

Force Design 2030 and the Challenge of Transformational Learning in the United States Marine Corps

Susan E. Upward

U.S. Marine Corps

Abstract

This article examines why the military struggles with transformative learning viewed through the lens of the U.S. Marine Corps' current restructuring plan, Force Design 2030. Other published pieces on Force Design 2030 simply argue for or against the specifics of the plan instead of opening the aperture to investigate why the Marine Corps, and the U.S. military writ large, struggles with transformational learning as an organization. This article looks at the American military's historical predilection for informational learning, which has led to an overreliance on a rigid lessons-learned approach and simply changing what we know instead of reframing problems and changing how we *know* through critical reflection and discourse to fundamentally alter individual and group perspectives. Alternative approaches to transformational learning are suggested in this piece, tempered with an acknowledgment of the military's continued reluctance to challenge the status quo. Readers should take away a better understanding of why dramatic, fundamental changes in the service branches are often met with vitriolic resistance from both inside and outside its ranks.

Transformation is a process, not an event.

—John P. Kotter, Harvard Business School

The very first word in Force Design 2030, the U.S. Marine Corps' (USMC) strategic planning document, is *transformation*, as used in the quote above (USMC, 2020a). Gen. David H. Berger, the 38th commandant of the Marine Corps, ordered fundamental changes to the organization's structure, focus, and capabilities, and called for "sweeping changes needed to meet the principal challenges facing the institution" (USMC, 2020a, p. 1), principally shifting away from the last 20

years of operations in the Middle East and preparing to counter a near-peer adversary in the Indo-Pacific: China. On its face, the USMC's plan for the future appears to bear all the hallmarks of transformative learning—an organization that has learned from experiences, reflected on the adjustments needed, and is on the precipice of a “dramatic, fundamental change” in the way it sees itself and the way it operates in the world (Merriam et al., 2007, p. 130). However, the transformation is far from complete. While on paper, the commandant's vision for the future of his service is beginning to take shape by divesting legacy equipment and restructuring units, not everyone is sold on the idea that the USMC needs to change the way it does business. Retired Marine Corps generals, anonymous active-duty officers, former executive branch officials, and current politicians alike have all engaged in a public rebuke of the plan, calling Force Design 2030 “an unproven concept” (Van Riper, 2022, para. 4) that has caused them to “have valid concerns” (Van Riper, 2022, para. 2) about the direction their beloved Corps is headed (Feickert, 2023).

This article investigates the ongoing challenges military organizations have in effectuating transformational change, as viewed through the lens of the USMC's Force Design 2030 initiative. After introducing transformational learning and its tenets, it looks at both the historical context and current state of learning in the military, and how the services overwhelmingly lean toward informational versus transformative educational practices. This article provides suggestions to alter mindsets and methodologies in how the USMC conceptualizes and pursues transformational change. This article discusses why the military's reluctance to change will extend the timeline, despite a clear and present danger of maintaining the status quo.

Transformational Learning Theory

Mezirow (2009) defines transformative learning as “the process by which we transform problematic frames of reference,” or our mindset, to make them more “emotionally able to change” and better prepared to guide future action (p. 116). Transformational learning is distinct from informational learning—the latter changes *what* we know and adds to the information we apply to new contexts, while the former changes *how* we know or how we look at things in the first place (Kegan, 2009). More simply put, transformational learning is about a fundamental change in perspectives, which reframes our outlook on the problem set. In transformational learning theory, there are two dimensions: a habit of mind and a resulting point of view (Mezirow, 2009). According to Mezirow, habits of mind include our mindset or habitual ways of thinking, which are susceptible to influence by assumptions and expectations that become a filter for the way we see the world. For instance, one such habit of mind that Mezirow found in military environments is ethnocentrism, or the predisposition to believe that those outside of one's group are inferior. Mezirow

also believes that points of view are comprised of *meaning schemes* that appear as immediate responses, such as emotions, value judgments, and attitudes that shape one's interpretation of the information we are perceiving. Again, in Mezirow's terms of ethnocentrism, the resulting point of view may be a negative attitude toward individuals who are different from our own group. In general, a point of view is more likely to change than a habit of mind because we are more aware of their existence and therefore are more susceptible to feedback from others (Mezirow, 2009).

