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elcome to the October 2023 edition of the Journal of Military Learning (IML). This edition includes manuscripts from the U.S. Military Academy, U.S. Air Force University, U.S. Naval War College, and the University of Southern Mississippi. The topics cover the Civilian Military Experience, developed to provide civilian faculty an immersive military and academic training experience; a new leadership development learning method called *leadergogy*; how to employ peer coaching in leadership courses; and an investigation of the application of interactive multimedia instruction products in military classrooms. I hope you enjoy this selection of articles, and I encourage all our readers to submit manuscripts to be considered for publication in future editions.

I'd also like to announce the Army University Learning Symposium 2024 will again be a hybrid conference. The intent of this biennial symposium is to develop partnerships among military, government, academic, and industry partners that advances the art and science of learning. The virtual session will occur 18-21 June 2024 hosting presentations of papers and Q&A with the authors. The hybrid session will occur 25-27 June 2024 at Fort Leavenworth, Kansas, and will host panels, presentations, breakouts, booths, posters, and activities. Unpublished professional papers may also be submitted for presentation and possible publication in a \mathcal{JML} special conference edition.

Finally, starting with the April 2024 *JML*, Dr. Steve Petersen, Army University, will be assuming the role as editor in chief. It has been my great pleasure serv-



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Editor in Chief

ing in that capacity, and I thank all who have contributed manuscripts and those who served on the editorial board or as an associate editor, as well as the staff of the Army University Press for making the *JML* successful.

The JML brings current adult-learning discussions and educational research from the military and civilian fields for continuous improvements in learning. Only through critical thinking and challenging our education paradigms can we as a learning organization fully reexamine and assess opportunities to improve our military education. The JML is published each April and October. A detailed call for papers and manuscript submission guidelines are found at https://www.armyupress.army.mil/Journals/Journal-of-Military-Learning. **



CivMX

Onboarding West Point Civilians to the Army Profession through the Civilian Military Experience

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Abstract

All faculty and staff at the U.S. Military Academy (West Point) support the academy's mission to educate, train, and inspire cadets to become *commissioned leaders of character* and are responsible for contributing to the academy's *culture of character growth*. Yet, without previous Army experience, civilian faculty and staff often struggle to understand the Army profession and how to contribute to cadets' professional development. The Civilian Military Experience was developed to provide civilian faculty an immersive military and academic training experience that resembles cadet field training at West Point. This training provided civilian faculty and staff with an intimate interactive experience that led to increased understanding of the demands of cadet life and leadership within the Army profession.

aculty and staff at the U.S. Military Academy (USMA, or West Point) are expected to educate, train, develop, and inspire cadets in a manner that aligns with the Army's professional ethic and develops the character traits and leadership skills required to succeed in the profession of arms.

Unlike most institutions of undergraduate higher education, all West Point graduates commission as officers and join a distinct profession where they are expected to have expertise in four broad fields: leader-human development, military-tech-

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nical, geocultural and political, and moral-ethical (U.S. Department of the Army [DA], 2019). Their profession will immerse them in a unique culture with challenges and responsibilities unfamiliar to most civilians. At West Point, approximately one quarter of the faculty are Army civilians with no previous military experience (typically Title X), and the majority of athletic coaches are civilians with no previous military experience (with contracted positions in Army West Point Athletics). The ability to relate to students' experiences and understanding the demands of their chosen profession is integral to facilitating effective education and mentorship; civilian faculty and staff can find themselves at a disadvantage compared to their military colleagues due to their lack of knowledge of military doctrine and culture, and a lack of shared experiences.

The military culture can differ from American culture outside of a military environment. For example, the military culture has more focus on the shared values of loyalty, duty, hierarchy, accountability, respect, selfless service, courage, and toughness (Joseph et al., 2022; most of which are emphasized in Army Doctrine Publication 6-22, Army Leadership and the Profession [DA, 2019]). In contrast to the individual freedoms emphasized by civilian American culture, the military has a highly collectivist culture and functional imperatives where teamwork and cohesion are incentivized more than individual accomplishment (Joseph et al., 2022). Obedience, for example, is not a prioritized virtue for many civilians; in contrast, obedience has been considered the "the highest virtue" of the military (Huntington, 1981), as it is critical for pushing soldiers to do what they would otherwise never consider. Furthermore, social bonds among soldiers are strengthened through shared experiences of adversity (Chapman et al., 2021). There is also the simple difference of physical appearance. Cadets and military faculty share common uniforms, mannerisms, customs, and courtesies. These differences can provide a significant barrier for civilian faculty and staff to overcome to make a meaningful connection with cadets.

The Army values the civilian workforce and the expertise it brings to the broader team (DA, 2022). Yet, integrating civilians poses challenges; at West Point, there is no centralized orientation to the Army profession for civilian employees. In fact, civilians are often told, "You'll drink from a fire hose" when they first arrive at West Point, as they rapidly try to absorb the acronyms, the ranks, the culture, and the details of cadet life. Swain and Cantrell (2021) recently highlighted the challenges in Army onboarding in a recent article titled "The Army's Onboarding Problem." They mention that civilians must be onboarded fully. "It doesn't matter if these civilian teammates served in uniform previously or not. If they are joining your unit, they should go through the same onboarding process as their uniformed teammates" (Swain & Cantrell, 2021, "Conclusion," para. 2).

Onboarding for Army civilians often involves video modules, lectures, or reading materials. While civilians do take the same oath as military officers, they do not always have a formal oath ceremony like officers do. This type of standard

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onboarding is likely not enough for West Point faculty who must connect their academic expertise to the military profession, and relate to their cadets or military colleagues.

At West Point, there is an imperative to build a culture of character growth, which requires faculty and staff to be a vital part in role modeling and reinforcing character traits essential to the Army profession. Yet, a notable gap remains that there is no training for all civilian faculty and staff to understand the challenges and responsibilities of officership and the character traits valued by the U.S. Army. To meet the need for a stronger understanding of the Army profession and to support West Point's line of effort to maintain a culture of character growth, the Civilian Military Experience (CivMX) was created as an experiential Army program for civilians serving at West Point.

The impact of an experiential onboarding program is supported by research that adults learn best from experience (Knowles, 1984; Knowles et al., 2020), where individuals first have a concrete experience, and then reflect on their experience to increase knowledge and skills (Kolb, 1984). Risk, in terms of novel, challenging experiences that place a learner out of their comfort zone, can benefit learning (Morris, 2020). Furthermore, research on outdoor experiential training suggests that such programs can positively impact group formation and development, attitudes about

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Lt. Col. Tom Dull serves as the battalion commander for 2nd Battalion, 11th Infantry Regiment, the Infantry Basic Officer Leader Course. He previously served as the executive officer for the Character Integration Advisory Group and as an instructor for MX400: Officership at the United States Military Academy. A career infantry officer, Dull is a graduate of Clarks Summit University and the United States Naval War College. He has served in a variety leadership position while deployed in support of Operations Enduring Freedom, Iraqi Freedom, Unified Response, Freedom Sentinel, and Atlantic Resolve.



group work, communication, and leadership skills (Cooley et al., 2015; Evans & Engew, 1997; Ginting et al., 2020).

CivMX was developed as an immersive, three-day experiential orientation to the Army profession. The curriculum was developed with the following objectives: (1) to increase civilian commitment to the larger institutional mission, (2) to facilitate staff and faculty understanding for the cadet experience, and (3) to provide faculty with a greater ability to connect classroom learning to the military profession. In 2022, CivMX was executed for a pilot cohort of faculty and staff.

Method

Participants

Participants in the CivMX pilot consisted of 13 West Point civilian faculty and staff (five females, eight males) recruited through various departments, and an in-

Dr. Orin Strauchler is the holistic wellness integrator at the Simon Center for the Professional Military Ethic and as an associate professor at the United States Military Academy in West Point, New York. He received his PsyD from Wright State University and his BA in psychology from the University at Albany–SUNY. Prior to coming to West Point, Strauchler served as the assistant dean of student support services and director of counseling at Mount Saint Mary College. His background and experience includes the development and provision of prevention, treatment, and wellness support services in higher education settings including counseling, disability services, academic success, character education, and violence prevention.

Elise M. Dykhuis is an assistant professor at the United States Military Academy. Her work integrates the concept of character virtues with developmental theory, such as Positive Youth Development, focusing on the dynamics between individuals and their contexts to promote holistic, positive formation. She received her PhD in child study and human development from Tufts University and previously worked with Wake Forest University in its Program for Leadership and Character, where she directed assessment and empirical research related to character interventions in college and professional school settings; she has also consulted on various other character intervention projects in higher education.

Lt. Col. Matt Arbogast serves as the deputy director for West Point's Simon Center for the Professional Military Ethic. He received his PhD in industrial and organizational psychology from the University of South Florida and his MBA from the College of William and Mary. He started his 25-year military career as a scout platoon leader in the 2nd Armored Cavalry Regiment and deployed to his first combat tour in 2001 to support Operation Enduring Freedom. He also served two combat tours in Iraq with the 172nd Stryker Brigade Combat Team and the 2nd Brigade Combat Team, 25th Infantry Division.



stitutional-wide email list (see Figure 1). Participants were affiliated with several departments, including seven science and engineering faculty, three behavioral science and character education faculty, and three staff with positions in administration or athletics. Their time employed at West Point ranged from less than one year to over 20 years ($\mathcal{M}=6.5$ years). All participants indicated that they had no direct family ties to the military outside of their own employment. One participant, the lead integrator for the Character Integration Advisory Group, was eliminated from the analyses in this article, given that they designed the experience, as well as parts of the survey.

Participants were provided with a packing list and were required to acquire Army operational camouflage pattern uniforms for the event. Participants were also provided with a cadet summer training liability waiver, and two read-ahead documents to provide background for discussion: the Army Vision (Esper & Milley, 2018) and an article on the art of followership (Disque, 2018). Lastly, participants were invited to take part in the pre-program and post-program survey for assessment purposes.

The Program

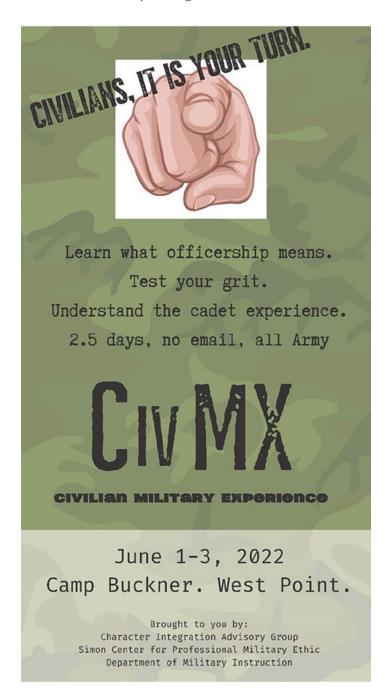
CivMX was held from 1 to 3 June 2022 at Camp Buckner, a vast outdoor training area near the West Point campus where, in parallel, cadet field training was underway for incoming West Point third-class cadets (college sophomores). Male and female participants were housed together (not separately) in barracks commonly inhabited by cadets during field training to reflect standard cadet and soldier living conditions. They were provided meals equivalent to what cadets receive when they participate in field training (e.g., "Meals Ready to Eat" [MREs] for lunch and hot meals for breakfast and dinner).

For two and a half days, participants executed practical exercises, field training events, classroom instruction, team building, and reflective exercises. Two Simon Center for the Professional Military Ethic (SCPME) platoon mentors (a lieutenant colonel and a major; authors on this article) provided supervision, guidance, training, and risk mitigation for the duration of the program. As instructors of West Point's capstone officership course (MX400), the platoon mentors leveraged their expertise to engage participants in fruitful conversations and prompted deliberate reflection before, during, and after programmed events. During participation in field training events, participants also received instruction and coaching from site cadre, which included members of the physical education and military instruction departments as well as the cadet summer training supporting task force from the 101st Airborne Division.

The three essential components of the CivMX program were classroom experiences, field experiences, and reflection (see Table 1 for the program schedule).



Figure 1
Flier Used to Recruit Civilian Faculty and Staff at West Point





Classroom Experience

Three formal lessons led by SCPME faculty were provided during the program: "The Professional Challenge," "The Army Profession," and "Inspiration to Serve (Unlimited Liability)" (see Table 2). Each lesson was developed to further participants' understanding of the Army profession and the responsibilities and challenges associated with military service.

Field Experiences

CivMX participants executed several field exercises including a water confidence course, a team obstacle course, land navigation, patrolling, camouflage, drilling, and weapons familiarization. During the program, each participant rotated through different leadership positions (each participant served as one of two squad leaders or one platoon leader during the program), similar to what cadets experience in field training. Field experiences were designed to be as authentic as possible including tasks such as a nighttime guard shift, living quarters cleaning, and accountability exercises (e.g., one participant was "kidnapped" when they left the living area without an accountability partner). All exercises were meant to closely resemble the nuanced experience of Army training regimens and schools.

Reflection

The platoon mentors utilized Socratic questioning to guide participants through reflective after action reviews after each training experience. This encouraged participants to analyze and confront the behaviors, attitudes, and commitment necessary to be a member of the Army and to facilitate their understanding and appreciation of their roles in preparing cadets for the profession of arms. Four themes were focused on throughout these reflection sessions: trust, followership, responsibility, and team cohesion (see Table 3 for more details).

