peace, and how their force planning processes succeed in capturing emerging technologies and innovative new methods."¹³⁰ The section also encourages leaders to consider the challenges of

¹³⁰ U.S. Army Maneuver Center of Excellence, "Maneuver Self Study Program."

leading change and how to foster a culture of innovation. Encouraging exploration of these behaviors and concepts greatly enhances a junior leader's change agility.

Furthermore, the MSSP has the potential to greatly enhance maneuver leaders' results agility. Immersion in a branch culture and lineage of accomplishing the mission against all odds, the MSSP seeks to inspire its leaders to prepare themselves for any situation. The study of historical examples of leadership failures and successes across various campaigns and battles serve to reinforce an individual's drive to get results. Deliberate study of the Great Captains within U.S. military history show examples of how leaders embodied presence, characteristics, and competencies desired of our leaders today.

Finally, although the MSSP has great potential to enhance learning agility, there are some inherent weaknesses with the program in its current state. While the structure and language of program remains available to the maneuver community online, it appears that the site is no longer monitored or developed. Links to some of the most useful resources in Warrior University or social media sites are no longer active, and thus lose the potential for interaction and the exchange of new and contemporary ideas. It also appears that there is not a strong link between the program and the resident Professional Military Education Courses (such as the Maneuver Captains Career Course or the Armor / Infantry Basic Officer Leader Courses). It is also unknown how widely these resources are utilized in leader development within the force. Still, the program serves as a great example of how each branch can develop and consolidate a professional library to accelerate exposure to many of the most relevant resources within the field.

Summary of Findings and Analysis

After deeply analyzing the components of the most developmental activities at MCCC, it is clear that the MCCC greatly enhances the learning agility of its maneuver leaders. Even before a maneuver leader arrives at MCCC, they have greatly benefited from the institutional and operational efforts to support learning agility in the name of enhancing adaptability to execute mission command. From Basic Officer Leader Courses, to home station training exercises and Combat Training Center rotations, the U.S. Army intentionally develops agility and adaptability within its leaders. Similarly, the volume of technical and conceptual information discussed and applied rapidly in the operations process significantly contributes to learning agility across all dimensions and factors. This builds to practical application in a virtual environment on simulated combat vehicles that replicate the speed and complexity of decision-making in combat. It appears certain that the MCCC greatly enhances learning agility. However, it also appears possible that the MCCC and MCoE can further enhance learning agility and adaptability for maneuver leaders by implementing with minor modifications. These recommendations are further addressed in chapter 5.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

The data presented demonstrates that the MCCC does an exceptional job of balancing countless institutional and branch specific priorities to develop agile and adaptive officers to lead Soldiers in combat. It appears that the U.S. Army and the MCoE have developed one of the most robust and defined development models through the lifecycle of a professional career that seeks constant improvement, nested through the operational, institutional, and self-development domains. The process and approach enhance learning agility across all factors and dimensions. However, given the life and death consequences of each maneuver leaders' missions, and their broader implications for national security, it is essential that the MCCC seize on every opportunity to maximize learning agility and adaptability.

Based on the analysis in Chapter 4, five major conclusions were reached. First, continued research towards understanding learning agility offers a valuable framework for the Army to assess the comprehensiveness of its leader development programs. Second, the MCCC and the U.S. Army serve as model organizations that greatly enhance agility and adaptability through intentional training, education, and experience-based learning. Third, it appears there is a lack of understanding of the depth of available resources for leaders and commanders to fulfill their responsibilities to shape leader development programs. Fourth, it appears that there is insufficient time available to understand self-development doctrine, tools, and resources to maximize learning throughout all developmental experiences. Finally, there are insufficient periods of reflection following major developmental events (Iterations of the Operations Process,

CCTT, etc) to maximize learning opportunities and their application to future events. This Chapter will address these conclusions, propose recommendations, and discuss opportunities for future studies to optimize leader development and adaptability within the MCCC.