Mezirow's transformational learning theory has 10 phases that can be categorized into four main components: experience, critical reflection, reflective discourse, and action (Merriam et al., 2007). The first step is experiencing a "disorienting dilemma," or a crisis that "cannot be resolved through the application of previous problem-solving strategies" (Merriam et al., 2007, pp. 135–136). The next steps are to embark on a journey of self-reflection to determine what habits of mind have affected the way we interpret situations, and then engage in critical dialogue, which should include a variety of points of view, especially those that challenge the status quo, in order to come to a better common understanding of the problem and possible alternative solutions. The final step is setting off on a course of action to implement the transformation by looking at future problem sets through the new perspective gained through the process.

Transformative learning, like Force Design 2030, is not without naysayers. Some critics of transformational learning theory believe Mezirow's work is acontextual—his original research in 1978 studied women returning to school after an extended break and lacked any analysis of the subjects' historical and sociocultural background that could add to the analysis of the nature of their transformations (Merriam et al., 2007). Taylor (2000), one of the leading opponents of transformational learning theory, conducted an empirical review of Mezirow's work and found that information specific to each individual could explain inconsistencies, such as why one person may experience a disorienting dilemma that would potentially lead to a transformation, while another person would have the same experience and not change at all. Another broader criticism of transformational learning theory is that it relies on a Western, patriarchal, and predominantly White concept of rational thinking (Merriam et al., 2007). Taylor (2000) again leads the dissent in this area, stating that Mezirow's work

Lt. Col. Susan E. Upward, U.S. Marine Corps, is an active duty judge advocate and a doctoral student pursuing an EdD in leadership studies at Louisiana State University Shreveport. She holds a BA in English from Valparaiso University, an MA in military studies from American Military University, a JD from Syracuse University, and an LLM in national security and homeland security law from Western Michigan University's Cooley Law School. Her 20-year career includes three deployments to the Middle East in support of Operation Iraqi Freedom and Operation Inherent Resolve. She is an active member of the American Bar Association and is a published author and speaker on a variety of diversity, equity, and inclusion topics.

discounts the role of affective learning and how emotions and feelings must be dealt with before a person can truly participate in meaningful critical reflection. Finally, work in the field of neurobiology has made researchers more aware of implicit memory and the conditioned responses such as habits, routines, or norms that result and may unconsciously influence a perspective of transformational experience (Merriam et al., 2007).

In later work, Mezirow (2009) conceded that context, including “ideology, culture, power, and race-class-gender differences” (p. 119) does play a role in “who learns what and the when, where and how of education,” (p. 127) but can be rationally assessed as factors and not necessarily “servants to these masters” (p. 120). He also responded to the notion that his work does not include an accounting of implicit memory; in his view, the critical reflection for true transformation necessarily involves an accounting between the conscious and unconscious so that individuals learn how the latter influences how they see themselves and how they interpret and act to the world around them. In total, the criticism of Mezirow’s work can be summed up as pointing out aspects that should be included in the transformational learning process but not fatal flaws in the theory itself.

History of Military Learning

From the organization’s infancy, the U.S. military has leaned heavily on informational learning as its primary tool to produce qualified troops quickly and efficiently for combat. Initial or basic training is certainly a disorienting dilemma that results in an individual transforming from a citizen to a soldier, but the process lacks the critical reflection or reflective discourse that falls in line with transformational learning per se—although drill instructors would likely be entertained by a recruit attempting to engage in such a dialogue. During World War I, the U.S. Army discovered that most draftees were lacking in math and reading skills beyond a sixth-grade level, while some were essentially illiterate, and all could benefit from learning the fundamentals of citizenship (Egardner, 1922). In the National Defense Act of 1916, Congress ordered that service members be allowed to receive instruction on general education subjects to increase their military competency but also to prepare them to be better equipped to reintegrate into society as productive members. Military specialists created a program of vocational education in a formal classroom setting over a year, and then quantitatively measured their increase in intellectual maturity by using standardized tests administered both at the beginning and end of the training. Egardner found that the formal instruction resulted in a marked improvement in test scores in all areas: spelling, vocabulary, language, and math skills. However, neither the Department of Defense (DOD) nor Egardner conducted an analysis to determine if the service member’s education translated into the reflective and critical thinking

