Gen David H. Berger, 38th Commandant of the Marine Corps, wrote in his 2019 planning guidance, “The National Defense Strategy has directed [the Marine Corps] to focus in new areas, and this requires us to think, innovate, and change.” The Marine Corps responded by publishing MCDP 7, Learning, which in the first chapter states that like war, there is both a science and an art to learning. The 2007 book by chess and martial arts champion Josh Waitzkin, aptly titled The Art of Learning, is a recommended must read supplement to the Marine Corps’ newest doctrinal publication. Marines should look to Mr. Waitzkin’s autobiography/learning treatise for deeper understanding and practical implementation of the dichotomy of learning ability, analytical versus pattern recognition decision making, and competitive training.

The dichotomy of learning ability is defined by the fixed mindset and the growth mindset. MCDP 7 reads:

Marines with a growth mindset understand that ... effort pays off. [They] seek challenges and feedback to better learn and test current skills, increasing their competencies. Conversely, individuals with a fixed mindset believe that their qualities are innate, are interested in feedback only to confirm abilities, avoiding feedback that indicates any perceived weaknesses.

Mr. Waitzkin describes the growth and fixed mindsets as the incremental and entity theories of intelligence, respectively. He goes on to describe the different effects of, and responses to, challenges observed by individuals with each of the mindsets: “Very smart kids with [fixed] theories tend to be far more brittle when challenged than kids with [growth] learning theories who would be considered not as sharp.” One specific study demonstrated that participants with an entity theory (fixed mindset) saw themselves as victims of circumstance who blamed others or the situation; participants with an incremental theory (growth mindset) looked for ways to learn and rebound aggressively.

What is special about this dichotomy is the effect that leadership can have on a subordinate’s mindset. The way leaders articulate tasks, provide correction, and give positive/negative feedback can help Marines learn a mastery-oriented, growth mindset, instead of a performance oriented, fixed mindset approach. The American Psychological Association defines “mastery-orientation” as an adaptive pattern of behavior in which individuals enjoy and seek challenge, persist in the face of obstacles, and view their failings as due to lack of effort or poor strategy rather than lack of ability.

This means making the process of honest introspection, and more importantly, consistent reevaluation—more important than specific outcomes. Poor performance should not be excused, but the most effective way it can be improved is by accountability of the learning process and individual adaptability. By giving mastery-oriented instructions and evaluations, leaders can instill and reinforce the growth mindset on their units—increasing flexibility, mental resilience, and ultimately, lethality.

MCDP 7 briefly discusses analytical and pattern recognition decision making.
making. However, it does not describe how to make them work together—Mr. Waitzkin does. The background on these different thinking modalities comes from Nobel Prize recipient (and decorated Israeli combat veteran) Daniel Kahneman, who uses the metaphor of the System 1 brain (pattern recognition), which is extremely quick but prone to bias, against the System 2 brain (analytical), which is slow, methodical, but accurate. His research describes how, based on the type of task, individuals subliminally alternate between analytical problem solving (algebra problems) and subconscious pattern recognition (driving).7 The chapters “Slowing Down Time” and “Making Smaller Circles” in The Art of Learning describe how to create optimal training by leveraging these two competing systems.

According to the Art of Learning, “The most common error in the learning of martial arts: to take on too much at once.”8 This, unfortunately, resonates with many Marines as there are few opportunities to slow down and focus on incremental improvement of the basics. However, by not creating space to analyze our incremental improvement, we relegate all our development to the biases-prone, subconscious, pattern recognition, System 1 brain. Mr. Waitzkin describes, both for chess and martial arts, how involving the System 2 analytical side to break down every skill and ability into the most fundamental parts and slowing down progression allows one to consciously train the subconscious. Not by repetition alone, but by analytical repetition (assessing/understanding the feeling, and the “why” of what right looks like), can individuals create stronger and faster neural networks for both physical action and cognitive thought.9 This deliberate strengthening of our subconscious allows individuals to recognize patterns faster, with more accuracy, and “move through the OODA loop more quickly than the enemy.”10

The Art of Learning’s second to last chapter, “Bringing It All Together,” amplifies the MCDP 7 insert “Force-on-Force Exercises to Simulate War’s Complexity.”11 Marine Corps documents emphasize the importance of competition in training; MCDP 1 describes, “War is fundamentally a dynamic process of human competition.”12 and former Commandant Gen Robert B. Neller wrote in his White Letter 2-18, “To meet the challenges of a peer-to-peer fight we must incorporate independent actions and opposing will in [all levels of] our training.”13 Mr. Waitzkin also highlights the importance of competitive training with one notable emphasis: he sought out tougher opponents and welcomed failure as an opportunity to improve. He provides many examples of how his most competitive training partner made him better by creating dynamic situations that exposed his weaknesses and forced him to generate creative solutions.14 True strength does not come through never losing, it is driven through failing, learning, and then reattacking. If no one becomes a black belt in Jiu-Jitsu without being tapped out thousands of times, how can one become the most effective combat leader without being beaten in (simulated) combat?

MCDP 7, Learning was written to “explain why learning is critically important to the profession of arms,”15 and The Art of Learning provides valuable supplements. By understanding both books, one can focus on building a growth mindset using System 2 thinking to train System 1 and searching out competitive opportunities. Failing in public, especially in front of subordinates, is a terrifying thought. But by fostering mastery-oriented and growth mindsets, teams can lose in training without destroying cohesion or degrading trust and confidence because individuals understand that failure is an integral ingredient to improvement.

Individuals and teams can then not only welcome challenges but take ownership of mistakes. That will allow them to be honest and specific about what areas need to be improved, and then relentlessly pursue objective measures of improvement with analytical precision to improve pattern recognition. The result will be a growth minded Marine Corps capable of out cycling any adversary. Marines are taught from day one that they are the most elite fighting force in the world; The Art of Learning describes how to avoid hubris and channel that pride into aggressive, competitive learning.

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Notes


3. Ibid.


5. Ibid.


8. The Art of Learning.

9. Ibid.

10. MCDP 7.

11. Ibid.


15. MCDP 7.