Learning Agility and Its Usefulness for the Army

Foremost, learning agility is a concept that merits continued monitoring by the U.S. Army to ensure the comprehensiveness of its' programs when posed with new opportunities. While most of the learning agility concepts are familiar to the Army, ongoing research into the factors and dimensions align well with the Army Human Dimension and efforts to refine assessment and feedback tools. This analysis also demonstrates that Army leader development concepts are keeping pace with developments in academia and industry. Similarly, the literature reviewed earlier demonstrated the value of learning agility's in developing adaptability. Given this value, some may pose its adoption as a new framework. However, analysis of the current U.S. Army doctrine and strategies adequately address the need to develop every dimension and factor in order to achieve the stated leader development outcomes. More specifically, the volumes of documents that describe how the U.S. Army operationalizes leader development demonstrate countless linkages to the learning agility behaviors and skills that best enhance adaptability and performance. Instead, it appears that the learning agility factors and dimensions are best utilized as a complimentary assessment framework for evaluating the gaps and opportunities within the MCCC and U.S. Army's approach to developing adaptability and agility. However, without appropriately prioritizing the time to establish a baseline knowledge of individual roles and resources at echelon, the Army is unlikely to close these opportunity gaps. These gaps, and recommendations to close them, are discussed individually below.

MCCC: A Model Program for An Enhancing Learning Agility

Foremost, the data shows that the MCCC and the U.S. Army are great examples of organizations that go to great lengths to enhance agility and adaptability through intentional training, education, and experience-based learning. The vision, strategy, and operational approach establish a clear path to developing leaders capable of rapidly developing understanding and making decisions in complex unfamiliar environments. The cumulative effect of multiple repetitions of the Military Decision-Making Process and the Troop Leading Procedures are especially valuable in enhancing multiple factors across the learning agility domain. These iterative processes broadly expose leaders to countless operational variables that must be rapidly analyzed for their importance and relevance to decision-making in the moment. When coupled with taking these plans into simulators, the effect is multiplied significantly. Aspects of the plan come to life and risks assumed become reality. The leader must then apply what they learned and assessed, and flexibly respond to a changing situation. It is apparent that the years of strengthening the linkages between the classroom and practice, refined by feedback from the operational Army, has resulted in a program that well-prepares Soldiers to lead in combat.

Providing Feedback and Developing Others: An Army Wide Opportunity

One of the greatest areas for improvement at the MCCC, and the likely the U.S. Army, is how they prepare their leaders to Develop Others. Given the importance of the role a leader can play in leveraging learning agility behaviors to shape a Soldiers
adaptability, it is important to examine the linkages with the leader competency Develops Others. Before posing opportunities to enhance learning agility at the MCCC, it is necessary to step back and acknowledge a challenge for the U.S. Army as a whole. In the Army's audit of its leader development programs, the Center for Army Leadership Annual Survey of Army Leadership (CASAL), a concerning pattern continues to emerge that demonstrates leaders struggle with the specific behaviors within the Develops Others competency.

In the 2016 CASAL survey, Develops Others was again the lowest rated leader competency- with only 61% of respondents reporting favorably on their direct supervisor.¹³¹ When asked to specifically assess a list of developmental behaviors or practices, most of the responses actually referred to leaders being approachable or providing encouragement.¹³² Instead, less than one-third of respondents reported leaders who provided coaching on skill development, future assignment preparation, or referred them to developmental resources.¹³³ Furthermore, less than half created developmental opportunities through delegation of tasks or attention to challenging assignments.¹³⁴ Similarly, less than half of leaders surveyed stated their leaders provided feedback

¹³⁴ Ibid.

¹³¹ Ryan Riley, Katelyn Cavanaugh, Jon Fallesen, and Rachell Jones, 2016 Center for Army Leadership Annual Survey of Army Leadership (CASAL): Military Leader Findings (Leavenworth: Cubic Applications, Inc., 2017), 96.

¹³² Ibid.

¹³³ Ibid.