the Army was seeking to develop. The program ended after only one school year and one set of participants—like all other education activities in the military, the war department did not see the utility of such an education program after the war ended, and it fell victim to reduced DOD funding (Egardner, 1922).

Just before the Vietnam War, the chief of the Army's education department declared again that the military wanted to produce better-educated men and women to enrich the civilian population when they were done with service, but frustratingly repeated the same methodology his predecessors did 40 years earlier (Strehlow, 1962). In keeping with the military's strict adherence to proscribed courses of study in formal classroom settings and "instruction in fundamental academic subjects" (p. 27), Strehlow (1962) alludes to the importance of self-improvement as a necessity for service members, but only in the context of keeping up with rapidly changing military weapons and equipment, and not to exercise any critical thinking to apply to the increasingly complex nature of war.

In the 60 years since, the U.S. Armed Forces have made moderate gains in adapting adult education principles to improve learning in the military, but still fall well short of the transformational change conceived of in Force Design 2030. The 1970s saw a review of how officers were trained and the recommendation that a professional military education system be developed to produce leaders "capable of making sound judgments" in future fluid and complex situations (Persyn & Polson, 2012, p. 9). In the 1980s, in what is arguably the first substantial attempt at transformational change for the American military, Congress passed the Goldwater-Nichols Department of Defense Reorganization Act in 1986 and established the Panel on Military Education, otherwise known as the Skelton Panel. According to Persyn and Polson (2012), one of the primary goals of these initiatives was to address the ethnocentrism that was rampant between the service branches post-World War II and adversely affecting combined joint military operations. Accordingly, in Goldwater-Nichols (1986), Congress dictated what training officers needed and how that education should be delivered to adequately prepare them to serve in joint service assignments. However, even almost 40 years after its enactment, there are still those who question the validity of the educational reforms of Goldwater-Nichols. For example, Anderson (2023), a retired USMC officer, argues that the United States has not won a war since Goldwater-Nichols because of those "misbegotten reforms [that] laid the groundwork for bloated joint staffs that cannot get out of their own way," and leading to a "Marine Corps that willingly castrated itself in an idiotic new strategy called Force Design 2030" (para. 3). Instead, he argues for less engagement and reflective discourse between the services in joint environments, and a more insular, linear, informational educational path for a warfighter to become "a master of his trade" only by spending "years in the trenches learning his craft" (Anderson, 2023, para. 15).

Current State of Military Learning

Military education today encompasses basic skills to graduate-level professional military education. One methodology used by militaries around the globe is the formal *lessons-learned* process, in which experiences from ongoing or past operations are gathered, reviewed, and widely disseminated in the hopes that other units will learn what has worked and what has not, and then apply those lessons to future operations (Dyson, 2019). However, the effectiveness of this formalized system of managing informational knowledge has flaws. For example, the Swedish Armed Forces bluntly stated that their lessons-learned process was simply “not working” because “few reported observations have been analyzed, validated and subsequently implemented [and] the experiences that been heeded are almost exclusively on a low tactical level” (Hasselbladh & Yden, 2020, p. 486).