Data Collection Procedure

To evaluate the impact of the experience, a repeated measures survey, in addition to several open-ended questions, was administered to the entire group of participants at three time points. The first survey was distributed six weeks before the experience (n = 10), the second survey was given out the week after CivMX (n = 12), and a third survey was given six months after CivMX (n = 11). Participants were made aware of the voluntary and anonymous nature of participating in the research survey and were provided a consent form before filling out the questionnaire. All procedures were approved



Table 1 *CivMX Schedule*

DAY 1	DAY 2	DAY 3	
Arrival and Orientation	Wake up / Formation	Wake up / Formation	
Move into Living Quarters	Class #2 The Profession of Arms	Move out of Living Quarters	
Class #1: The Professional	Basics of Land Navigation	Drill and Ceremony	
Challenge			
Water Obstacle Course	Introduction to Patrolling Tech-	Q and A and Reflections with	
	niques / Camouflage	Platoon Mentors	
	Mock Patrol	Additional Weapons	
		Familiarization	
Change Clothes / Lunch	Weapons and Equipment	Observe Cadet Summer Training	
	Familiarization	Briefing	
Team Obstacle Course Event	Hygiene and Reflection Exercise	Class #3 Inspiration to Serve	
		Cemetery Tour	
Evening Dinner and Guided	Clean Living Quarters		
Reflections			
Overnight Fire Guard	Overnight Fire Guard		

by the institution's review board. As part of the survey, participants invented their own PIN to keep the data anonymous and have some way to link the repeated measures. Ideally, a within-subjects analysis could be performed; however, too few PINs aligned to allow for that type of analysis. Instead, means across time points were compared.

Measures

In the quantitative survey pre- and post-program participation, participants were surveyed on various items that measured sense of belonging within the Army, and the degree to which the participants "understood" their cadets. Across the pre- and immediate post-surveys, we asked the following as internally developed questions: To what extent do you feel you are part of USMA? To what extent do you feel you are part of the Army? Relative to your military peers, how well do you feel you understand the cadet experience? All questions were placed on a scale from 1 (not at all) to 100 (totally). Free response "explain why" questions followed. The following were derived as belonging questions from the Workplace Belongingness Scale (Jena & Pradhan, 2018): When referring to USMA to outsiders, how much do you refer using "we/us" rather than "they/them"? When referring to Army to outsiders, how much do you refer using "we/us" rather than "they/them"? These questions were rated on a scale from 1 = Never to 5 =

 Table 2

 "Classroom" Experiences during CivMX

The Professional Challenge

CivMX will demonstrate that officership is difficult; it requires continuous, lifelong strengthening of one's character, competence, and commitment. Military effectiveness and survival on the battlefield depend upon prompt, enthusiastic obedience. CivMX introduces the Army culture and regulations that require subordinates to comply with commander's orders and emphasizes the goals of the team above personal considerations. CivMX discussions will consider how the volatility, uncertainty, complexity, and ambiguity of modern warfare could cause some orders to become obsolete. Civilian faculty and staff will learn how officers need to exercise their professional judgment to seize unforeseen opportunities and accomplish the mission when the situation changes. Officers are needed who are trustworthy enough to take initiative because they have been certified in character, competence, and commitment.

Faculty and staff will learn that the rapid pace of conflict does not allow subordinates to wait for updated orders before acting. The mission command operating doctrine provides a framework of seven principles for officers to lead their units in ever-changing situations. Predicated on trust, a mission command philosophy enables commanders to provide intent and then trust subordinates to exercise disciplined initiative to achieve that intent. Capable subordinates are trusted to take the appropriate action, without direct orders or supervision, to accomplish the mission. Trust is the enabler, for without trust, commanders will exercise direct control and subordinates will hesitate to change course.

The Army Profession

The U.S. Constitution establishes civilian control of the military; thus, as a commissioned officer, it is imperative to understand the unique authorities and responsibilities conveyed in the commission, along with the legal and moral obligations incurred upon taking the oath. The words of the Commissioning Oath seem simple; however, they carry great moral weight given the responsibilities and authorities being delegated by the president of the United States. The civilian faculty and staff are taught that the public oath is a vow to the American people to well and faithfully discharge the duties of the office upon which they (and officers) are about to enter. It is worth reflecting on the oath's meaning for both them and the cadets they develop. Armed with this understanding, faculty and staff will be better equipped to exercise stewardship of the Army Profession.

CivMX will show how the military exists to serve and defend the American people. However, the "horizontal relationship" between the military and the civilian society is complex. Military professionals have experienced the differences between military and civilian culture, and they sometimes lament what they sacrifice as a member of the profession of arms. At times, the values that make America great run contrary to the values that make its Army great. America places high value on individual liberty, while the Army requires you to voluntarily relinquish some individual freedoms. America values individual pursuits, while the Army focuses on team accomplishments. The values of the protected often collide with the necessary values of the protectors.



 Table 2

 "Classroom" Experiences during CivMX (continued)

Inspiration to Serve (Unlimited Liability)

The Army Profession doctrine establishes membership to include both civilian and military personnel. Department of the Army civilians and officers take the same oath on the day they join the Army Profession. However, the risks and possible consequences of that oath are very different for military personnel who are also joining the profession of arms. That difference is the officer's and soldier's acceptance of unlimited liability—the willingness to suffer and inflict death and physical injury. For the officer, it is also an understanding that his or her orders may result soldiers' deaths under their leadership. Unlike other professions, the profession of arms places life and death decisions in the profession's youngest members.

Unlike other professions, the profession of arms expects that its members are willing to die or suffer great injury because of their service. No one likes to think about death and injury. However, officers must accept this unlimited liability and hopefully use it to motivate themselves to develop the expertise and provide the leadership necessary to minimize death and injury. During CivMX, participants will visit the West Point Cemetery and hear stories of those service members that have made the ultimate sacrifice in service to their nation.

Always. In the immediate post-surveys, we also asked participants free-response questions: Has your understanding regarding your role in building leaders of character here at West Point changed as a result of the CivMX experience? Would you recommend CivMX and why/why not? What was the most beneficial aspect of CivMX? What was the least beneficial aspect of CivMX? In the six-month follow up (after a semester of teaching), we asked the Workplace Belongingness Scale questions and the following question: To what extent do you feel you are part of the Army? We asked a free-response question: Has CivMX influenced you this semester and how?

Results

Pre-CivMX

Free response questions before the experience were asked about what makes participants feel connected to West Point and the Army, and how well they understand the cadet experience. The responses before participation in CivMX reveal sentiments of disconnection from participants. Seven out of nine pre-survey respondents noted that their lack of military background made them feel less connected to USMA/Army. The following quotes highlight this:



 Table 3

 Themes Used for Reflections and Discussion

Trust	Centered on what we know about the future battlefield and the characteristics of the Army Profession, we reflected on the fact that trust is the bedrock of the profession of arms (Army Doctrine Publication 6-22). Officers and DA civilians are stewards of the profession both in and outside the institution; they are responsible for exploiting the strength of our profession and to fulfill its obligation by being trusted and categorically trustworthy.
Followership	Much of the discussions considered the instability, uncertainty, complexity, and ambiguity of modern warfare that cadets will likely encounter. So, questions on how officers resolve the dilemma between obedience and disobeying without becoming a toxic subordinate were considered for reflection. How does this pertain to the DA civilian? What criteria determine when an officer or DA civilian can disobey a lawful order? What kind of person can be trusted to disobey in a profession and culture that demands obedience? Leading is hard but following is harder.
Responsibility	Reflection on responsibility centered around the oath of office each commissioned officer and DA civilian takes to serve as members of the Army Profession. The words of the commissioning oath carry great moral and ethical weight given the responsibilities and authorities being delegated by the president of the United States and established through the U.S. Constitution. Their oath is a vow to the American people to well and faithfully discharge the duties of the office upon which you are about to enter; it establishes the individual commitment to the profession. The oath forms the community's distinct cohesion.
Team Cohesion	Service in the Army Profession requires all members, military and civilian, to work as a team to fulfill the responsibilities of our oath of office. Military endeavors are not individual pursuits. Cohesive teams are essential to the effective pursuit of the Army's mission.

"I don't feel a part of the Army at all, and am reminded pretty consistently, mainly by cadets, that I'm not. I also pick up on my own from listening to others who have extensive backgrounds in the Army, that I simply don't have that knowledge or understanding which is a bit of a subliminal message that I'm not a part of it. I feel like I work for the Dept. of the Army, but not the more highly respected 'Operational Army."

"I do not understand the terminology of the Army, its organization, or how the cadets are broken into platoons and what not."

Six out of nine pre-survey respondents noted that they had poor understanding of the cadet experience, as the quotes below highlight:



"I don't understand their experience, nor do I understand what they will be going into. I'm picking up pieces but it's all from a conceptual basis and not from a more visceral understanding which I think military peers can more relate to."

"Again, not as connected to USCC side of things, day to day sometimes easy to forget military academy and just see college students in front of me, very aware I'm a civilian."

Post-CivMX

Descriptive statistics indicated that, directly post-experience, nine out of 11 participants said that their understanding regarding their role in building leaders of character at West Point changed because of the CivMX experience. After CivMX, participants' free responses indicated the divide between themselves and their colleagues with a military service background was still perceived (7/10 noted this in their free responses). Consider, for example, the following quotes, which highlight how the program made them feel more connected:

"Certainly through CivMX I feel much more connected or at least I have a better understanding of where I fit into the army profession which helps me feel connected."

"Before CivMX, I considered my role as only in the academic pillar. I felt that character development was done by other members of the staff and faculty. This was typical 'stovepipe' thinking. Cross functional experiences such as CivMX breaks down those barriers."

A one-way ANOVA for quantitative analysis showed that feelings of belonging in the Army increased significantly from pre-CivMX to directly post-CivMix, and the six-month follow-up indicated stayed effects, $\mathcal{F}(2,30)=7.37$, p=.002, $\eta 2=.330$ (95% CI [.056, .513]). Bonferroni post-hoc comparisons of the three groups indicate pre-CivMX scores were significantly lower than immediate post-CivMX scores (p=.013); although immediate post and six-month post changes were not significantly different, the differences between the pre- and six-month follow-up surveys were similarly significantly different as the pre- and immediate post-survey (p=.004) (see Table 4). There were no significant changes in how participants rated themselves on the Workplace Belongingness Scale items, in contrast. We acknowledge that with this sample size, and without a comparison group, this interpretation is a promising initial evaluation of the impact of this program, although it lacks full statistical control. Despite these limitations, these data support the overwhelming qualitative data.

Table 4Self-Report of Feeling of Belonging in the Army

	Pre-CivMX	Post-CivMX (the following week)	Post-CivMX (six months later)
Number of respondents (total $N = 12$)	n = 10	n = 12	n = 11
To what extent do you feel you are part of the Army? (0-100 scale) <i>M(SD)</i>	41.10 (23.61)*	68.40 (23.11)*	73.64 (14.33)*

^{*}Bonferroni post-hoc comparisons of the three groups indicate pre-CivMX scores were significantly lower than immediate post-CivMX scores (p = .013) and six-month post-CivMX (p = .004)

Eight out of 10 participants indicated in their free responses that CivMX had improved their understanding of their roles in USMA/Army. The following quote illustrates this:

The [CivMX] program really helped to put the 'army' context into lived form. I felt a part of the 'Army' during it, a part of the 'teaming' process that others speak about but that we dont [sic] have the same experiential opportunities / feelings for as civilians. This program, led by officers, with layered in operational Army features, really helped to bring everything to life and make connections that I hadn't previously made. The sessions on the Army profession were really well done, were informative and thought provoking. The messages were clear and repeated throughout.

Eight out of 10 participants indicated in their free responses that CivMX improved their understanding of the cadet experience; the quotes below highlight this bridged understanding.

"I have a much better understanding of the cadet training experience now than I did before CivMX. I understand the mental and physical challenges in a way that I did not a week ago."

"CivMX helped me better understand the leadership skills that cadets need to have when they leave USMA. I understand better how one of the courses that I teach is put together and why it is the way it is. I also better understand



that my role is not just my subject matter expertise, but extends in subtle ways beyond that."

"The insight into the cadet experience, from the weight of leadership to the frustration of following, from the fear of heights and being pushed slightly beyond your physical limits gives new insights and ways to reach our students. I look forward to seeing the impact my CivMX experience has on my teaching and cadet development activities."

Seven out of 10 post-survey respondents said that the field training and "lived" experience were beneficial, as exemplified by the quotes below:

"Most beneficial was being immersed in it for 72 hours non-stop. The layered in pieces that [the mentors] Tom and Marc so skillfully built in was phenomenal (starting off with accountability, continuing accountability in multiple ways-buddy system, fire guard, etc.), physically challenging us together, getting our hearts pumping, teaching new and hard skills, putting us out of our comfort zones, having really thoughtful and reflective conversations, leadership rotations, them OOZING Army virtues out of them—they BELIEVE this and LIVE it. I can't say enough about Tom and Marc. They made this insanely meaningful. Biggest lesson—hard to be a good leader, harder to be a good teammate."

"The team activities (i.e., obstacle course activities, land nav) and the rotation of leadership positions. I think these allowed us all to better understand the values and lessons that we want cadets to experience and embrace."