(formal or informal counseling).¹³⁵ Of those who did receive formal counseling, only about half of respondents believed "the feedback [they] received in their last performance counseling was useful in helping [them] set performance goals for improvement."¹³⁶

Although there are likely many causes for these responses, including a time constrained operational environment, it is likely that this is worsened by a lack of fluency with the resources that enable leader development. As these behaviors are most impactful for enhancing learning agility and developing adaptability, this is concerning beyond the MCCC. However, deeper analysis of the MCCC provides a useful tool for understanding how these recommendations are applicable to the greater Army.

Leader Development Doctrine and Resources at the MCCC

After reviewing the MCCC curriculum, it appeared that there is an opportunity and a need, to expand the block of instruction on leader development doctrine and practices. The learning agility factors and Army doctrine emphasize that appropriate leader involvement in shaping a subordinates' development greatly enhances their learning agility and adaptability. Although MCCC clearly prepares leaders for the challenges they will face leading in a complex environment, it appears it assumes some risk in the realm of preparing those same leaders to develop agile and adaptive leaders within their formations.

¹³⁵ Riley et al., 2016 Center for Army Leadership Annual Survey of Army Leadership (CASAL): Military Leader Findings, 96.

¹³⁶ Ibid.

Based on the Mission Command Training and Education Program metrics, leadership competencies and attributes should be at the analyze and apply level for Captains.¹³⁷ In each of the Army's Captains Career Courses, there is a three-hour block of instruction on leader development doctrine and programs to achieve this. Although there are teaching points that tie back to leadership and leader development throughout the rest of the curriculum, that single time block covers the Army Profession, the Army Leadership Requirements Model, the macro-level of leader development doctrine, and resources for self-development. If the intent is to further the individual's development alone, this would be sufficient. However, given the importance Company Commanders play in operationalizing a vision for leader development at echelon, it is critical that they become masters in the resources that enable leader development to maximize future outcomes. Based on the CASAL findings, and the findings of this research, it appears that the MCCC curriculum should be modified to enhance fluency in leader development doctrine, programs, and resources.

Many recommended areas for focus in the expanded leadership development block come the U.S. Army's *Commanders Guide for Unit Leader Development*. The product provides a clear and concise guide to implementing leader development plans, recommended roles and responsibilities at echelon, and how to breathe inspiration into the program. The guide offers leader centric actions to set the conditions, provide feedback, integrate learning, and generate a generational process by creating a leader

¹³⁷ HQDA, Mission Command Training and Education Plan FY 18-20.

development legacy.¹³⁸ Once again, the behaviors and attitudes that develop the learning agility factors and dimensions are directly aligned with achieving the Army's stated desire to improve adaptability through leader development. The manual provides leaders with in-depth examples for fostering a learning environment, techniques to deliberately plan observation that promotes for beneficial feedback, and methods to continue learning through further reflection and targeted self-study.¹³⁹ While some of these topics may overlap with the Army Training Management Model, the Commander centric leadership development methodology merits its own block of instruction.

Similarly, to address the current problem with providing effective feedback in the Army, the *Leader Development Improvement Guide* should be introduced in-depth at the MCCC. Although the U.S. Army's leader development system requires leaders at all levels be fluent in the language and tools to be effective, the CASAL findings demonstrate that leaders struggle to give quality feedback.¹⁴⁰ Less than half of respondents found their performance counseling helpful for setting goals towards improvement.¹⁴¹ The CASAL acknowledges that not all feedback is formal.¹⁴² However, it found that "from two thirds to one half of leaders report their immediate superior takes

¹⁴¹ Ibid.

¹³⁸ Headquarters, Department of the Army (HQDA), *Commander's Handbook for Unit Leader Development* (Washington, DC: U.S. Government Publishing Office, July 2007), 1.

¹³⁹ Ibid.

¹⁴⁰ Riley et al., 2016 Center for Army Leadership Annual Survey of Army Leadership (CASAL): Military Leader Findings, xii.