Similarly, the services have made attempts to transform military education and incorporate adult learning principles into their curriculums but have gained little ground. For instance, the *U.S. Army Learning Concept for 2015* (Department of the Army, 2011) structurally brought all educational instruction under the supervision of one entity, Army University, in an attempt to merge the concepts of training and education “in a continuum of learning rather than treating the two as distinct, mutually exclusive learning domains” (Persyn & Polson, 2012, p. 10). However, that ambitious initiative has not been fully implemented, let alone effective; there is still no comprehensive or clear approach to military education that sufficiently aligns with adult learning theory and andragogy principles, while the Army marches on and continues to execute its curriculum in a rigidly uniform “one-size-fits-all model” (Piereson, 2017, p. 31). Other examples are two foundational documents that bookended the USMC’s release of Force Design 2030, Marine Corps Doctrinal Publication 7, *Learning, and Training and Education 2030* (USMC, 2020b, 2023). Both publications were aimed at transformational changes in the way the USMC views learning and education, including ending the bifurcated view of training versus education and acknowledging the value of instituting a shared perspective of learning. But like the Army, the proscribed modernization of USMC’s educational methodologies fall back into the comfortable realm of recommending formal, linear instruction instead of utilizing the “applied science, research, and philosophy of the field of adult learning” to propose real change (McCann & O’Connell, 2020, “MCDP 7’s Purpose” section).

One program that demonstrates the military is capable of transformational change in the way the organization approaches learning and education is the Army’s development, training, and utilization of decision-support red teaming (Dietz & Schroeder, 2012). Referring to red teaming, Dietz and Schroeder (2012) found that the process brings transformative learning principles such as “full-spectrum (holistic) critical thinking to an operational environment (OE) in an effort to provide commanders with both alternative perspectives and ideas for improving plans” (p. 29). In

an uncharacteristic change of pace for military learning, Deitz and Schroeder (2012) believe red teaming encourages diversity of thought, collaborative discourse, and critical thinking that is purposefully aimed outside of the doctrinal, one-size-fits-all mindset that usually plagues military planning. They also found that red teaming schools depart somewhat from the military norm of the traditional, highly structured, informational methodology of learning: classes “are conducted in a roundtable, open discussion style that facilitates and encourages dialogue” with the normal deference for respect between participants of different ranks but “not to inhibit the free flow of ideas” (p. 31). Expansion of these red teaming concepts, aimed at inspiring the kind of critical inspection and reflective discourse that are the hallmarks of transformational learning, could assist in all facets of military problem-solving—both as directed toward external threats such as those described in Force Design 2030 as well as internal challenges such as racial and gender inequality—and lead to the transformative change military leaders in learning other documents have so far failed to inspire (Upward, 2022).

Ways To Transform Military Learning

To engage in transformational change, military leaders should embrace the adult learning principles they purport to employ in their doctrine like *Learning and Training and Education 2030* to truly transform the organization they aspire to and envision in Force Design 2030. Zacharakis and Van Der Werff (2012) describe creating such organizational learning by encouraging a working relationship between adult educators and the military to improve critical thinking skills and increase the overall intellectual prowess of service members. To accomplish this goal, history shows that educators cannot be tied to only customary military teaching methods or bound by traditional adult education principles.

For instance, McCann and O’Connell (2020) suggest that MCDP 7 should be revised to go “beyond previous conceptions of learning” (para. 3) and the current tendency to tell, not show, the benefit of critical thinking. To avoid the danger of “cloning,” or producing leaders who think identically to their predecessors, they suggest that the USMC encourages curiosity and cultivates an environment that values “diversity of thought, study, and practice” (para. 7). Acknowledging the repeated failure of military organizations to actually effectuate change, Dyson (2019) used a qualitative literature review to focus on dynamic organizational capabilities and suggests best-practice improvements to the military’s formal lessons learned program. His research focuses on the necessary conditions for the organization to avoid stagnant silo-thinking and support knowledge transformation; in other words, to challenge the bureaucratic status quo that serves as a barrier to the integration of new and existing organizational knowledge. Pierson (2017) proposes individually tailoring

instruction for service members, with military training and professional education working in consort with one another in a symbiotic relationship under the umbrella of education. He suggests a feasible framework utilizing both the competency-based education approach and the experiential learning model to establish an effective adult learning environment, complete with opportunities to conduct self-reflection and meaningful collaboration to solve problems.