All respondents (12/12) would recommend the Civ/MX program to their civilian peers. Table 5 shares all the comments in response to this question.

Six months later, we asked one free-response question: "Has CivMX influenced you this semester and how?" Nine out of 12 participants responded to these questions and six of these nine mentioned how the experienced helped them better connect to cadets and provided them with shared experiences to share in class. Two explicitly mentioned they were able to use military/summer training examples in class. For example:

"It helped having some shared experiences—I talked to the cadets about some of their summer experiences like Land [Navigation] and the [Water Confidence Course]. We were able to relate some that to the course material (the idea of being apprehensive and maybe a little lost, how to adapt and

Would You Recommend CivMX to Your Civilian Peers?

10000% I've already talked to several people about it and cant praise it enough. This was truly the first time that I felt like I was a part of the infamous Army 'team' that we are known for. I came here looking for it, and this program was where I first felt edges of it. Huge kuddos to Marc and Tom and their leadership and modeling made this just tremendous in that aspect.

Absolutely! The insight into the cadet experience, from the weight of leadership to the frustration of following, from the fear of heights and being pushed slightly beyond your physical limits gives new insights and ways to reach our students. I look forward to seeing the impact my CivMX experience has on my teaching and cadet development activities.

Absolutely. I'd do it again if I had the chance.

Absolutely. One, it's a completely unique experience you wouldn't get anywhere else; two, it's gonna help you relate to your cadets that much better; three, you're gonna learn a lot about yourself and others, and we are in the business of character development, which means we need to be in the business of our own personal, professional, character development too.

ABSOLUTELY. EVERYONE SHOULD DO THIS. HOW CAN YOU POSSIBLY TEACH CADETS WITHOUT UNDERSTANDING WHAT THEY GO THROUGH AND WHAT THEY ARE BEING TRAINED FOR. WE NOW HAVE A COMMON LANGUAGE AND ARE MORE LIKELY TO INTEGRATE COMMON THEMES ALONG CURRICULUM.

Hell yes. From the minor, (It gives one a bit of street cred), to the major (It make one a better and more informed instructor). Bonus, it was a lot of fun and a good team building exercise with staff one does not normally interact with.

Without a doubt, life changing, I am so much more respect for the Army service even though had only a small taste.

Yes

Yes! It was a great experience where I learned about cadet life, the army profession and built stronger relationships with my civilian peers.

yes, only the ones worth it

Yes. It was a great experience. It was enjoyable, challenging, and I learned a great deal about the cadet experience, the profession of arms, leadership, and followership. It also helped me to learn about myself as a leader, a follower, and a teammate.

Yes. It's beneficial to help bridge the perceived gap. It was a growth opportunity for all.

improve, etc.). Personally seeing the commitment and professional stewardship of our instructors inspired me to redouble my instructor development efforts."

Five of the nine comments indicated instructors had a better understanding of what we were developing cadets for and how they, as faculty and staff, could contribute to this purpose. Participants enthusiastically suggest the program is worthy of offering again. However, most participants still acknowledged that they did not feel

completely integrated into the Army and West Point. While CivMX helped them understand their role in the profession, participants still feel a distinct separation from actively serving military faculty at West Point. One consideration that continues to make civilians stand out, and feel disparate from their active-duty Army colleagues, is the uniform.

"I don't get to wear OCPs, so visibly, always look different. That is a bigger deal to me than I think officers around me realize. I feel more connected when I learn the correct language, acronyms, and even experience what they do."

Discussion

Understanding the requirements of the Army profession, the role of an officer, and the character traits cadets must develop to be effective and trustworthy are key components to effectively develop and educate cadets at West Point. CivMX provided participants with an experiential opportunity to learn about the Army profession. Despite the small sample size, the results suggest that their feelings of belonging increased, as did their ability to empathize with the cadet experience.

A few unique aspects helped make the program successful. First, the interactive classes were taught by SCPME faculty who are well-versed in illustrating how Army doctrine and the challenges of modern military operations connect with the teamwork and leadership qualities we need to develop in West Point cadets. The platoon mentors, who were also SCPME faculty, effectively utilized questions and discussion to promote participant engagement and likely increased commitment to the role of character development in support of the Army profession.

Second, teamwork was emphasized—particularly the importance of being a good teammate and not solely a leader. A central characteristic of military teams is the supremacy of the team and mission completion over the wants of the individual. Participants were placed within a platoon and asked to lead and follow their peers who had an equal lack of military experience. Even the most basic tasks of communicating through a chain of command initially seemed foreign and cumbersome. The nuance of communicating up, down, and across the simulated chain of command sparked important conversations about trust. Critical to the success of these exercises was the ability of the officer cadre to provide greater understanding for each exercise during group reflection exercises (known as after action reviews). The officers specifically emphasized the importance of team dynamics and the imperative for teamwork. A key component of this learning experience was the unstructured conversations that occurred between officer mentors and participants throughout the duration of the two-and-a-half-day program. The programmed experiences prompted introspection and stimulated ad hoc conversations about military culture and norms. These con-

versations were perceived by the officers to be valuable learning opportunities for the participants and seemed to have a significant impact on their understanding of the Army profession. Several participants' comments support this perception:

"Impromptu discussions with us helped to provide a context I previously did not possess."

"We don't learn from experience, we learn from reflecting on experience."

"It wasn't just do something adventurous, but rather, what does this mean, why do we do this, why does this matter?"

Reflections, like the conversations around task delegation and trust, were a vital part of the experience. Participants were encouraged to consider how an exercise or experience mapped on to the greater curriculum of developing future leaders of character for our Nation's Army. The ambiguity of the tasks and realism of the experience at hand allowed mistakes to be made, which led to an internal examination of the rationale behind activities. For example, one participant ignored the order to perform hygiene activities in the evening because they preferred to shower in the morning. This mistake led to a discussion about the importance of following orders, but also about the "why" or purpose behind orders—in this case, it was explained that going to sleep prior to conducting hygiene activities would leave a soldier unprepared for the following morning's activities, could soil a soldier's only available bedding, and potentially lead to medical issues. During a patrolling exercise, instead of spot correcting the fact that many participants attempted to take charge rather than dutifully performing their role, the platoon mentors allowed the confusion and disorganization amongst the team to continue and integrated the learning point in the post-exercise reflection. Allowing participants to participate in authentic military exercises and make mistakes allowed for a more impactful learning experience.

Throughout the planning and execution of this program, the officer cadre were focused on providing the most realistic experience possible that was both mentally and physically challenging but not to a level that might decrease morale or leave participants too stressed to participate fully in the educational activities. The program designers questioned whether the program needed to be overnight and fully immersive. There was also a great deal of debate as to how motivated the civilian participants would be to participate in both physically challenging events, such as the water obstacle course, and the routine, often mundane, tasks performed in the normal course of Army life including guard shifts, sanitation of facilities, and strict adherence to basic military standards. During execution, it became clear that the immersive and challenging elements of the program were essential to its success.

Participants took each exercise seriously, showed great determination in the face of personal fears or physical difficulty, and readily engaged in all assigned tasks. They were also willing to grapple with concepts such as personal discipline and the challenges of teamwork and trust that were made more poignant and powerful due to the program's verisimilitude.

At West Point, civilians touch many cadets through teaching, coaching, and mentorship. Understanding the profession cadets are entering and the experiences cadets have can make these interactions more impactful and meaningful. Programs like CivMX that provide military civilians a chance to experience and better understand military culture will likely have similar benefits in military settings outside of West Point. Beyond impacting civilians' interactions and training of cadets and military personnel, these programs have the potential to foster a greater sense of belonging in civilians, positively affect overall team cohesion, and encourage civilian stewardship of the profession.

The views expressed herein are those of the authors and do not represent the U.S. Military Academy, the Department of the Army, or the Department of Defense.

References

- Chapman, M. T., Temby, P., Crane, M., Ntoumanis, N., Quested, E., Thøgersen-Ntoumani, C., Parker, S. K., Ducker, K. J., Peeling, P., & Gucciardi, D. F. (2021). Team resilience emergence: Perspectives and experiences of military personnel selected for elite military training. *European Journal of Social Psychology*, 51(6), 951–968. https://doi.org/10.1002/ejsp.2795
- Cooley, S., Burns, V., & Cumming, J. (2015). The role of outdoor adventure education in facilitating groupwork in higher education. *Higher Education*, 69(4), 567–582. https://doi.org/10.1007/s10734-014-9791-4
- Disque, B. M. (2018). *Followership: Avoid being a toxic subordinate*. NCO Journal. https://www.armyu-press.army.mil/Journals/NCOJournal/Archives/2018/May/Followership/
- Esper, M. T., & Milley, M. A. (2018). *The Army vision*. U.S. Army. https://www.army.mil/e2/downloads/rv7/vision/the_army_vision.pdf
- Evans, D., & Engew, T. (1997). Outdoor-based leadership training and group development of family practice interns. *Family Medicine*, 29(7), 471–476.
- Ginting, H., Mahiranissa, A., Bekti, R., & Febriansyah, H. (2020). The effect of outing team building training on soft skills among MBA students. *International Journal of Management Education*, 18(3), Article 100423. https://doi.org/10.1016/j.ijme.2020.100423
- Huntington, S. P. (1981). The soldier and the state: The theory and politics of civil-military relations. Harvard University Press.
- Jena, L. K., & Pradhan, S. (2018). Conceptualizing and validating workplace belongingness scale. *Journal of Organizational Change Management*, 31(2), 451–462. https://doi.org/10.1108/JOCM-05-2017-0195

- Joseph, J. S., Smith-MacDonald, L., Filice, M. C., & Smith, M. S. (2022): Reculturation: A new perspective on military-civilian transition stress. *Military Psychology*, 35(3), 193–203. https://doi.org/10.1080/08 995605.2022.2094175
- Knowles, M. (1984). Andragogy in action: Applying modern principles of adult learning. Jossey-Bass.
- Knowles, M. S., Holton, E. F., III, Swanson, R. A., Swanson, R., & Robinson, P. A. (2020). *The adult learner: The definitive classic in adult education and human resource development*. Routledge.
- Kolb, D. A. (1984). Experiential learning: Experience as the source of learning and development. Prentice-Hall.
- Morris, T. H. (2020) Experiential learning: A systematic review and revision of Kolb's model. *Interactive Learning Environments*, 28(8), 1064–1077. https://doi.org/10.1080/10494820.2019.1570279
- Swain, J., & Cantrell, M. J. (2021). *The Army's onboarding problem*. Center for Junior Officers. https://juniorofficer.army.mil/the-armys-onboarding-problem/
- U.S. Department of the Army. (2019). *Army leadership and the profession* (Army Doctrine Publication 6-22). U.S. Government Publishing Office. https://armypubs.army.mil/epubs/DR_pubs/DR_a/ARN20039-ADP_6-22-001-WEB-5.pdf
- U.S. Department of the Army. (2022). Army people strategy: Civilian implementation plan. https://civilians.army.mil/



Understanding "Leadergogy"

The Unique Teaching and Learning Methods in a Leader Development Course

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Abstract

Whereas leadership development is a prominent concern for all organizations, how individuals learn and develop leadership within the classroom remains unclear. This article shows how a new instructional method was adapted from established best practices to form the basis for a new leadership development learning method, called *leadergogy*, emerging from the U.S. Air Force Leader Development Course for Squadron Command (LDC). Interested in determining what learning experiences contributed to higher perceptions of student learning, researchers qualitatively analyzed student comments in end-of-course surveys from 15 iterations of the eight-day LDC in academic year 2021 (n = 889) and three iterations of the LDC-Command Modules in academic year 2021 (n =165). Five themes emerged and this article discusses one of them (pinnacle of standards) along with the corresponding subthemes of connection, content, delivery, environment, and experience. These five elements, when taken together, form the foundation of a more comprehensive method of teaching and learning for lifelong adult learners by honoring students' life experiences and embracing a more shared, democratic approach to teaching and learning.

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In 2017, the RAND Corporation conducted a study called "Improving the Effectiveness of Air Force Squadron Commanders" designed to assess the responsibilities, preparation, and resources of U.S. Air Force (USAF) squadron commanders (Ausink et al., 2018). In a follow-on study, the USAF collected data from 14,652 survey participants and 3,886 interviews on three key attributes of vitality—esprit de corps, purposeful leadership, and verifiable mission success. The studies concluded that USAF leaders needed to improve their human domain skills when facing complex and emotionally demanding circumstances and to be provided with opportunities to practice these skills in realistic, pressurized situations (Davis & Air Force Core Team, 2018). In response, both the secretary and the chief of staff of the USAF requested that a program be created that provides future commanders with the tools and skills to do so (Wilson & Goldfein, 2018). This program resulted in the creation of the Air University's Leadership Development Course (LDC) for Squadron Command in 2018.