¹⁴² Ibid.

time to talk with them about how they are doing in their work (63%), how they could improve their duty performance (53%), and how to prepare for future assignments (51%)."¹⁴³ This implies that there is a problem with providing quality feedback that enables improvement while operating. To counter a perceived problem with giving effective feedback, the U.S. Army developed *the Leader Development Improvement Guide*. The *Leader Development Improvement Guide* uses descriptions of observable behaviors in a manner that allows individuals and leaders of any skill level to easily improve themselves or help others to improve. The LDIG provides a quick guide to assess competencies, describe need areas, and provide recommended developmental activities.

Although it merits further research, the CASALs findings reference poor or absent feedback appear to indicate that most leaders are unfamiliar with the *Leader Development Improvement Guide* or its content.¹⁴⁴ While some may argue the data that feedback related problems are the result of discomfort in confronting another's weaknesses, or challenges in finding time for quality feedback, it appears more that Soldiers are not conversant with the product because it is never formally introduced to them in detail.

Therefore, it is recommended that the suite of leader development tools and resources be formally introduced and utilized at BOLC, then reinforced with a focus on Command responsibilities at the MCCC. Going further, students should apply the LDIGs content in their self-assessment, and the formation of their Individual Development Plan. It would also be extremely beneficial for maneuver leaders to conduct a practical

¹⁴³ Riley et al., 2016 Center for Army Leadership Annual Survey of Army Leadership (CASAL): Military Leader Findings, xii.

¹⁴⁴ Ibid.

application in providing feedback to others in a peer coaching environment as an additional homework assignment. Enabling leaders to better understand, assess, and provide developmental feedback will greatly enhance each of the learning agility factors and the development of adaptability.

Self-Development Domain

Similarly, the self-development domain is briefly reviewed in the MCCC curriculum, but merits further emphasis. Maneuver leaders at the MCCC have usually taken the first step towards continuing as a professional warrior, by electing to stay in beyond their initial service obligation. As a member of the Profession of Arms, leaders are expected to continuously seek self-improvement. However, as with the leader development doctrine and resources described above, the self-development resources are not discussed or applied to the level where Soldiers are best prepared to fill the gaps in their capabilities as intended.

It is recommended that the Armor and Infantry Basic Officer Leader Courses allocate appropriate time for a thorough introduction of an individual's role in their selfdevelopment. This will establish and emphasize the behaviors that maximize learning throughout all developmental experiences. This will include a more detailed introduction to the Maneuver Self-Study Program and the linkages between their institutional, operational, and self-development. While the Maneuver Self-Study Program should be optional, it must be formally introduced as a valuable resource that serves as a starting point for broadly understanding the many areas that prepare a leader to fight and win in a complex world.

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Additionally, it is recommended that MCCC further emphasize self-development at the start of program to maximize their recurring self-assessment and learning throughout the course. This block of instruction would reinforce linkages between key development experiences in professional military education and self-development. Furthermore, reinforcement of the Commanders role in shaping programs that reinforce self-development within their units will greatly enhance individual performance and long-term potential. Finally, it is recommended that the Center for Army Leadership be further resourced to support the branches as the lead integrator of guided selfdevelopment programs. This will allow the branches to further refine the specific topics that are most relevant to their warfighting function, while allowing the Center for Army Leadership to share best practices, common resources, and advertise changes in doctrine and programs. This will also help both organizations to better integrate resources like the Junior Officer Forum and branch specific organizations that support improvement within the self-development domain. Ultimately, empowering leaders to take charge of their development, will optimize the return on investment across the institutional and operational domains.

Enhancing Reflection

Additionally, to further optimize the value of the program, the MCCC should increase the periods of reflection following major developmental events (iterations of the operations process, TEWTs, CCTT, etc.) to maximize learning opportunities and their application to future events. As discussed in chapter 4, these events provide countless lessons in leadership, followership, decision-making, cognitive processes, and the list continues. The current After-Action Review that immediately follows the simulation is already robust and facilitated with video and sound recordings that are invaluable. However, each leader will take away additional information about themselves, their leadership style, and decision-making that can further enhance their preparedness for similar or unfamiliar situations.

