By Franklin C. Annis, EdD

Many of us know the adage, “A jack of all trades and master of none.” This phrase, in the modern usage, is usually used to describe an individual that is functional in several different skills but lacks the ability to really perform well in any of them. However, the phrase may have carried a significantly different meaning when it was first invented. Almost no one knows the passage often ended with the clause, “…is sometimes better than a master at
one.” This addition significantly changes the meaning of what we can draw from the phrase. Often polymaths, individuals with interest in a multitude of areas, possess a distinct advantage over those that specialize in only one subject (monomaths). As the Army continues to push leaders to think outside the box it may be time to examine how “the box” developed and how we can truly test its limits.

What we think of as “the box” probably has an origin much earlier than many would guess. In 1840, the French diplomat Alexis de Tocqueville noted that the industrial revolution drastically increased the productivity of society by having individuals focus on one specific step in a manufacturing process. While he noted the increase in productivity, he also noted that it robbed men of something larger. While the “art” of manufacturing may have improved, it came at the expense of the artisan. As Tocqueville explains in his work *Democracy in America*, “While the workman concentrates his faculties more and more upon the study of a single detail, the master surveys an extensive whole, and the mind of the latter is enlarged in proportion as that of the former is narrowed.” As workers became more and more specialized, they soon adapted strict concepts and assumptions that applied only to the craft of making their assigned part.

As specialization continued over time, this has led to individuals being restricted within a box created by the underlying concepts and assumptions of their chosen profession or academic discipline. Since society prized and rewarded specialization as it increased productivity, institutions were created to produce these types of individuals. In American culture this phenomenon can be seen every time a parent asks a child what they want to be when they grow up (with the answer usually expected to be a specific profession). Sometimes this question is even followed with additional questions, “What type of X?” in an attempt to guide a child into selecting the most specialized professions that might provide the best income. Our society rewards highly-specialized individuals like brain surgeons and defense attorneys with large salaries. But just because society highly values these
specialists doesn’t necessarily mean that highly-specialized Soldiers would guarantee success on the battlefield.

Does the Army need highly-skilled specialists? The answer must surely be yes. On the modern battlefield there are a number of complex assignments ranging from being a pilot to conducting cyber warfare that would demand specialists to fully utilize the abilities of advanced weapons platforms. I don’t think anyone would argue against the need for specialists in the military. However, just because we have need of specialists (monomaths) doesn’t mean our military couldn’t be strengthened through the addition of generalists (polymaths).

The major problem with specialists is they tend to default to their own specialties while trying to solve a problem. This may occur for a couple reasons. First, it is the area they have mastery. And second, it allows them to draw authority from specialized credentials or degrees. I once conducted an experiment asking several professors at a local college what would be the best way to prevent Afghan villagers from supporting the Taliban. The economics professor told me that it was due to a lack of a strong economy and job opportunities. We needed to focus on creating industry, so villagers didn’t have to turn to the Taliban for sources of income. The religion professor told me it was due to low literacy rates that prevented the villagers from reading religious text firsthand. His answer was to improve the quality of religious instruction and education in the community to ensure the villagers would turn away from the Taliban. The education professor told me it may be due to the lack of understanding of nationhood, knowledge of other systems of government, and the benefit of the modern world. So, he asserted that the solution would be found in establishing modern school systems. While none of these answers were wrong, they were all too specific to address the complexity of the modern battlefield. The battlefield is not conducive to scientific experiments where an individual thesis is tested. Time has proven the best strategy, and tactics on the battlefield are multipronged and diverse. Where one effort fails, another one succeeded. And often attacking the problem from multiple different
angles provides a greater advantage of approaches reinforcing each other.

While specialists tend to engage in learning to achieve a specific goal, polymaths tend to have a much more organic approach to learning. Often polymaths will simply follow their interests and questions regardless of how they cross academic disciplines. This can be easily seen in one of the most famous polymaths of all time, Leonardo de Vinci. Trained as a painter, he would often visit the apothecary to acquire pigments to make his paint. With mixing of paint similar to the mixing of medicine, Leonardo was soon learning how to make medicine. From making medicine it was a short step to studying anatomy, and from studying anatomy to engineering. Thus, he explored his interests and became a master of several arts. By having such a broad scope of learning, he was able to utilize problem-solving methods from various disciplines and utilize his knowledge in amazingly innovative ways. Many of his ideas were centuries ahead of his time. Noted military polymaths that display this same type of innovative thinking and problem-solving abilities include strategic-thinkers like General of the Armies John J. “Blackjack” Pershing and General of the Army Dwight D. Eisenhower.

The very nature and design of military command structures is already optimized for the use of generalists in command positions. Highly specialized staff officers report their pertinent findings and recommendations to a commander. The commander in turn evaluates the information provided, and often reshapes and recombines recommendations to direct responses to complex problems. This might be the perfect marriage in combining specialists and generalists on the battlefield. The specialists can demonstrate the upmost mastery of their field, while the generalist can question and test the underlying assumptions that may be limiting approaches instead (the box).

Just yesterday, I heard a captain loudly proclaim the fallacy that, “You can either learn a lot about a little or a little about a lot.” But this phrase is simply not true. We must abandon the idea that specialization is the only road to mastery. In fact, if we embrace the true nature of
learning we might all become polymaths and, “Learn a lot about a lot.” The wonderful news is that humans are naturally polymathic and are typically programmed into being monomaths. Army officers might be well suited to return to polymathic approaches as large portions of Army officers have degrees that do not align with their area of concentration (AOC). This makes officers at least multidisciplinary if not true polymaths. I would assert that our reserve component Soldiers might already be engaging in a polymathic lifestyle as most do not have full-time civilian employment that aligns with their military occupational specialty (MOS) or AOC. This might account for how National Guard and Reserve units, while not always bringing the same level of mastery to a mission, often bring a much wider skill set with their Soldiers.

I admit that the addition of polymathic Soldiers presents some significant challenges to talent management. Army doctrine is not written to include this type of “universal Soldier.” Managing the careers of polymaths would be difficult because it would likely take significantly more time than our current monomath-based model. And I have been questioned by more than one general about how you could control true polymathic officers that constantly operated outside the box. But for all of the complexities polymaths could add to the Army, they are far outweighed by the advantages these individuals bring to the table.

The truth of the matter is that polymaths have always existed in some degree within our military. Many of these often rise far into the strategic ranks and are often remembered by name. If we are truly focused on remaining the dominant force on the modern battlefield, then we must make every attempt to optimize our personnel in both learning methods and approaches. As warfare continues to increase in both speed and complexity, we will need to optimize our forces to take full advantage of the skills of both expert specialists and master generalists.
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