Taught by highly successful graduated squadron commanders partnered with civilian academics, LDC provides students with an intensive eight-day curricular experience covering human domain content in areas that were found to impact the key squadron vitality attributes such as clarity of purpose, culture, values, communications, human performance, and practical leadership competencies (Davis & Air Force Core Team, 2018). It uses experiential, immersive application activities to deliver an impactful student experience for participants (Hinck & Davis, 2020). Since 2018, the program witnessed considerable success, becoming known as Air University's top-rated course with student comments characterizing it as "life changing" and "the best educational experience of my life." As previous research found, LDC addresses key squadron vitality attributes by delivering an impactful student experience (Hinck & Davis, 2020). Nonetheless, the teaching and learning methods undergirding LDC's success have not been studied. This poses challenges when adapting LDC content and learning methods to new classroom contexts. Thus, when LDC faculty were tasked in early 2021 to deliver similar human domain content in a condensed, two-day format known as LDC-Command Modules (LDC-CM) as part of squadron leadership courses at USAF major commands (MAJCOM), a substantial drop in student ratings occurred. This prompted a review of the course's curriculum and learning methods.

This study presents the findings of that review whereby researchers examined what learning experiences contributed to the substantially lower perceptions of student learning in the LDC-CMs and those leading to extremely high perceptions of student learning in the eight-day course. Researchers conducted a qualitative thematic analysis of the end-of-course surveys from the three initial LDC-CMs and 15 iterations of the eight-day LDC course occurring throughout academic year (AY) 2021. Results showed an emergence of a new instructional method adapted from established best practices that form the basis for a new leadership development learning method, which we call *leadergogy*. It is composed of five elements that combine into a pinnacle of standards: connection, content, delivery, environment, and expe-

rience. We situate the findings within the broader literature of leadership development, pedagogy, and andragogy and present the implications of leadergogy for future leadership education in the USAF.

Literature

The development of effective leaders is a prominent concern for all organizations, especially the U.S. armed services. Although leadership has been widely studied, the study of leadership development has only recently emerged (Day et al., 2014). According to Day (2000), leadership development is defined as expanding the collective capacity of organizational members "to engage effectively in leadership roles and processes" (p. 582), including roles both with and without formal authority. Importantly, leadership development extends beyond training individuals' behaviors to align with specific theories on leadership to encompass broader considerations regarding the development of leadership attitudes, skills, and behaviors (Day et al., 2014).

Like human development more broadly, leadership development involves complex processes occurring within a larger context of ongoing adult learning (Day et al., 2008). According to Day et al. (2014), leadership development should be understood as a unique field of study independent from leadership more generally. Despite the growth of leadership development research (see Day et al., 2014, for a review), how

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educators engage leaders in developing their leadership capacities within the class-room remains understudied. While some attempt to bridge leadership development learning with principles of andragogy—the study of adult learning—by emphasizing the role of the instructor as guide and facilitator (McCauley et al., 2017), others argue that educational practices remain too instructor-focused with teachers still seen as the givers of learning and students as receivers (Hirsh et al., 2022). While the ideas of pedagogy have changed over time and may not have a central meaning (Shah & Campus, 2021), is there a need for a new term that better captures the variety of learning methods required to engage lifelong learners (Watkins & Mortimore, 1999) in the emerging field of leadership and how leaders study and learn leadership?

The term *pedagogy*, once confined as a discipline to the art and science of teaching children and how knowledge and skills are imparted in an early educational context, is outdated (Shah & Campus, 2021) and needs to be updated in higher education and for lifelong learners (Watkins & Mortimore, 1999). While some affiliate pedagogy challenges to ideologies associated with race, ethnicity, and gender, these terms are limiting (Murphy, 1996) and exclude the notion of student as teacher or a shared authority for teaching and learning in the classroom. Meeting the educational needs of students at critical points in their education (young or old) is key to the quality of learning (Usanov & Qayumov, 2020) for all participants. While a variety of teaching should be used to ensure all learning styles are met, traditional education, especially in higher education, focuses on unidirectional methods (e.g., lectures) as the dominant form of knowledge exchange rather than a more democratic approach to learning using shared dialogue (Brookfield & Preskill, 1997) or the use of dis-

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cussion-based methods where the instructor holds the authority (Rose-Redwood et al., 2018) rather than a dialogic approach where teacher and student share the authority for teaching and learning. In-class activities lead to higher student satisfaction and higher test scores than other methods while lectures resulted in lower test scores than other teaching methods (Hackathorn et al., 2011). The term andragogy, or the art and science of adult learning (Davenport & Davenport, 1985), encapsulates and honors prior life experiences and education level of the learner (Krajnc, 2014) and emphasizes lifelong learning as an element of adult learning (Henschke, 2011). Teaching and learning are best when multiple teaching and learning styles are employed (Tulbure, 2012; Waite, 2011) with learning strategies that "develop students' capability to use ideas and information, develop the student's ability to test ideas and evidence, develop the student's ability to generate ideas and evidence, facilitate the personal development of students, develop the capacity of students to plan and manage their own learning" (Bourner & Flowers, 1999, p. 6). The use of inductive teaching methods, including inquiry learning, case studies, and discovery learning, are more effective in a student-driven approach to learning (Prince & Felder, 2006) that involves active and collaborative learning environments. Yet, the teaching is still instructor-focused, and learning is student-focused where teachers are the "givers" and students are the "receivers" (Hirsh et al., 2022). Learning effectiveness can be understood via writing assignments and is impacted by differences between students, instructional methods, and the capabilities of instructors (Graham & Hebert, 2010). Because the quality and nature of leadership development programs play important roles in behavioral change and the transfer of leadership skills among organizational members (Baldwin & Ford, 1988), research into the teaching and learning methods of leadership education programs is needed.

LDC Teaching and Learning Methods

To answer the charge to develop USAF squadron leaders' human domain capacities, in 2018, LDC began offering an intensive eight-day course covering topics such as clarity of purpose, culture, values, communication, human performance, personality, storytelling, coaching, officer performance reports, and justice and discipline. In doing so, the eight-day course provides a mix of large group experiences with 75–



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120 total participants and smaller, 14–16-person seminar breakouts. Large group experiences predominately include short 10–15-minute perspectives on leadership from graduated squadron commanders, with the bulk of students' time occurring in their seminar groups cofacilitated by a graduated squadron commander and an academic instructor. Before teaching, instructors go through a four-week faculty development program with an additional four weeks occurring throughout the year. Course objectives aim to engage students in three domains of learning: cognitive, affective, and behavioral; with specific teaching and learning methods including group discussion, whiteboard prompts, short reflection/journaling, music and improv, live scenarios with AI simulations, and various classroom activities.

Whereas previous research on LDC has focused on the impact of the course, including the application and transfer of leadership objectives (Crowley, 2019), the way leadership is developed and enacted in the course (Hinck, 2022; Iwanenko, 2021; Michaelson, 2020), and how the course sets the conditions for success in command (Longmire, 2019), less attention has been placed on its learning methods. Within this vein, some research has shown an increased importance of self-reflection and introspection when creating a virtual version of the course (Hinck & Davis, 2022). Another study focused on the specific usage of music, coaching, and improv to deepen the experience for students and instructors (Hinck et al., 2023). Most notably, Hinck and Davis (2020) developed a model conceptualizing the learning environment as an ecosystem, stressing the importance of constructing a positive learning environment for both student and instructor development.

The BART (boundary, authority, role, and task) analysis of organizations (Senge, 1991) and in group relations (Green & Molenkamp, 2005; Wells, 1990) is a useful framework for LDC. The boundaries of who is teacher and who is student is less formalized in LDC than other professional military education courses. The shared authority for learning coupled with the dual role of teacher and learner in the task of becoming a better leader using human domain content for self, others, and organizations illuminates an adaptive element how learning and teaching occurs in LDC. Group relations theorists (Alderfer, 1980; Green & Molenkamp, 2005; Laszlo, 2007; McTaggart, 2008; Rice, 1965) say that all thoughts and behaviors can be understood as products of the system, collective, and context that produced them and that no

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human production exists in a vacuum. The system of teaching and learning in LDC seems to be more about the capacity of each participant (instructor and student) to be both teacher and learner.

The LDC teaching methods prioritize experiences, small group discussion, and interactive activities that overlap with the Army's experiential learning model (Kem, 2006). The LDC curriculum flow aligns with the experiential learning model and engages multiple learning styles that begin with a perspective—a story that puts the follow-on content into the context of military command and leadership. Each perspective serves as a concrete experience and anchors learning in the emotional/ affective zone. In the follow-on seminar, students unpack their reactions to the perspective and/or conduct a personal reflection in their leader book—all which invites students to process and publish their learning (P&P/Reflective Observation). Specific and generalized new information (GNI/Abstract Conceptualization) is presented to students in various ways that include prompts, guided discussions, handouts, slides, etc. Students are then asked to develop (Develop) what they learned in a series of small groups, answering specific prompts, and engaging in a meaningful dialogue with peers. To finish the lesson, students are invited to apply (Apply/Active Experimentation) their new learning by sharing out loud or journaling their answers on imagining how they might apply the new learning in their military/home life. See Figure 1 for the comparison.

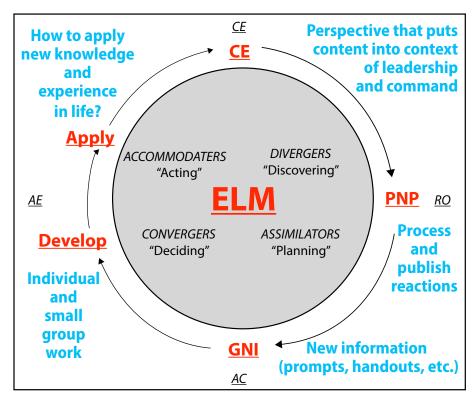
While these studies explore some individual teaching strategies, identify the broader importance of the learning environment, describe the underlining learning methods, and connect them to established models, they are coupled with some definitional problems relating to learning activities and typologies of Kolb's experimental learning model used by the Army and LDC (Bergsteiner et al., 2010), and the effectiveness of the methods utilized by LDC remain unclear. Thus, when asked to offer a condensed two-day version of LDC at USAF MAJCOMs, despite similarly trained faculty delivering similar content blocks, a substantial drop in student evaluations occurred. Whereas the eight-day course received a mean score of 4.84/5.00 over 15 iterations in AY21, the average score of the three LDC-CM was only 3.57/5.00—the lowest received by any LDC program, including those conducted virtually. While the standard deviation for the LDC has become smaller over time (from 2.0 to 1.4 we believe due to course improvements), the standard deviation for the LDC-CM was much wider (due to reasons we identify and explain later). The unexplained drop in student evaluations and variance in scores prompted the LDC faculty research team to ask two questions:

RQ1: What learning experiences contributed to consistently high perceptions of student learning in the eight-day LDC course?

RQ2: What learning experiences contributed to substantially lower perceptions of student learning in the LDC-Command Modules (LDC-CM)?







Note. Figure adapted from "The Use of Case Studies as an Integrating Approach in Professional Military Education: A Pilot Study," by Jack D. Kem, 2006, *Essays in Education*, 18(1), p. 9 (https://openriver.winona.edu/eie/vol18/iss1/). Copyright 2006 by OpenRiver.

Method

Researchers conducted a qualitative thematic analysis comparing students' written feedback from the LDC-CM and eight-day LDC occurring throughout AY21. End-of-course survey data for the LDC-CM were provided by the Air Mobility Command representative who organized all squadron leader courses. The LDC-CM portion of the Squadron Leadership Courses consisted of two half-day sessions on content related to the human domain skills when leading a squadron. Data were coded from all questions in the end-of-course survey related to the LDC-CM portion from the three iterations of the LDC-CM (n = 165). Data from the eight-day LDC included 15 iterations of the course occurring throughout AY21 (n = 889) with researchers



examining responses from eight survey questions related to the student learning experience. Participants were in one program or the other, not both.

Data was collected and coded from eight questions used in the survey and transcript analysis from the instructor discussions that supported three objectives:

1. Assess the Content Value / Area of Impact

Q20–23: "What were the three most (least) valuable areas of instruction?" Explain top three.

2. Assess the Application of Learning / Level of Impact

Q24: "How do you plan on applying what you learned in this course?"

3. Assess Course Effectiveness / Depth of Impact or "Student Experience"

Q13: "How would you rate the quality of your online/virtual education in LDC?"

Q14: "The course better prepared me to thrive in the unique context of leading a sq or sim org."

Q18: "Rate your experience with the following aspects of the course."

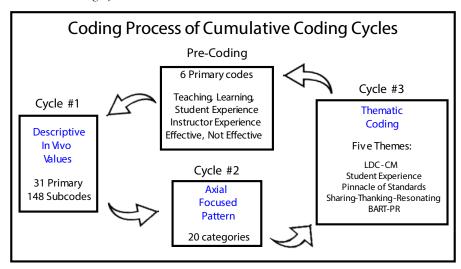
Researchers analyzed the data by conducting a qualitative thematic analysis using a grounded theory approach. Given previous studies' call for development of new teaching and learning methods for lifelong adult learners (Hirsh et al., 2022; Shah & Campus, 2021; Watkins & Mortimore, 1999), this method best suits the study's research aims by allowing themes to emerge organically from the data without any a priori assumptions, enabling new insights to emerge through close engagement with the data (Glaser & Straus, 1967; Patton, 2015). Accordingly, researchers engaged in a cyclical process of cumulative coding cycles. This process began with (a) familiarization of the data by reading through the entirety of the data set; (b) initial precode generation identifying areas of effective and ineffective teaching, learning, and both student and instructor experience; and (c) three cumulative coding processes moving from descriptive, in vivo coding to axial, focused coding whereby emergent patterns were identified and concluding with a final thematic coding of the data into major themes (see Figure 2). For this process, three researchers were involved with 95% inter-rater reliability. The differences were in descriptive coding in cycle 1 that were resolved before moving into categorical coding in cycle 2.