Alternative approaches to transforming learning may seem too radical for the usually predictable traditional views of military education. Nonetheless, they should be considered as unconventional thinking to provide inspiration, if not methodology, to both accurately measure the capability to, and then effectively institute, fundamental organizational change. For instance, Buechner et al. (2020) believe that collective transformation should be defined as a “shared worldview shift that is grounded in a shared experience” (p. 87) and emphasize the role the initial experience plays in transformative learning for the individual who is enduring it. As previously discussed, the shock and awe of basic training or combat can produce the kind of disorienting dilemma or crisis situation that often creates shared hardship and can produce the contrasting feelings of liminality and community, or *communitas*, which this research shows has a positive effect on setting the proper conditions to achieve collective transformation. Of note, the subjects of the qualitative study conducted by Buechner et al. (2020) are five groups of individuals who have survived distressing chapters in their lives, including military veterans returning from combat who participated in holistic retreats. In some cases, those participants reported that they had personally grown from their unpleasant or unsettling experiences and found a comforting community along the way that could be used as an impetus for change. Part of the radical approach suggested by Buechner and his colleagues is to use intentional somatic development techniques because it

[m]akes major organizational transformations possible because it requires disengagement from the organization’s historical self, thus creating an opening through which the leaders can construct a new operational shape. The organization can then embody new practices that will sustain, and possibly advance, the organization. In other words, collective transformation begins with an awareness of what the organization already embodies, continues with the use of imagination to envision the future, and concludes with a commitment to using intentional practices to strategically create a life-giving and sustainable organizational shape. (p. 100)

Although the feeling of *communitas* can be fleeting, Buechner et al. (2020) found it can be a tipping point to be exploited because from it “shared concepts can emerge, including an organizational vision, a common sense of purpose, and a strategic framework for purposeful action” (p. 101).

Another nontraditional approach to transformational change is proposed by Kasl and Yorks (2016), who used an epistemology approach to posit that empathetic connection is a critical component of organizational change in diverse groups. The barriers to creating the empathy required for transformational change can be categorized through three “dimensions of difference,” such as (1) relational power, or how power is distributed in the group; (2) hegemonic embeddedness, or how aware individuals in the group are aware of their personal relationship to power; and (3) emotional valence, or how strong someone feels about new learning (Kasl & Yorks, 2016, pp. 7–9). Given the antagonistic discourse that is essential for transformational change, and as seen in the discord that surrounds Force Design 2030, critical reflection and discussion about all three dimensions of difference could conceivably help overcome contentious divides, especially considering the military’s cultural norm of ethnocentrism and its unconscious “internalized hegemony” that convinces individuals that their point of view is “the right way to be” (Kasl & Yorks, 2016, p. 7). However, if history is any indication, military culture remains strongly rooted in tradition and general customs and practices unlikely to be willing to create safe spaces to foster the kind of empathic connection necessary to encourage both personal learning and organizational change in diverse groups in this manner.

Before engaging in any traditional or alternative approach to organizational change, the military might be best served to assess how transformational learning currently takes place within individual service members. Wiley et al. (2021) saw a need for a better method to “operationalize” (p. 403) such an assessment and devised a new quantitative approach to “allow for a deeper understanding of how, when, and why deep reshaping of self takes place” (p. 400). Using the 17 scales in the Belief, Events, and Values Inventory (BEVI) and mapping the results to Hoggan’s (2016) self-constructive dimensions of transformative learning as a backdrop, a composite score is created that researchers propose is a more effective measure of transformational learning than any other technique to date (Shealy, 2016; Wiley et al., 2021). The value of this approach is that it provides a measurable methodology that is applicable in a variety of contexts outside of higher education, including the military which historically has shown a propensity for “data-driven learning” and using standardized tests that produce tangible numerical results to evaluate educational effectiveness (Egardner, 1922; Schatz et al., 2017; Strehlow, 1962).