It is recommended that leaders be required to respond to a guided reflection of their significant takeaways and assessment of their developmental needs from the event. This would not need to be graded, but could serve as one of several formal touchpoints between the MCCC curriculum and the otherwise optional Maneuver Self-Study Program. An example tailored operational reflection guide is included in Appendix F. Similarly, leaders should be encouraged in the Maneuver Self-Study Program to recommend discussions of these takeaways with their mentor(s). As a result, leaders will maximize the return on investment for the lessons learned in the classroom and applied in the simulators.

Recommendations for Further Research

Given the value that learning agility provides to preparing leaders to perform in complex environments, it would be useful to better understand how military leaders' learning agility develops over time based on experience, and the changing requirements of their increased responsibilities. A longitudinal study that assessed an individual's learning agility, and their performance over time, would likely elucidate indicators for potential that may inform selection and assessment. As this study was limited in scope to Maneuver Captains, it Similarly, if the learning agility behaviors are explicitly reinforced at the MCCC throughout the course, the study could determine the short-term and longterm impacts on adaptability. This could include a qualitative assessment of the extent that simulations and the operations process develop agility and adaptability. This may also demonstrate the degree to which learning agility can be taught, and the effectiveness of reinforcing it through time.¹⁴⁵ Similarly, it appears the Army would benefit from an assessment of the utilization and effectiveness of specific leader development tools and programs. From this, it would enable a better understanding of where to further optimize leader development, which programs need to be resourced further or modified to meet current and future needs. Finally, it would be useful to utilize the learning agility framework to analyze a number of the Great Captains of War to understand how they prepared themselves, through a lifetime of learning, to best perform in periods of dire uncertainty. Based on this research, it appears possible that the leaders who demonstrate learning agile behaviors early, may be better able to combine the art and science of warfare to achieve operational and strategic outcomes. Such implications merit further research.

Conclusion

As the Army prepares for the complexities of unified land operations in a multidomain environment, the cognitive requirements of its leaders continue to grow. Ultimately, developing agile and adaptive leaders will help to bridge any technical or conceptual gaps in understanding and transitioning from the current state and future states in conflict. An analysis of the MCCC curriculum against the factors of learning agility has reinforced countless lessons with regards to the interconnectedness of learning agility

¹⁴⁵ Sarah Hezlett, and Nathan Kuncel, "Prioritizing the learning agility research agenda," *Industrial and Organizational Psychology* 5, no. 3 (2012): 300.

and the development of agile and adaptive leaders capable of conducting mission command in an austere environment. First, learning agility provides a valuable framework for assessing the comprehensiveness of cross-domain development programs. Second, the MCCC and the U.S. Army serve as exemplary illustrations of organizations that greatly enhance learning agility and adaptability through the synchronization of multiple challenges and experiences. Third, in order to best develop agile and adaptive leaders, the U.S. Army must further optimize the reinforcing value of experiences across the institutional, operational, and self-development domains. Fourth, professional military education must further prioritize leader development education to better arm leaders with the skills, language, and tools to perform their roles as stewards of the program. At a macro-level, this research has demonstrated that the Army's greatest need is not to develop many additional resources, but rather to achieve a cultural shift that prioritizes formal and in-depth leader development training in a manner that better enables individuals to fill the gaps in what the Army can provide. A few extra hours of deliberate exposure to leader development resources and tools during PME, result in countless hours of better directed self-study through the continuum of a Soldiers time in service. As improved learning agility and leader development skills proliferate across the force, the culture of learning while operating, and even warfighting, will greatly enhance the effectiveness of the Army's programs and its overall return on investment. Continuing to recognize the role of the human dimension, and maintaining its proper prioritization in PME and in the force, will greatly enhance the lethality and readiness of the U.S. Army.