Findings

Analysis of the LDC-CM and eight-day LDC end-of-course student surveys revealed five themes: LDC-CM, student experience, pinnacle of standards, shar-

Figure 2
Cumulative Coding Cycles



ing-thanking-resonating zone, and boundary-role-authority-task-purpose-relationships. This article only examines the theme of pinnacle of standards as one way to understand why the LDC-CM resulted in substantially lower perceptions of student learning and the consistently higher perceptions of student learning in the eightday LDC. Each of the five subthemes in the pinnacle of standards is discussed with comments from the LDC-CM showcasing the deficiency of each category contrasted with the more positive, impactful descriptions provided by students in the eight-day LDC. While instructor experience was examined, the focus in this article is on how the students learned from instructors and the student experience and does not address the instructor experience.

Theme 1: Connection

Students in the eight-day LDC reported consistent and strong feelings of connection fostered among their peers and instructors. As one student noted, "I feel like this course gave me new tools for my toolbox and allowed me to build new connections with some great people. I highly recommend to any future squadron commanders or senior NCOs." As another stated, "I have now gained unique perspective and lifelong friends (in just 8 days) that I can reach out to."

This building of connection enabled trust to emerge among students and instructors, allowing them to open up and become vulnerable. As one comment details, "This course is the best course in the Air Force for many reasons but mostly because of the



vulnerability of the instructors and the seminar team building." LDC instructors modeled vulnerability by sharing personal stories and experiences of adversity during command, after which students were asked to personally reflect upon and then discuss the stories in seminar groups. Taken together, this process emphasized connection before content, thereby enabling student vulnerability and enhancing their ability for reflection and growth: (1) "The course provided the time and space for self-reflection and discussion on difficult topics ... it provided instructional venues, allowed shared stories/experiences from classmates and instructors." (2) "Sq/CC [squadron commander] perspectives hit the nail on the head. I believe that set the tone for students to open up and be vulnerable within their breakout groups and seminars."

In contrast, the LDC-CM was unsuccessful in fostering a sense of connection. Students were left confused, bored, or disengaged from the command perspectives and small group discussions:

I felt like directions for the small groups were often confusing. The afternoon session really just felt like we were being talked to. Also, spouses seemed very bored. The presenters didn't convey the questions to the class but were more concerned on telling the story. Either change back to the instructor from the previous sq/cc courses this year or prepare the new instructors better so the class can get something worthwhile out of this full day! But 3 hours of listening to your stories is not productive. The lead briefer repeated himself a lot.

Thus, rather than fostering connection between students and instructors, learning methods in the LDC-CM were perceived as unidirectional, with content flowing from the instructor to students, contributing to a lack of identification and interest in the stories presented. Instructors were perceived as concerned not with connecting with students, evident not only by failing to convey questions to the class but also because students perceived them as focused on themselves and the presentation of their stories.

Theme 2: Content

Students in the eight-day LDC consistently saw value in the leadership tools, stories, scenarios, and overall content presented to them in class. Students came to see the "real world" applicability of the content: "This course was phenomenal. The real-world experiences that were shared during the sessions really made the class. The lessons dealing with the human factors/interactions were very useful as they related to real world situations." For others, the content felt tailored for them specifically: "It [LDC] highlighted foundations for leadership development: trust, empowerment, vulnerability Content felt customized to us and applicable across all career fields and mission sets."



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Taken together, the relevancy of the content uniquely enabled students to personally grow:

I believe the know yourself and know your team were outstanding. I have done this in several other courses, but it was very by the book and a "cool, I know my personality is letters." This instruction was way more than that. It allowed each student to lead in ways that they thrived, and for those challenges/blind spots, how to get better at those gaps of leadership.

Real Life Perspectives of being in Command—allows to visualize and realize one should prep/prepare prior to taking command. The Personality traits and the 5 Voices—discussions throughout the whole course provided discovery who we are as well as others and how we see and do in life. The daily phrases were thought provoking in allowing me to think deeper about my Leadership abilities now and in the future.

In contrast, students in the LDC-CM perceived the content as lacking substance, practicality, and relevance. As one student explained, "I'm concerned this course is entirely based on personality and personal stories. Very little advice or lessons. There weren't scenarios to work through on the road show module. I would have like more concrete/actionable info. More substance, less philosophy." Thus, despite similar content presented, the LDC-CM students did not see its real-world applicability, with this evident even when comparing comments on the same content blocks, like personality.

Theme 3: Delivery

Students in the eight-day LDC course found the delivery of course content as contributing to their learning and development. This included not only the variety of learning methods applied but also how they were delivered. As one student explained,

You can never get enough stories. So much value in someone sharing a story, THEN applying the course content. Makes the content more relevant and gives leaders a chance to reflect on their own stories and where they could have modified their actions had they known the content.

In this sense, the eight-day course engaged students across three domains of learning—cognitive, affective, and behavioral. By placing command perspectives before a content block, students were put into an affective learning state first, thereby enabling further cognitive engagement, reflection, and growth in the small group discussions.

Further contributing to this were students' perceptions of the delivery as genuine and authentic:



The Sq/CC perspectives were fantastic—they were all up there with some of the better TED talks I've seen. I feel like some of these should be shared with a wider audience because they were really genuine and taught great lessons. Finally, the retired GO perspectives were awesome, and it was great to have them in our seminars as regular participants—they were very down to earth and relatable.

Squadron CC perspective is very powerful. It is authentic. How the speaker approached the situation and learned from it is very valuable ... Leading Squadron in Crisis gives us an opportunity to think through a situation that could possibly happen and learn from each other.

In contrast, during the LDC-CMs, students felt the delivery fell flat most of the time, both in terms of the large group experiences and within seminar discussions:

I had high expectations based on discussion with others that had attended LDC. The afternoon didn't really improve my ability to help lead in a crisis. The stories were great in hearing actual stories, but I think they could be cut down. Maybe the instructors just failed to effectively facilitate. It was good, but I would try to condense this to one full day to make room for other sessions.

As the comment suggests, the large group experience failed to set the affective tone for the student. Despite some positive descriptions of the stories, the students felt that less time should be devoted to them, while instructor facilitation was seen as lacking. Taken together, the failed delivery of content contributed to a lack of cognitive engagement and perception of skill development.

Theme 4: Fnvironment

Whether in resident or virtual, LDC instructors aim to create learning environments whereby student learning comes from self, peers, and instructors in meaningful ways (Davis & Hinck, 2021; Hinck & Davis, 2020). Comments from the eight-day LDC reflected this in a variety of ways: (1) "Hearing senior leaders and group commanders' perspectives in such an intimate, close environment was exceptional." (2) "The personal experiences shared by the instructors coupled with the seminar discussions provided a unique and insightful perspective on the roles of the Squadron Leadership Triad."

Importantly, students viewed the learning environment as one whereby authority was shared, contributing to a sense of collective understanding. Thus, learning emerged not only from stories or content told by instructors but also from discussions with their peers—including those from different ranks and statuses.



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Learning from all of the others in the seminar was invaluable. Excellent insights shared by both "new" squadron commanders as well getting the enlisted perspective. The clarity of purpose was on-point. Understanding the interaction/role/value of all of the members on the command team was huge! The Leadership Perspectives helped put a very real and very human face on the things commanders will face (not just a bunch of hypotheticals.)

In contrast, a productive, shared learning environment failed to take hold at the LDC-CM. As one student noted, "I think we should be in smaller groups. The small group discussions were most valuable, but because we just discussed what we wanted. Maybe the class was too big." Here the instructors were not seen as contributing to the group's collective learning. While the comment expressed a desire for more small group discussion, the value of the small groups was not related to the development of one as a leader but was perceived as useful because students could discuss what they pleased without concern for course content. This suggests that the learning environment was not established, leaving students disconnected from the course's educational purposes, instructors, and, to some extent, their peers.

Theme 5: Experience

Arguably the most important theme from the eight-day LDC course was positive descriptions of the student experience. Comments included those evaluating the overall design of the course—"the design, structure, and how the course grew on the day before provided a very positive experience, along with listen[ing] to others"—as well as its impact related to personal development: (1) "Learning through experiences and conversation really solidified the material being presented. It allowed me the opportunity to internalize, reflect, and mentally make a leadership game plan." (2) "Leadership case studies and crisis response exercises really allowed us to practice and build confidence for future scenarios with our Airmen."

More specifically, students noted how the teaching and learning methods felt authentic, real, and challenging: (1) "The first-hand stories and debriefs thereafter were so powerful and thought provoking. This is what set this class above anything I have experienced in the past." (2) "Leading a squadron in crisis, the role play was authentic, and I felt the panic and unsureness of the actions."

Most comprehensively, how all four of the previous themes coalesced into a positive learning experience was evident in the following student comment:

Hearing the stories of others, bouncing ideas/scenarios off of others, and being asked to lean into discomfort is a premiere opportunity that some never get, or don't get often. Knowing yourself and understanding what you bring to the team, and where you need cognitive diversity to offset your attributes is crucial



as a leader. Having the chance to practice tough scenarios before being in real ones is highly productive and value-added. Leaning on the vast experience in the room and the trust built in a short amount of time allowed us to really ask hard questions of ourselves - some of which we might otherwise ignore or overlook when faced with tough situations or decisions. It also gives us a network to reach out to for help in the future, and that builds confidence.

As the comment demonstrates, the previous four themes contributed to the positive experience by emphasizing the importance of connection, the applicability of the course content and its impactful delivery, and the creation of an environment of shared learning.

Conversely, the LDC-CM failed to deliver an effective learning experience. As one student explained,

Extra time could have been used for another subject. The LDC felt more like a church sermon than adult leadership learning. Lots of weird overhead questions. It felt very programmed and scripted. LDC was easily the least relevant or exciting portion of the course, cannot emphasize this enough. I don't think the Thursday session was really needed. Not much of a gain ... I had high expectations for this part of the week but was disappointed. Less doom and gloom, more specifics about building teams and building the mentality and ethos to survive in the high-end threat environment.

In this case, the negative characterization of the experience as akin to a "church sermon" highlighted the culminating lack of success when attempting to create a positive learning experience, with the inability to construct a positive learning environment evident by the ineffective manifestation of the previous four themes. Thus, poor delivery occurred—described as "programmed and scripted," content seen as "not much of a gain," the learning environment as "weird" with too much "doom and gloom," and no mention of connection or learning among student peers and instructors.

Discussion

Taken together, we argue that the five themes emerging from the comparison of students' perceptions of learning in the LDC-CM and eight-day LDC articulate a new form of leadership development learning, which we call leadergogy. We begin by summarizing what leadergogy is and situate its five elements within the literature on adult learning and leadership development. We then offer two primary reasons why the LDC-CM student experience could have suffered and discuss three implications for the USAF and leadership development programs more broadly.



Defining Leadergogy: The Pinnacle of Standards

As a learning method, leadergogy begins by enacting and developing *connections* among students and instructors before providing relevant *content* aligning with the stage of students' leadership development, learning, and experiences. Through multiple learning modalities communicated authentically, the *delivery* of leadergogy encompasses all domains of learning (cognitive, affective, and behavioral), contributing to a carefully orchestrated *environment* in which all voices and experiences are shared and heard in a psychologically safe space conducive to learning. These four elements culminate in a unique *experience*—one where students perceive the benefits of the leadership development program while fostering personal growth, gratitude, and optimism for their future development (see Figure 3).

Components of Leadergogy

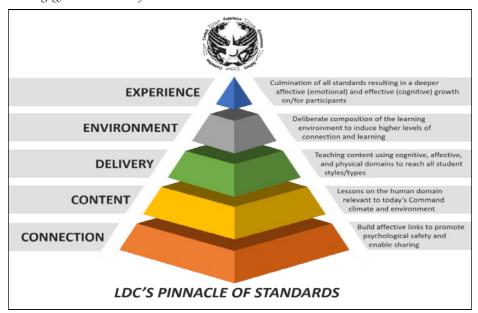
Connection. Because relationships matter in the human domain, leadergogy emphasizes connection before content to build trust and strengthen the social fabric among participants. This occurs by building affective links that promote psychological safety and inclusivity that enable sharing and discussing difficult situations (Dewey, 1933/1986; Edmondson, 1999, 2004; Schein & Bennis, 1965). Students and instructors come to appreciate, support, and connect in ways allowing them to explore new avenues for personal growth, reflection, and perspective sharing while offering gratitude toward others and expressing humility.

Content. Leadergogy provides relevant, thought-provoking tools and frameworks for hard-hitting content in the human domain (Hinck, 2022; Hinck & Davis, 2020). Importantly, the content must align with individuals' current stages of learning and experience, honoring prior life experiences and the education level of the learner while emphasizing learning as a lifelong process (Henschke, 2011; Krajnc, 2014). If the content is not made relevant for the time and place in the student's career, perceptions of the applicability of the learning does not occur, stymieing self-development.