Military’s Reluctance to Transform

Regardless of what changes are necessary or what form the transformation takes, history has shown that like a war of attrition, change in the military is going to be painfully slow—partially because of the “monolithic bureaucracy” of government


agencies but also because of the organization's stubborn reluctance to change (Zacharakis & Van Der Werff, 2012, p. 94). Tagg (2018) provides a realistic time frame required for truly transformative change through the lens of "System 1" and "System 2" thinking made famous by Kahneman (2011). Tagg explains that students are products of the school system they have been raised in, and therefore have been primed over the course of their lives to accept and use information in a certain way. According to Tagg (2018), the educational model predominant in Western culture primarily utilizes mindless, unconscious rote learning (System 1) evaluated by timed standardized tests, as opposed to the kind of meaningful, conscious reflective engagement (System 2) required for true transformational learning. Historically, the military has doubled down on the linear, informational style of learning and testing to educate the young adults joining its ranks (Egardner, 1922; Strehlow, 1962). As such, changing their perspective—the goal of transformative learning—will necessarily take time to fundamentally alter those mental schemas borne from years of being subjected to educational techniques that were built for efficiency bolstered by mindless learning (Tagg, 2018).

To that end, Hasselbladh and Yden (2020) note that while there have been revolutions in military affairs that have fundamentally transformed the way armies fight, there has not been a corollary transformation in the way armies learn. For instance, using recent international operations such as Afghanistan and Iraq as case studies, the authors question the validity of the military's lessons-learned process that, as previously discussed, rarely results in any change being implemented anywhere in the organization above the tactical level. According to Hasselbladh and Yden (2020), when change does result from the lessons-learned program, it is almost always informational in nature and decidedly not transformative. Comparing the military to other large-scale formal organizations, Hasselbladh and Yden's research hypothesized that while the military shares certain generic traits with these entities, it has even more constraining characteristics that make it less conducive to organizational change. They found that the military's collective learning style is highly controlled and dictated by doctrine and standard operating procedures; it is too rigid, formal, and completely counter to the environment necessary to be dubbed an effective learning organization. As such, Hasselbladh and Yden (2020) concluded that a transition to a more fluid, transformational approach to learning in the military would contradict the organization's inherent tendency to "impose order on chaos" (p. 478)—that is, predictable and repeatable lessons that allow the individual to apply a bias for action at the point of friction and despite the fog of war.

Despite this rebuke, the U.S. Navy's old adage "don't give up the ship" comes to mind—the military should not cease all attempts to engage in meaningful transformational change simply because of its "bureaucratic character and specific task environment" (Soeters, 2022, p. 480). In that vein, Soeters (2022) penned a rebuttal to Hasselbladh and Yden's 2020 article, cautioning politicians and generals alike

would use their article as “scholarly ammunition” (p. 481) as an excuse not to actively seek improvements in the constant learning the military publicizes it is pursuing like Force Design 2030. Instead, Soeters discusses the value of *double-loop learning*, which investigates the fundamental beliefs of an organization, and how it can work in conjunction with, and not at the expense of, *single-loop learning*, which is akin to the military’s lessons-learned approach of just repeating and then improving existing practices. Although Hasselbladh and Yden (2020) fail to examine why the military would want or even need to embark on a journey of organizational change, Soeters (2022) believes it is an imperative inquisition and action for the military. Citing other organizations that need to constantly change to keep pace or get ahead of the pack, Soeters opines the military similarly needs to continue to transform using *double-loop learning* to maintain American hegemony against near-peer adversaries and meet the demands of modern warfare that is increasingly volatile, uncertain, complex, and ambiguous.