APPENDIX A

ARMY LEARNING AREAS

	GLO 2: Soldiers and Army Civilians proficient in character, competence, and commitment as trusted Army Professionals. This includes the Army Profession, Army Ethic, Army Values, and Character Development.	ALA: Army Profession and Leadership GLOS GLO 1: Soldiers and Army Civilians proficient in leader attributes and competencies. This includes Leader Development, Counseling, Coaching, and Mentoning, (Add in ALRM here for clarity)
 GLO 5: Soldiers and Army Civilians demonstrate proficiency in mission command staff tasks. This includes the Operations Process (Plan, Prepare, Execute, and Assess), Synchronize Information-related Capabilities, Knowledge/Information Management, and Oyber-Electromagnetic Activities. GLO 6: Soldiers and Army Civilians demonstrate proficiency in the mission command system. This includes Common Operating Picture and Mission Command Information Systems. 	GLO 4: Soldiers and Army Civilians demonstrate proficiency in mission command leader and commander tasks. Inform and Influence Relative Audiences, Develop Teams within Units and Unified Action Partners, Art of Command/Science of Control, Pre-Combat Inspections, Lead the Unit, Organize Staff for Operations, Rapid Decision and Synchronization Process, and Troop Leading Procedures.	ALA: Mission Command GLOS GLO 3: Soldiers and Army Civilians demonstrate proficiency in mission command philosophy. This includes Build Teams through Mutual Trust, Create Shared Understanding, Provide Commander's Intent, Exercise Disciplined Initiative, Use Mission Orders, and Accept Prudent Risk.
 GLO 9: Soldiers and Amy Civilians demonstrate proficiency in cultural awareness, cross-cultural competencies in the strategic environment of 2025 and beyond. This includes Strategic Communications, Public Affairs Awareness, Joint Inter-Governmental and Multi-National Relations. GLO 10: Soldiers and Amy Civilians pursue Comprehensive Fitness.Resiliency Skills and Performance Enhancement Skills. GLO 11: Soldiers and Civilians pursue lifelong learning, self-assessment, and goal setting. 	GL 08: Soldiers and Army Civilians demonstrate proficiency in communications skills. This includes Verbal Communication, Written Communication, Active Listening, Facilitation, Negotations, Social Media, and Digital Communications.	ALA: Human Dimension GLOS GLO 7: Soldiers and Army Civilians demonstrate capacity in critical thinking. This GLO includes Appled Critical Thinking and Groupthink Mitigation, Strategic Thinking, Problem Solving, and Decision Making.
GLO 14: Soldiers and Amy Civilians are technically and tactically competent, includes Branch and Career Management Field proficiency, Career Programs, Series Technical Certifications, and Warfighting Skills.	GL0 13: Soldiers and Army Civilians support Army policies, programs, and processes; includes Understanding and contributing to Army Systems that manage, develop, and transform the Army.	ALA: Professional Competence GLOS GLO 12: Soldiers and Army Civilians demonstrate proficiency in Army and joint doctrine; includes ULO, Nafional Security Policies, and Military Strategies and Capabilities.

Source: Headquarters, Department of the Army, *Mission Command Training and Education Plan FY18-20* (Washington, DC: U.S. Government Publishing Office. June 2017), 4-8.

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Army Learning Area (ALA) Desired Knowledge Levels by Cohort

MOTEP

Source: Headquarters, Department of the Army, *Mission Command Training and Education Plan FY18-20* (Washington, DC: U.S. Government Publishing Office. June 2017), A-4.