Delivery. Whereas traditional educational practices focus on unidirectional methods (e.g., lectures) for knowledge exchange (Brookfield & Preskill, 1997) or use discussion-based methods whereby the instructor still maintains authority (Rose-Redwood et al., 2018), leadergogy includes a range of teaching and learning techniques not only to reach all student learning types but also create an affective state whereby students and instructors share authority in a genuine and authentic way. Thus, leadergogy engages students in three domains of learning—cognitive, affective, and behavioral. This enables students to feel the importance of others' perspectives and stories and fosters deeper self-reflection, development, and introspection. Whereas previous research shows that learning best occurs when multiple



Figure 3 *Leadergogy as a Pinnacle of Standards*



teaching and learning styles are employed (Tulbure, 2012; Waite, 2011), leadergogy uses such teaching and learning techniques in a way that emphasizes relationships with and among participants (Green & Molenkamp, 2005; Lazlo, 2007; McTaggart, 2008; Rice, 1965; Wells, 1990) and provides a way of combining teaching techniques into a new model that accompanies the experiential learning model.

Environment. Leadergogy aims to maximize and carefully orchestrate the internal and external learning environments so that student learning comes from self, peers, and instructors in meaningful ways (Davis & Hinck, 2021; Hinck & Davis, 2020). Building from research showing student preference for learning methodologies based on shared dialogue (Brookfield & Preskill, 1997) and prompt-based discussions as a means to reinforce shared authority between the teacher and learning, leadergogy supports nontraditional approaches to teaching and learning that de-centers authority away from the instructor (Rose-Redwood et al., 2018). By creating an environment of shared authority, supported by trust as modeled by instructor vulnerability and personal stories when in command, students mirror such practices and develop their capacity to use ideas and information to test and share different perspectives and reactions. This, in turn, facilitates greater personal development and ownership, with students afforded greater agency in planning and managing their learning (Bourner & Flowers, 1999, p. 82) when addressing ambiguous, potentially awkward, and difficult situations.

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Experience. The goal of leadergogy is to produce a positive impactful experience for learners. This represents the top-level standard upon which student learning can be evaluated. The student experience marks a culmination of the previous four standards while adding consideration to the overall product of the learning methods employed and environment created. Because meeting the educational needs of students at critical points in their education is key to the quality of learning for all participants (Usanov & Qayumov, 2020), with leadership development concerned not only with individual behavioral change and skill improvement but attitudinal alignment and personal motivation for growth as well (Day et al., 2014), the goal of leadergogy as a learning framework is to leave students with an impactful learning experience resulting in a deeper affective state conducive to greater cognitive growth and sustained behavioral change (Hinck & Davis, 2020; Hinck et al., 2021) that aligns with the organization's goals (Day et al., 2014). Thus, the combination of meaningful teaching and learning strategies, in addition to a truly student-driven learning approach, results in leadergogy creating positive perceptions of student learning that can drive continued leadership development and growth.

When taken together, these five standards form the foundation of a more comprehensive method of teaching and learning for lifelong adult learners (Henschke, 2011; Usanov & Qayumov, 2020; Watkins & Mortimore, 1999), which honors students' life experiences (Krajnc, 2014). Importantly, it provides a new way to approach adult learning and leadership development by addressing deficiencies from more limiting, and vague principles of pedagogy and andragogy (Murphy, 1996; Shah & Campus, 2021) and embraces a more shared and democratic approach to teaching and learning (Brookfield & Preskill, 1997; Rose-Redwood et al., 2018). Hence, leadergogy goes beyond andragogy's six broad assumptions regarding adult learning (learners' concept, the role of experience, readiness to learn, orientation to learning, motivation, and need to know) (Knowles et al., 2015) by providing a more useful, specific, and empirically backed framework for leadership development programs in which content is constructed and delivered in service to creating an environment leading to an impactful and meaningful leadership development experience.

Evaluating the LDC-CM: Lessons Learned and the Reinforcement of Leadergogy

This study was prompted by concerns regarding the drop in student perceptions of learning in the LDC-CM compared to the eight-day LDC. Whereas student comments from the eight-day LDC course exemplified the leadergogy framework, responses from the LDC-CM demonstrated more middle-line and typical student evaluations of professional military education courses. Taken together, the comparison of feedback from the two courses supports the argument for leadergogy as a



new form of effective leadership development learning, with the lower scores in the LDC-CM arising from an inability to enact the leadergogy framework.

When evaluating the LDC-CM feedback within the framework of leadergogy, two primary potential reasons for the lower perception of student learning, and thus lower scores of the course emerged: relevancy and training. First, the relevancy issue was understood by students viewing the LDC-CM content as not useful for those who were either already in command or about to take command. In this sense, students were already in an affective state whereby the current stress of command or immediate worries about taking command shortly resulted in the lack of resonance of LDC-CM content. Thus, future iterations of the LDC-CM should modify both the content and its delivery to emphasize the immediate applicability of the tools and value of discussions and shared perspectives experienced within the course to honor the educational needs of students at their current stage in development (Usanov & Qayumov, 2020).

Second, four elements could have contributed to training issues regarding those teaching the LDC-CM:

- 1. Inadequate training in adapting the implementation of leadergogy's standard of connection given the shortened time for the LDC-CM. Here opportunities for connection between students and instructors were insufficiently intentional given the time constraints. Yet, the difference in length between the LDC (eight-day) and LDC-CM (two-day) is a relevant factor in the time available for connection that relates to the overall experience. While not causal, it is a confounding variable.
- An inability to maximize the learning environment due to the USAF MAJCOMs selected location in which LDC instructors were unfamiliar.
- 3. A low degree of immersion and limited continuous exposure to purposeful LDC delivery, leading to limited usage of scenarios, application activities, and meaningful reflection from shared perspectives among students and their peers.
- 4. A lower quality of experience. Because learning effectiveness is impacted by differences among students, instructional arrangements, and the capabilities of those implementing instruction (Graham & Hebert, 2011), the three aforementioned issues related to training, in addition to the issue relating to content relevancy, detrimentally influenced how students and instructors could create an impactful experience characterized by shared authority and personal growth.

Thus, future implementation of the LDC-CM should include more faculty development accounting for the shortened class time and adaptation of learning activities in service to fulfilling the leadergogy framework. LDC faculty may also consider traveling to the LDC-CM locations prior to the class to familiarize themselves with the location to improve the orchestration of the environment.

While an alternative explanation for the lower LDC-CM scores may be the difference in contact hours, analysis of the student feedback suggests this not to be the



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case. As the LDC-CM examples demonstrated, students actually believed that less time was needed; specifically, less time devoted to stories (see Theme 1), suggestions that the curriculum be condensed to one day (see Theme 3), and time better utilized if given to another subject (see Theme 5). In contrast, students from the eight-day course noted how trust was built in such a short amount of time (see Theme 5). Taken together, this suggests that the quality, not quantity, of contact hours determines how students perceive the efficacy of professional military education (Hinck & Hinck, 2023). Yet, as argued earlier, the difference in length between the eight-day LDC and the two-day LDC-CM is a confounding variable and very relevant in the overall experience.

Implications

Our project provides three implications for the wider educational field, professional military education, and the USAF. First, leadergogy, as a new form of learning methodology, offers an empirically backed framework that honors the voices of students and teachers, which is key to creating a shared learning environment whereby all participants act as co-learners and co-teachers. This enables greater learning and personal development to occur by enlarging the field of perspectives and leadership experiences contemplated, both successes and failures, helping to shape the attitudes of learners in more constructive and confident ways.

Second, the study advocates for a variety of teaching and learning methods, including multiple learning styles, and engagement of the affective learning domain to support cognitive growth and behavioral change. When employing leadergogy effectively, less emphasis is placed on formal lecturing, and instead, greater usage is made of prompt-based discussions, experiential learning tools, and emotional storytelling. This enables learning and personal development to emerge not only from readings but also from the collective knowledge, experiences, and inquiries of the group. The real-life experiences of students are as important to learning as the expert content knowledge and teaching methods of instructors. Students thus develop and apply new knowledge and skills in concert with the instructors and their peers, with relational development among them creating a positive learning environment.

Third, the research addresses three of the four key attributes in the 2018 chief of staff of the Air Force's "Action Orders on Accelerating Change or Lose" (Brown, 2020). It reinforces the "Airmen" concept that sees all participants as learners and teachers with universal skillsets viewed as significant to all Airmen regardless of their Air Force specialty code, advocates for the need to revise our educational bureaucracy and learning practices, and identifies outdated learning systems and programs that require new designs for more effective learning and leadership making us competitive in the future high-end fight.



Conclusion

Moving away from traditional classroom approaches of instructor-centric authority and content delivery, this study offers leadergogy as a new teaching and learning approach established from best practices to form the basis for a new leadership development learning method. At its heart, leadergogy aims to craft a meaningful student experience by creating connection before content to foster psychological safety and personal growth, content relevancy, and effective delivery placing students in an affective state conducive to greater learning, and an environment whereby trust, authenticity, and vulnerability emerges to enhance shared learning from peers and instructors. Taken together, the leadergogy framework offers new ways by which programs may assess and construct their curriculum, including its application to improve the learning effectiveness of future and current leaders not only in the Air Force and Space Force but other service branches as well, in addition to leadership education programs within higher education and the private sector.

References

- Alderfer, C. P. (1980). Consulting to underbounded systems. In C. P. Alderfer & C. L. Cooper (Eds.), *Advances in experiential social processes* (Vol. 2, pp. 267–295). John Wiley & Sons.
- Ausink, J. A., Matthews, M., Conley, R. E., & Lim, N. (2018). *Improving the effectiveness of Air Force squad-ron commanders*. RAND Corporation. https://www.rand.org/pubs/research_reports/RR2233.html
- Baldwin, T. T., & Ford, J. K. (1988). Transfer of training: A review and directions for future research. *Personnel Psychology*, 41(1), 63–105. https://doi.org/10.1111/j.1744-6570.1988.tb00632.x
- Bergsteiner, H., Avery, G., & Neumann, R. (2010). Kolb's experiential learning model: Critique from a modelling perspective. Studies in Continuing Education, 32(1), 29–46. https://doi.org/10.1080/01580370903534355
- Bourner, T., & Flowers, S. (1999). Teaching and learning methods in higher education: A glimpse of the future. Reflections on Higher Education, 9, 77–102.
- Brookfield, S. D., & Preskill, S. (1997). Discussion as a way of teaching: Tools and techniques for a democratic classroom. Jossey-Bass.
- Brown, C. Q. (2020). CSAF action orders: To accelerate change across the Air Force. Department of the Air Force. https://www.af.mil/Portals/1/documents/csaf/CSAF_Action_Orders_Letter_to_the_Force.pdf
- Crowley, R. (2019). Transfer of Air Force leader education—increasing application of development course objectives (Air War College Professional Studies Paper). Air University.
- Davenport, J., & Davenport, J. A. (1985). A chronology and analysis of the andragogy debate. *Adult Education Quarterly*, 35(3), 152–159. https://doi.org/10.1177/0001848185035003004
- Davis, S. B., & Hinck, J. M. (2021, June 8–11). Adapting teacher life cycle developmental theory in adult education. In W. B. James, C. Cobanoglu, & M. Cavusoglu (Eds.), *Proceedings of the 4th annual global conference on education and research (GLOCER)* (Vol. 4). Virtually Hosted, Florida, United States.



UNDERSTANDING LEADERGOGY

- Davis, S. L., & Air Force Core Team. (2018). *Improving Air Force squadrons—Recommendations for vitality*. Department of the Air Force. https://www.afsig.af.mil/Portals/73/Documents/Improving%20Air%20Force%20Squadrons%20-%20Recommendations%20for%20Vitality.pdf
- Day, D. V. (2000). Leadership development: A review in context. *The Leadership Quarterly*, 11(4), 581–613. https://doi.org/10.1016/S1048-9843(00)00061-8
- Day, D. V., Fleenor, J. W., Atwater, L. E., Sturm, R. E., & McKee, R. A. (2014). Advances in leader and leadership development: A review of 25 years of research and theory. *The Leadership Quarterly*, 25(1), 63–82. https://doi.org/10.1016/j.leaqua.2013.11.004
- Day, D. V., Harrison, M. M., & Halpin, S. M. (2008). An integrative approach to leader development: Connecting adult development, identity, and expertise. Routledge.
- Dewey, J. (1986). How we think: A restatement of the relation of reflective thinking to the educative process. D. C. Heath and Company. (Original work published 1933)
- Edmondson, A. C. (1999). Psychological safety and learning behavior in work teams. *Administration Science Quarterly*, 44(2), 350–383. https://doi.org/10.2307/2666999
- Edmondson, A. C. (2004). Psychological safety, trust, and learning in organizations: A group-level lens. In R. M. Kramer & K. S. Cook (Eds.), *In trust and distrust in organizations: Dilemmas and approaches* (pp. 239–272). Russell Sage.
- Glaser, B. G., & Strauss, A. L. (1967). The discovery of grounded theory: Strategies for qualitative research.