Conclusion

The military’s disorienting dilemma demanding transformational change has already occurred: Gen. Robert Neller, the 37th Marine Corps commandant, assessed that “the Marine Corps is not organized, trained, equipped, or postured to meet the demands of the rapidly evolving future operating environment” (USMC, 2020a, p. 2). But transformational learning and organizational change cannot be simply decreed or ordered—it must be cultivated and inculcated into the USMC’s culture as the norm, not the exception. It is not enough for military organizations to say *what* will change and just soldier on; for buy-in from the lowest ranks to the highest generals, service members must know the *why* and feel a part of the *how* to reframe problem sets and create long-lasting, effective change. As history shows, the military’s habit of mind is its incessant need for informative-only learning, producing uniformity in thought, word, and deed that, in turn, is stymying the diversity of thought necessary for critical reflective thinking and substantive reflective discourse to change its collective perspective. To counter the organization’s long-standing reluctance to change, which manifests in negative immediate responses, emotions, and value judgments that have surrounded attempts at transformational change like Force Design 2030, the military would be best served to enhance current nontraditional military education programs and even wade into alternative approaches to transformational learning. In the end, an organization as zealous about its heritage as the USMC must overcome meaning schemes to ensure its members understand that transforming the force does not necessarily mean exorcising the service’s very soul. It may take time and effort, but the future fight demands the transformation Force Design 2030 calls for. 

Author's note: *The views presented are those of the author and do not necessarily represent the views of the Department of Defense or the U.S. Marine Corps.*

References

- Anderson, G. (2023, September 7). *Why our generals don't win*. Military.com. <https://www.military.com/daily-news/opinions/2023/09/07/why-our-generals-dont-win.html>
- Buechner, B., Dirkx, J., Konvisser, Z. D., Meyers, D., & Peleg-Baker, T. (2020). From liminality to *communitas*: The collective dimensions of transformative learning. *Journal of Transformative Education*, 18(2), 87–113. <https://doi.org/10.1177/1541344619900881>
- Department of the Army. (2011). *The U.S. Army learning concept for 2015* (TRADOC Pamphlet 525-8-2). U.S. Army Training and Doctrine Command.
- Dietz, A. S., & Schroeder, E. A. (2012). Integrating critical thinking in the U.S. Army: Decision support red teams. *New Directions for Adult and Continuing Education*, 136, 29–40. <https://doi.org/10.1002/ace.20033>
- Dyson, T. (2019). The military as a learning organisation: Establishing the fundamentals of best-practice in lessons-learned. *Defense Studies*, 19(2), 107–129. <https://doi.org/10.1080/14702436.2019.1573637>
- Egardner, Z. T. (1922). Adult education in the Army. *The School Review*, 30(4), 255–267. <https://www.jstor.org/stable/1078096>
- Feickert, A. (2023). *U.S. Marine Corps Force Design 2030 initiative: Background and issues for Congress* (CRS Report No. R47614). Congressional Research Service. <https://crsreports.congress.gov/product/pdf/R/R47614>
- Goldwater-Nichols Department of Defense Reorganization Act of 1986, 10 U.S.C. § 111 (1986). <https://www.govinfo.gov/content/pkg/STATUTE-100/pdf/STATUTE-100-Pg992.pdf>
- Hasselblad, H., & Yden, K. (2020). Why military organizations are cautious about learning? *Armed Forces & Society*, 46(3), 475–494. <https://doi.org/10.1177/0095327X19832058>
- Hoggan, C. (2016). Transformative learning as metatheory: Definition, criteria, and typology. *Adult Education Quarterly*, 66(1), 57–75. <https://doi.org/10.1177/0741713615611216>
- Kahneman, D. (2011). *Thinking, fast and slow*. Farrar, Straus and Giroux.
- Kasl, E., & Yorks, L. (2016). Do I really know you? Do you really know me? Empathy amid diversity in differing learning contexts. *Adult Education Quarterly*, 66(1), 3–20. <https://doi.org/10.1177/0741713615606965>
- Kegan, R. (2009). What “form” transforms? A constructive-developmental approach to transformative learning. In K. Illeris (Ed.), *Contemporary theories of learning: Learning theorists ... in their own words* (2nd ed., pp. 29–45). Routledge.
- McCann, S., & O'Connell, D. (2020). A response to the Marine Corps' new doctrine on learning. *Proceedings*, 146(5). <https://www.usni.org/magazines/proceedings/2020/may/response-marine-corps-new-doctrine-learning>
- Merriam, S. B., Caffarella, R. S., & Baumgartner, L. M. (2007). *Learning in adulthood: A comprehensive guide* (3rd ed.). Jossey-Bass.