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APPENDIX C

MCCC LESSONS MOST CLOSELY RELATED TO LEARNING AGILITY

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Think Critically and Creatively	Sell-Awarene		People Agin	Change Agin	Results Agin
Transformational Moral Leadership					
LEADER DEVELOPMENT DOCTRINE (3brs)					
(10hrs)					
Mission Command Staff Tasks (2hrs)					
EUNDAMENTALS OF THE Operations PROCESS					
A1 Historical Vignette					
Analysis of Mission					
TEWT - Bush Hill					
A2 Tactical Decision Exercise					
OFFENSIVE OPERATIONS					
Tactical Decision Exercise (Urban Attack)					
Columbus TEWT					
A4 OPORD Performance AAR (and Retraining)					
MDMP Step 2 (Mission Analysis; CAID WfF Briefs) B3					
MDMP Step 3 (COA Development) B3					
MDMP Step 4 (COA Analysis) B3					
MDMP Step 5 (COA Comparison) B3					
Staff Ride					
After Action Reviews (AARs)					
Determine Key Tasks to Train					
COUNSELING (3hrs)					
FRG Panel Discussion					
BCT Specific Command Topics					
Iroop Leading Procedures					
A Chilateria a Missanta					
A2 Historical Vignette					
History of Insurgency					
Commander's Intent					
Course of Action Analysis / Scheme of Maneuver	-				
TACTICAL LOGISTICS (4hrs)					
FRAMING THE OE (3hrs)					
Receive the Mission					
Time Analysis					
Terrain, Weather, and Civil Considerations Analysis					
Threat Analysis					
Threat COA Development					
Analysis of Troops and Support Available					
Determine a Decisive Point					
Close Air Support					
SEAD & AGO in the Combined Arms Breach					
Direct Fire Planning					
A2 Company OPORD Brief					
Tactical Enabling Operations					
RXL and CCTT ABCT Attack					
Infeat OE Offense					
Conduct of Withdrawal					
Beconnaissance and Security Operations					
ARMY SO EORCES (ARSOE)					
SBCT Organization/Capabilities & Limitations of SBCTs					
IC Planning					
Urban Operations					
Sniper Employment					
Cavalry Squadron Reconnaissance					
MDMP Step 1 (Receive the Mission) B3					
Unit Readiness (Obj-T)					
Company Training Meeting					
LFX Range Visit					
LFX Development					
Mission Analysis Back Brief Development					

Source: Modified from "MCCC to CAC Common Core Crosswalk," U.S. Army Maneuver Center of Excellence, Fort Benning, GA, 2018.