 Transaction Publishers.
- Graham, S., & Hebert, M. (2011). Writing to read: A meta-analysis of the impact of writing and writing instruction on reading. *Harvard Educational Review*, 81(4), 710–744. https://doi.org/10.17763/haer.81.4.t2k0m13756113566
- Green, Z., & Molenkamp, R. (2005). *The BART system of group and organizational analysis. Boundary, authority, role, and task.* University of Maryland. http://dx.doi.org/10.13140/RG.2.1.2488.5929 (Original published on Academy of Leadership website)
- Hackathorn, J., Solomon, E. D., Blackmeyer, K. L., Tennial, R. E., & Garczynskib, A. M. (2011). Learning by doing: An empirical study of active teaching techniques. *The Journal of Effective Teaching*, 11(2), 40–54.
- Henschke, J. A. (2011). Considerations regarding the future of andragogy. *Adult Learning*, 22(1), 34–37. https://doi.org/10.1177/104515951102200109
- Hinck, J. M. (2022). Leadership coaching as a transformative process in the military. *International Journal of Evidence Based Coaching and Mentoring*, 20(1), 20–34. https://doi.org/10.24384/6cf9-v073
- Hinck, J. M., & Davis, S. B. (2020). Re-operationalizing and measuring "impact" of a leader development course. *International Journal of Teaching and Learning in Higher Education*, 32(3), 427–440. https://www.isetl.org/ijtlhe/ijtlhe-article-view.php?mid=3899
- Hinck, J. M., & Davis, S. B. (2022). Going virtual: Evolution of the student experience ecosystem (SEE) model to the virtual or vSEE model (Eaker Center for Leadership Development Paper Series). Air University Press.
- Hinck, J. M., Davis, S. B., Byrnes, J. B., & Longmire, J. A. (2021). *Creating a virtual leader development course using the design thinking process for innovation*. 7th International Conference on Higher Education Advances (HEAd'21), Universitat Politècnica de València, Valencia, Spain.



- Hinck, J. M., Davis, S. B., Clayton, A. C., Wilson, S. Q., & Leon, M. (2023). Building and employing the music-coaching-improv (M-C-I) skillset to aid new instructors in overcoming the imposter phenomenon. *International Journal of Teaching & Learning in Higher Education*, 35(2), 125–135. https://www.isetl.org/ijtlhe/ijtlhe-article-view.php?mid=4401
- Hinck, R. S., & Hinck, J. M. (2023). Strength through vulnerability: The role of trust formation in leader development programs. *Journal of Military Conflict Transformation*, 4(1), 45–63.
- Hirsh, A., Hilholm, C., Roman, H., Forsberg, E., & Sundberg, D. (2022). Reviews of teaching methods which fundamental issues are identified? *Education Inquiry, 13*(1), 1–20. https://doi.org/10.1080/20004508.2020.1839232
- Iwanenko, D. (2021). The commander's chronicles: Exploring leadership theory through case study design (Air War College Professional Studies Paper). Air University.
- Kem, J. D. (2006). The use of case studies as an integrating approach in professional military education: A pilot study. Essays in Education, 18(1), Article 6. https://openriver.winona.edu/eie/vol18/iss1/6
- Knowles, M. S., Holton, E. F., & Swanson, R. A. (2015). The adult learner: The definitive classic in adult education and human resource development (8th ed.). Elsevier.
- Krajnc, A. (2014). Andragogy. In C. J. Titmus (Ed.), *Lifelong education for adults: An international hand-book* (pp. 19–21). Pergamon.
- Laszlo, E. (2007). Science and the akashic field. An integral theory of everything. Inner Traditions.
- Longmire, J. L. (2019). *Revitalizing squadron command, risk management, and decision making* (Air War College Professional Studies Paper). Air University.
- McCauley, K. D., Hammer, E., & Hinojosa, A. S. (2017). An andragogical approach to teaching leadership. *Management Teaching Review*, 2(4), 312–324. https://doi.org/10.1177/2379298117736885
- McTaggart, L. (2008). The field. The quest for the secret force of the universe (updated ed.). HarperCollins.
- Michaelson, J. R. (2020). *A Framework for establishing an Air Force coaching culture* (Air War College Professional Studies Paper). Air University.
- Murphy, P. (1996). Defining pedagogy. In C. V. Gipps & P. F. Murphy (Eds.). *Equity in the classroom: Towards effective pedagogy for girls and boys* (pp. 9–22). Routledge.
- Patton, M. (2015). Qualitative research & evaluation methods (4th ed.). SAGE Publications.
- Prince, M. J., & Felder, R. M. (2006). Inductive teaching and learning methods: Definitions, comparisons, and research bases. *Journal of Engineering Education*, 95(2), 123–138. https://doi.org/10.1002/j.2168-9830.2006.tb00884.x
- Rice, A. (1965). Learning for leadership. Tavistock.
- Rose-Redwood, R., Kitchin, R., Rickards, L., Rossi, U., Datta, A., & Crampton, J. (2018). The possibilities and limits to dialogue. *Dialogues in Human Geography*, 8(2), 109–123. https://doi.org/10.1177/2043820618780566
- Schein, E. H., & Bennis, W. (1965). *Personal and organizational change through group methods*. Wiley. Senge, P. (1991). *The fifth discipline: The art of the learning organization*. Soundview Executive Book Summaries.
- Shah, R. K., & Campus, S. (2021). Conceptualizing and defining pedagogy. 10SR Journal of Research & Method in Education, 11(1), 6–29. https://www.iosrjournals.org/iosr-jrme/papers/Vol-11%20ls-sue-1/Ser-2/B1101020629.pdf



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- Tulbure, C. (2012). Learning styles, teaching strategies and academic achievement in higher education: A cross-sectional investigation. *Procedia—Social and Behavioral Sciences*, 33, 398–402. https://doi.org/10.1016/j.sbspro.2012.01.151
- Usanov, F., & Qayumov, B. (2020). The eight ways to advance pedagogy to the next level. *Mental Enlightenment Scientific-Methodological Journal*, 1(52), 181–190. https://mentaljournal-jspu.uz/index.php/mesmj/article/view/23
- Waite, S. (2011). Teaching and learning outside the classroom: personal values, alternative pedagogies and standards. *Education 3-13*, 39(1), 65–82, https://doi.org/10.1080/03004270903206141
- Watkins, C., & Mortimore, P. (1999). Pedagogy: What do we know. In P. Mortimer (Ed.), *Understanding pedagogy and its impact on learning* (pp. 1–19). Sage.
- Wells, L. (1990). The group-as-a-whole: A systemic socioanalytic perspective on group relations. In J. Gillette & M. McCollom (Eds.), *Groups in context: A new perspective on group dynamics* (pp. 49–85). Addison-Wesley.
- Wilson, H., & Goldfein, D. L. (2018, June 1). *Squadron revitalization implementation plan* (Memorandum for all U.S. Air Force commanders and HAF/SAF staff). Department of the Air Force.





Military Instructors' Perspectives on Interactive Multimedia Application in Military Classrooms

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Abstract

The objective of this study is to investigate the application of interactive multimedia instruction (IMI) products in military classrooms. This study explored the experiences of military instructors with barriers, application strategies, and professional development resources. Military instructors are crucial in facilitating soldiers' learning experiences and applying multimedia products effectively to ensure soldiers are combat ready. A phenomenological approach was used in this study, which involved seven certified military instructors as participants. Semistructured interviews were conducted to collect data, and a qualitative content analysis was performed. The study yielded four findings that provided insights into military instructors' perspectives on applying IMI products in military classrooms. The findings of this study contribute to enhancing the understanding of the application of IMI products and provide recommendations for improving the professional development of military instructors.

The U.S. Department of Defense (2019) has emphasized integrating modern learning products, processes, and support systems to train service members better and stay competitive with foreign military capabilities. This push toward technology in military learning environments allows for realistic and challenging experiences that help to prepare military learners for combat situations (U.S. Department of the Army [DA], 2019). As such, military instructors must have a solid technical knowledge of interactive multimedia instruction (IMI) products. IMI products are educational technologies that include simulators, artificial intelligence, learning management systems (LMS), and other technologies (DA, 2018). Previous studies have shown a need for more emphasis on training instructors in this area (Alhassan, 2017).

While past research has focused on instructor training and knowledge, there is a gap in the literature regarding military instructors' perspectives on applying IMI products in military classrooms. This study aimed to fill the literature gap by investigating military instructors' lived experiences of applying IMI products in military classrooms. This study also sought to understand the barriers military instructors face, application strategies, and professional development resources when using IMI products in military instructional settings. The research question focuses on military instructors' perspectives on barriers faced, application strategies, and professional development resources associated with applying IMI products in military instructional settings.

This qualitative study is significant because instructional technologies like IMI products are critical to modernizing military education and training. The findings of this research can provide the U.S. Army Training and Doctrine Command (TRADOC) with valuable insights into how the organization can train its military instructors effectively in technology-rich learning environments. The results of this study can also influence the professional development opportunities of military instructors across TRADOC. The study's findings and recommendations can also help to enhance digital modernization readiness within TRADOC, the U.S. Army, and the Department of Defense.

Literature Review

Multimedia Instructional Strategies

Multimedia products engage learners through multiple senses in a single environment and align with specific instructional strategies (Adams et al., 1996). They facilitate collaborative learning and communication among learners and teachers, improving academic performance and collaboration skills (Koh et al., 2016). Authentic and inquiry task strategies allow learners to bring experiences and interests into the classroom. These experiences enhance multimedia that support group activities, such as small-group discussions, research projects, scientific tools, and community-based projects (Koh et al., 2016). Simultaneous modalities provide learners with multiple stimuli through multimedia products, including images, animations, videos, audio clips, and text, such as simulators (Adams et al., 1996). Given the available instructional strategies, there exists a gap in the literature on military instructors' applications of multimedia instructional strategies.

IMI Engagement and Levels of Interactivity

Yueh et al. (2012) found that the degree of participant students' multimedia engagement produced variances in the students' perceptions of multimedia instruction. These variances in student perceptions of multimedia instruction, in turn, im-



pact the level of multimedia interactivity. The U.S. Department of Defense (2001) defines interactivity levels as student engagement with IMI products, which reflects the appropriate level of interactivity with various IMI products. The four levels of interactivity provide a framework to identify and define student engagement with IMI products (U.S. Department of Defense, 2001). These levels of interactivity include passive, limited, complex, and real-time participation. The passive level requires learners to show a procedure with computer-generated multimedia products. The limited participation level requires learners to use computers or multimedia to assess students' intellectual skills or provide feedback. The complex participation level requires learners to use limited real-time simulations to perform specific operational tasks. Finally, the real-time participation level requires learners to perform real-time simulations in operational settings.

Given the levels of multimedia interactivity, there exists a gap in the literature on the degree of instructors' prior engagement with interactive multimedia instruction and understanding of the levels of interactivity in multimedia instruction. The instructors' level of previous engagement with IMI products informs their perceptions of multimedia tools and their applications. These perceptions are developed through prior experiences and knowledge of IMI products, shaping the instructors' foundational understanding of the levels of interactivity in multimedia instruction.

IMI Product Barriers

The 21st-century education system focuses on developing students' critical thinking and adaptability skills using digital tools such as Web 2.0, social media, games, and simulations (Peck, 2020). However, instructors and teachers face various barriers when using these digital tools. Smith et al. (2020) identified stereotype barriers, including assumptions that digital natives possess innate knowledge and competence in using technology. Önalan and Kurt (2020) identified two levels of barriers that affect higher education teachers' integration of technology in classrooms: resource barriers and belief barriers. Resource barriers include a lack of training,

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technical support, and resources, while belief barriers relate to instructors' attitudes and self-efficacy toward technology use.

Önalan and Kurt's (2020) study used quantitative methodologies to collect and analyze the samples' perceptions of resource and belief barriers. Considering this study, a gap in the literature requires further exploration of teachers' or instructors' perceptions of resources and belief barriers. Additionally, Önalan and Kurt recommended using a qualitative approach to explore teachers' perceptions of resource and belief barriers. Suddick et al. (2020) recommend a phenomenological approach to understanding participants' experiences and establish meaning. The gap in the literature reflects an existing need to explore teachers' or instructors' perceptions of resource and belief barriers based on lived experiences as associated with phenomenology.

Similarly, Dinc (2019) categorized barriers into first-level (external) and second-level (internal) factors such as access to IMI products, confidence in applying IMI products, and beliefs about technology. Dinc's study included a population of preservice elementary education teachers who yielded results that are not generalizable in military education settings. Mayes et al. (2015) also assert that user needs, attitudes, expectations, and beliefs are internal factors to applying IMI products. Finally, Hutchison and Woodward (2018) posit that a lack of context and experience with current technologies limits secondary education teachers' knowledge and ability to use these technologies. The results of the study provided implications of necessary technology integration professional development for teachers. However, professional development barriers, such as a lack of context and experience with current technologies, limit teachers' knowledge of use and ability to apply IMI products in instructional settings (Hutchison & Woodward, 2018).

Implications of IMI Product Application

Martin's (2016) study found that military education students and instructors value using technology-rich environments for training and preparing soldiers for future missions. Students believe that technology can support education and increase critical thinking, and instructors recommend using technology to facilitate learners' crit-

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ical thinking. However, there is a knowledge gap between military instructors and their perceived abilities to apply IMI products in the learning environment. Classroom resources such as multimedia-assisted instruction can improve learners' interest and effectiveness (Liu et al., 2020). Pricilia et al. (2020) and Toteva and Grigorva (2014) suggest pairing effective IMI product designs such as videos, animations, images, and summaries with appropriate teaching approaches and learning techniques. Effective teaching with IMI products requires multiple techniques and strategies to maintain learners' interests (Hamilton, 2019).