- Mezirow, J. (2009). Transformative learning theory. In K. Illeris (Ed.), *Contemporary theories of learning: Learning theorists ... in their own words* (pp. 114–128). Routledge.
- National Defense Act of 1916, Pub. L. No. 64-85, 39 Stat. 166 (1916). <https://govtrackus.s3.amazonaws.com/legislink/pdf/stat/39/STATUTE-39-Pg166.pdf>
- Persyn, J. M., & Polson, C. J. (2012). Evolution and influence of military adult education. *New Directions for Adult and Continuing Education*, 136, 5–16. <https://doi.org/10.1002/ace.20031>
- Pierson, D. (2017). Reengineering education for adult learners. *Journal of Military Learning*, 1(2), 31-43. <https://www.armyupress.army.mil/Journals/Journal-of-Military-Learning/Journal-of-Military-Learning-Archives/October-2017-Edition/Pierson-Reengineering-Army-Education/>
- Schatz, S., Fautua, D. T., Stodd, J., & Reitz, E. A. (2017). The changing face of military learning. *Journal of Military Learning*, 1(1), 78–91. <https://www.armyupress.army.mil/Journals/Journal-of-Military-Learning/Journal-of-Military-Learning-Archives/April-2017-Edition/The-Changing-Face-of-Military-Learning/>
- Shealy, C. (2016). The EI self: Real world implications and applications of EI theory. In C. N. Shealy (Ed.), *Making sense of beliefs and values: Theory, research, and practice* (pp. 93–111). Springer.
- Soeters, J. (2022). Why it is important to be cautious in the analysis of military organizations: A reply to Hasselblad and Yden. *Armed Forces & Society*, 48(2), 480–485. <https://doi.org/10.1177/0095327X20970248>
- Strehlow, L. H. (1962). The Army and adult education. *Adult Education*, 13(1), 25–33.
- Tagg, J. (2018). Rome wasn't built in a day: Why transformative learning takes time. *Journal of Transformative Learning*, 5(1), 1–8. <https://jotl.uco.edu/index.php/jotl/article/view/251/141>
- Taylor, E. W. (2000). Analyzing research on transformative learning theory. In J. M. Associates (Ed.), *Learning as transformation: Critical perspectives on a theory in progress* (pp. 285–328). Jossey-Bass.
- U.S. Marine Corps. (2020a). *Force design 2030*. <https://www.marines.mil/Force-Design-2030/>
- U.S. Marine Corps. (2020b). *Learning* (Marine Corps Doctrinal Publication 7). <https://www.marines.mil/Portals/1/Publications/MCDP%207.pdf?ver=2020-03-03-111011-120>
- U.S. Marine Corps. (2023). *Training and education 2030*. https://www.marines.mil/Portals/1/Publications/Training%20and%20Education%202030.pdf?ver=G6MJLpoB3_H4JRuo0FwthA%3d%3d
- Upward, S. E. (2022). “Ducks pick ducks”: The military’s institutionalized unconscious bias challenge. In B. Donald & S. Redfield (Eds.), *Extending justice: Strategies to increase inclusion and reduce bias* (pp. 347–383). Carolina Academic Press.
- Van Riper, P. (2022). *This is the Marine Corps debate we should be having*. Marine Corps Times. <https://www.marinecorpstimes.com/opinion/2022/12/07/this-is-the-marine-corps-debate-we-should-be-having/>
- Wiley, J. L., Wiley, K. R., Intolubbe-Chmil, L., Bhuyan, D., & Acheson, K. (2021). A new, depth-based quantitative approach to assessing transformative learning. *Journal of Transformative Education*, 19(4), 400–420. <https://doi.org/10.1177/15413446211045164>
- Zacharakis, J., & Van Der Werff, J. A. (2012). The future of adult education in the military. *New Directions for Adult and Continuing Education*, 136, 89–98. <https://doi.org/10.1002/ace.20038>