APPENDIX D

MCCC TRAINING TASKS MOST CLOSELY RELATED TO LEARNING AGILITY

Tasks Taught/Supported/Reinforced	Self-Awaren	Mental Adi	People Agi -	Change Ag	Results Agility V
Adapt to a Tactical Plan (Supported)		g		<u> </u>	
Analyze Mission Command (Taught)					
Analyze the Variables to Creating a Positive and Ethical Climate					
(Supported)					
Conduct a Company AAR (Supported)					
Conduct a Platoon Level After-Action Review (AAR) (Supported)					
Conduct Battle Focused Training at the TM/PLT/CO Level IAW Current					
Army Doctrine (Supported)					
Conduct Military Decision-Making Process (MDMP) as a Staff Officer					
(Supported)					
Develop Onit Mission Essential Task Eist (METE) (Supported)					
Engage Human Networks in the Area of Operations (AO) (Supported)					
Explain How Company Grade Officers Lead Unit Development					
(Taught)					
Integrate the Basic Knowledge of Military History into Your Education					
as a Future Officer (Supported)					
Perform as a Battle Capital (Supported)					
Provide Input for Intelligence Preparation of the Battlefield (Reinforced)					
Supervise Command Post Activities at Battalion/Squadron Level					
(Supported)					
Think Critically and Creatively (Supported)					
Integrate the role and use of Military History for Leaders in the Profession of Arms (Supported)					
Apply the Fundamentals of Communicative and Writing Skills in a Unit					
or Staff Environment (Supported)					
Clear an Objective (Reinforced)					
Conduct a Training Meeting (Supported)					
Conduct Course of Action Analysis (War-Gaming) (Supported)					
Communicate Effectively (Supported)					
Conduct a Withdrawar at Company/1100p Level (Supported)					
Company/Troop Level (Reinforced)					
Conduct Formal and Informal After Action Review					
Confirm Environmental Effects on Operations (SL3) (Reinforced)					
Confirm Environmental Effects Products for Threat and Friendly					
Operations (SL3) (Reinforced)					
Analyze Terrain Broducts To Supported)					
(Reinforced)					
Analyze the Operational Environment (Taught)					
Analyze US Army Doctrinal Concepts in ULO (Taught)					
Apply Pattern Analysis Products to Support Counter Improvised					
Explosive Device Operations (Reinforced)					
Apply Predictive Analysis to Support Counter Improvised Explosive					
Apply US Army doctrinal concepts (Taught)					
Conduct a Breach at Company Level (Supported)					
Conduct a Movement to Contact at Company/Troop Level					
(Reinforced)					
Conduct Actions on Contact at Company/Troop Level (Reinforced)					
Conduct an Attack at Company/ Iroop Level (Supported)					
(Reinforced)					
Conduct an Attack by an M2 BFV Platoon (Supported)					
Conduct an Attack by Fire at Company/Troop Level (Reinforced)					
Conduct Area Security at Company/Troop Level (Supported)					
Conduct Lethal/Nonlethal Targeting Process at Battalion and Below					
(Supported)					
Conduct Patrolling at Company/Troop Level (Supported)					
Conduct Rehearsal at Maneuver Troop/Company Level (Reinforced)					
Conduct Urban Operations (Supported)					
Confirm Threat Courses of Action (SL3) (Reinforced)					
Confirm Threat Model Elements (SL3) (Reinforced)					
Develop a Reconnaissance and Security Plan (Reinforced)					
Display Knowledge of COIN Operations (Supported)					
Employ Spipers in a Tactical Environment (Taught)					
Implement Unified Land Operations (Supported)					
Integrate Fundamentals of Air-Ground Operations (Supported)					
Integrate Suppression of Enemy Air Defense (SEAD) (Supported)					
Issue an Oral Operation Order (OPORD) - Fragmentary Order					
(FRAGORD) (Supported)					
Perform Information Collection (Supported)					
Plan Fire Support at Company/Troop Level (Reinforced)					
Plan for the Integration of Counter-Improvised Explosive Device (C-					
IED) Assets (UNCLASSIFIED//FOR OFFICIAL USE ONLY)					
(U//FOUO) (Reinforced)			-		
Plan Reconnaissance Operations at Battalion/Squadron Level					
Plan Security Operations at Battalion/Squadron Level (Taught)					
Plan Surface Danger Zones (SDZ) (Reinforced)					1
Plan the Employment of Direct Fire Systems at Company Level					
(Supported)					
Prepare an Obstacle Plan (Reinforced)					
Prepare an Operation Overlay (Reinforced)					
Process Intelligence Information at Pottolion/Squadron Loval					
(Supported)					
Recognize Brigade Combat Team (BCT) and Below Organizations			1		1
and Capabilities (Taught) revised 25 Apr18					
Recognize Threat Tactics and Battlefield Organization (Reinforced)					

Source: Modified from "MCCC to CAC Common Core Crosswalk," U.S. Army Maneuver Center of Excellence, Fort Benning, GA, 2018.

APPENDIX E

ORGANIZATIONAL SUPPORT TO LEARNING AGILITY



Source: Arun Pradhan, "Learning Agility: Building Learning Organizations," *Learning Solutions Magazine*, 2018, accessed November 4, 2018, https://www.learningsolutions mag.com/articles/learning-agility-building-learning-organizations.

APPENDIX F

MSSP/MCCC GUIDED POST-OPERATIONS REFLECTION

1. How do the collective characteristics of cavalry and armored units make them wellsuited to operations across the range of military operations in diverse operational environments?

2. How would you characterize the core competencies of Armor organizations? How can these best be sustained and/or improved to ensure their effective employment against varied threat types on different battlefields?

3. What constitutes the greatest combat threat to cavalry and armored organizations today? How can this threat be mitigated with the current capabilities, skills, and assets available to the Armor leader?

4. What additional skills, capabilities, and training would improve my ability to apply the foundational tactics applied in this training requirement?

5. Before you conducted the previous mission, how did you assess your preparedness?

6. What elements of the mission surprised you? Why?

7. After you conducted the previous mission, how do you assess your preparedness?

8. What can you do to improve your command of a maneuver formation in the future?

Source: Modified from "Maneuver Self Study Program." Learning Adaptation and Innovation. U.S. Army Maneuver Center of Excellence. Accessed February 18, 2019. http://www.benning.army.mil/mssp/Learning%20Adaptation.

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