Methodology

Research Design

This study used a phenomenological research design to explore the experiences of military instructors with IMI product applications in the military classroom. Phenomenology is a research approach that focuses on understanding an individual's experiences and the meaning they attach to those experiences (Suddick et al., 2020). This design was appropriate for this study as it allowed the researchers to understand the instructors' experiences and perceptions of using IMI products in the classroom.

Research Settings

The research setting is a military training school for current soldiers at a U.S. Army School of Excellence (pseudonym). The School of Excellence is a traditional brick-and-mortar institution with virtual learning capabilities. The classrooms include smartboards, overhead projectors, Wi-Fi, and individual computer stations. The School of Excellence uses Blackboard as its LMS for hybrid learning. Under the Department of Defense COVID-19 pandemic health protection guidelines, Microsoft Teams software is part of the School of Excellence's instructional technology plan. The School of Excellence has separate simulator rooms for various types of virtual combat and military occupation specialty performance tasks and experiences. After completing prerequisite training, the School of Excellence provides field training experiences as capstone exercises for students.

Participants



The study included seven participants: three U.S. Army enlisted instructors and four officer instructors. This study uses the criterion sampling method to select participants based on their certification to instruct by TRADOC and their experience in teaching soldiers and junior officers (DA, 2018). The sample size of seven partic-

Table 1Descriptive Demographic Data

Participants	Title	Gender	Age	Ethinicity	Level of Education	Service Year	Teaching Year
Castle	Officer Instructor	Male	32	African American	MS	9	2
Jim	Enlisted Instructor	Male	40	Caucasian	MS	18	9
James	Enlisted Instructor	Male	38	Caucasian	MS	14	2.5
Steven	Enlisted Instructor	Male	37	Caucasian	MS	19	4
Eric	Officer Instructor	Male	36	Caucasian	MS	16	2.5
Elizabeth	Officer Instructor	Female	40	Hispanic	MS	10	4
Kendrick	Officer Instructor	Male	33	African American	MS	14	3

ipants was deemed appropriate for a phenomenological study as it falls within the typical range of five to 25 individuals (Leedy & Ormond, 2016). Table 1 provides demographic data of the participants. Using pseudonyms in the study helped protect the participants' identities. In addition, the collection of demographic data provides a better understanding of the participants' teaching experiences.

Data Collection and Analysis

This study utilized two one-hour rounds of one-on-one semistructured interviews to collect data. The researcher selected one-on-one interviews to enable a comprehensive exploration of participants' experiences, perceptions, and understandings of a phenomenon (Stofer, 2019). Both interviews were conducted using Zoom and recorded in cloud storage. During the first round of interviews, the researcher used an interview protocol that included seven demographic and seven open-ended questions. The following questions are samples from the first-round interview protocol:

- How many years have you served in the Army?
- Before becoming an instructor, describe your previous experience with interactive multimedia products such as simulators, virtual reality, games, smartboards, electronic tests, learning management systems, etc.



- What application of IMI products do you use in your classroom? When/How
 do you use them? How would you describe the usefulness of these products?
- How would you describe your professional development experiences that support your efforts to apply IMI products?

Conducting follow-up second-round interviews allows the researcher to clarify any incomplete, unstated, misunderstood, or missing data or to explore any areas of responses that seemed implicit. The following sample questions were asked as part of the second around interview questions:

- Are there any additions or deletions to the responses provided?
- Is there anything that I may have missed or misunderstood in the transcription of your responses?

This approach ensures that the researcher has a complete understanding of the data and provides an opportunity for the researcher to discover any issues that may have arisen during the first round of interviews.

The data analysis followed Hsieh and Shannon's (2005) qualitative content analysis (QCA) steps. QCA focuses on language and context to describe and quantify a phenomenon. The researcher began the QCA by first reading all the transcripts repeatedly to achieve immersion and understanding of the textual data's context. Next, the researcher checked the accuracy of the audio transcript by listening to it while reading it.

In the second step, the researcher began the first-cycle coding process, which occurs concurrently through all phases of the QCA. According to Miles et al. (2020), the first cycle of descriptive coding assigns a short symbolic phrase to the textual data, summarizing and translating each data unit. The researcher applied the descriptive codes against the participants' transcribed responses. For example, Jim's response to interview question seven was assigned the descriptive code: "I had little integration experience with the smart boards or anything like that. Coming up through high school." Next, the researcher used MAXQDA data analysis software to note the relationship between unique and significant similar and different codes that aligned with the research questions.

The third step required the researcher to reflect on jotted notes taken during the interviews. These notes allowed the researcher to approach the data with his first impressions, thoughts, and initial analysis (Hsieh & Shannon, 2005). The researcher used these notes as ideas for analytic consideration throughout this study. For example, the researcher included a jotted note in the margin of the transcription about "participants' similar responses about professional development availability."

In step four, the researcher sorted the initial codes and notes into categories based on how the codes are related (Hsieh & Shannon, 2005). During the categorization process, the researcher made necessary changes to the codes and categories based on data analysis. The data analysis allowed the researcher to develop the following categories related to question seven:



Figure 1Sample of Qualitative Content Analysis Matrix

Measuring Unit	Code	Category	Theme
RO-2 Question 7 Kendrick	I've used virtual, uh, rollover simulators, and those are to reenact being hit by IED and how to, uh, get yourself out, um, in that, but in the academic environment, also a bunch of like different Blackboard websites and other virtual training, uh, websites as well. So a fair amount of experience using them.	Experiences as a Soldier	Range of Experiences
RO-2 Question 7 Jim	I had little integration with the, with the smart boards or anything like that, coming up through high school	High School Experiences	Range of Experiences
RO-2 Question 7 James	I've always, I've always had a deep interest in multimedia and, and, um, uh technology. Um, so, you know, into gaming as I was a kid growing up, starting with the, uh, Nintendo system and kind of following those through and playing PlayStation and all that kind of stuff.	High School Experiences	Range of Experiences

Before becoming an instructor, describe your previous experience with interactive multimedia products such as simulators, virtual reality, games, smartboards, electronic tests, learning management systems, etc.:

- · Pre-military experiences
- High school experiences
- College experiences
- Limited experiences

Finally, in step five, the researcher developed themes from the sorted categories using the generic QCA matrix. According to Hsieh and Shannon (2005), the researcher sorts the initial codes and notes into categories based on how the codes are related. The developed themes were based on the categorized codes and notes and were used to answer the research questions. Figure 1 is a section from the QCA matrix used in this study.

Findings

Finding 1: Having foundational technology experiences is critical to military instructors' successful application of IMI products.

When discussing instructors' premilitary service experiences, most participants have enriched experiences with IMI products. These enriched experiences are shaped by participants' prior knowledge of and learning with IMI products. These preservice experiences include childhood experiences, secondary education experi-



ences, higher education experiences, and job requirement experiences. For example, James said, "I have always had a deep interest in multimedia and technology. I was into gaming as a kid growing up." Eric stated, "I have used simulators for a few things during my undergrad." However, two participants had limited experience such as Jim, who mentioned, "I had little experience with the smart boards or anything like that when I was coming up through high school." According to the descriptive demographic data table, participants with limited experiences with IMI are 40 years of age. Which in this study, places Jim and Elizabeth in the digital immigrant population. All participants acknowledged an array of IMI products they have engaged in, which informed their current knowledge of IMI products and their uses.

The findings of this study showed that participants who have been deluged with IMI product experiences and possess the knowledge required tend to incorporate open education resources (OER) as IMI products into the instructional experiences. In this study, OER IMI products are described as independently sourced by instructors not traditionally included in an organization's educational technology plan. For instance, Eric and Kendrick possess in-depth knowledge of IMI products and incorporate additional outsourced IMI products such as Google Classroom, Kahoot, Cal Topo mapping program, and YouTube videos into their classrooms. In contrast, participants such as Jim had limited preservice experiences with IMI products and focused only on essential products, such as Microsoft PowerPoint and smart boards.

Finding 2: Barriers that impact military instructors' applications of IMI products.

The second finding of this study showed that participants have experienced several barriers while applying IMI products in instructional settings. However, according to the literature, the barriers the participants reported are all resource and belief and level one (external) and level two (internal). These barriers varied in the following aspects:

Software Licensing. Some participants reported constantly facing software licensing issues that inhibit their ability to use available IMI products. For example, James explained that a challenge he faced was "software licensing issues." According to the literature, software licensing is a resource and level one barrier.

Connectivity. Some participants reported frequent connectivity issues, such as the LMS being down or internet disconnection. For example, Jim stated, "One of the main challenges I often run into in my organization is LMS site downtime." According to the literature, connectivity is a resource and level one (external) barrier.

Student Dislocation from the Instructor. Some participants reported feeling uncertain when they could not assess student engagement. For example, Kendrick stated, "I cannot see online students' faces and gauge how well they comprehend." According to the literature, student dislocation from the instructor is a belief and level two (internal) barrier.



Distractions. Some participants indicated the distractions when studying at home. Kendrick says online students "are at home and have things in the background that sometimes pulls them away (distractions)." Current literature suggests that a distraction is a belief and level two (internal) barrier.

Cultural. Some participants stated that instructing students with various cultural and learning backgrounds made using IMI products in their instructional settings challenging. Castle explained, "You have to learn that students that come from different parts of the world, and some of them are just more analog driven, and what I mean by analog driven, there is a lot of the digital interfaces and digital products that we use." Castle's response alludes to the various backgrounds and experiences of the learners he has. Many of Castle's learners are international students or digital immigrants who do not share similar digital cultural experiences. According to the literature, a cultural barrier is a belief and level two (internal) barrier.

Inadequate Technology Support. Some participants reported that software updates are common, but the hardware would not receive the appropriate update; they (participants) would encounter various technical problems. Kendrick explained, "It can be challenging working with the department to get them to come in and reinstall the proper drivers and update them." According to the literature, inadequate technology support is a resource and level one (external) barrier.

Finding 3: Strategies that military instructors use to apply IMI products in military instructional settings.

The participants' responses allude to IMI product application strategies being critical to enhancing the learning experience and improving instruction effectiveness. The findings of this study showed various strategies that participants used to apply IMI products in the classroom.

Using Multiple IMI Products in the Classroom. Participants reported using LMSs such as Blackboard in addition to PowerPoint, YouTube videos, video chat, and other technologies. Jim states, "I use different smartboard systems and PowerPoint, Excel, spreadsheet, trackers, and utilization of the Army's publication system."

Promoting Digital Collaboration. Some participants encouraged student communication and interaction via discussions and group work. Eric mentioned, "Google classroom, I can provide individual feedback to students through emails through instant messages through the system."

Using OER (Open Educational Resources). Participants used Google Earth, videos, and Kahoot to simulate students' learning interests. James stated, "I use things [IMI products] like Cal Topo, mapping software that'll help you create and print your maps."

Requesting Prereading. Participants described how to use prereading to get students ready for class activities. Kendrick said, "I think the most prominent strategy is having the students do prereading about the topics that we will talk about before-

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hand so that they can come into the class already having a general idea of what we will be talking about."

Preparing an Instruction Backup Plan for Technology Failure. Participants mentioned that they had to be prepared for the technology failure. Eric mentioned that he replaced unworkable digital materials with hands-on projects.

Finding 4: Professional development, classroom resources, and technical support are crucial to building and sustaining military instructors' IMI product knowledge and application skills.

Participants in this study identified professional development, updated hardware and software, and technology support (i.e., help desk) as necessary resources for applying IMI products in military classrooms. All participants indicated that short-term, professional development courses were essential for gaining necessary IMI product knowledge and skills. For instance, Kendrick explained that during the instructor course, he learned about adult learning models and 18 different teaching techniques. When a new program or system was released, participants received training on how to use the specific technology or application in the classrooms, which Elizabeth referred to as "train the trainer." Castle noted that they were shown the function of the new update to understand how to utilize it with IMI products.

Despite the availability of professional development opportunities, participants expressed the need for updated training content. Steven and Eric mentioned that they had to be self-reliant and engage in multimedia to stay current with available IMI products. Jim even stated, "There was no training whatsoever." In addition, Eric identified the need for updated equipment and software. He said, "The military is known well for buying something; they will wait 20 years to buy something else." Similarly, Elizabeth stated that some of the equipment necessary for teaching was not always accessible.

Participants also considered help desk or technology support as a crucial resource. Immediate technical support and resources were necessary, as reported by most participants. Castle mentioned that when a piece of equipment or interface malfunctioned, he could call the help desk and would be prioritized for a repair.

Discussion and Recommendations

Finding 1



This finding aligned with Peck's (2020) study in that familiarity with digital tools was associated with participants' experiences in civilian learning environments and their regular use of digital technologies. The study found that the more exposure participants had with IMI products, the more likely they were to incorporate technology

into their classroom teaching. Thus, understanding a military instructor's preservice experiences or familiarity with IMI products is crucial for an organization's effort to modernize or enhance the instructional experience.

Recommendation. Before duty assignments, instructors should participate in an instructor duty assignment assessment to determine their preservice IMI product experiences. The assessment will help identify military instructors' familiarity with IMI products and those with much or little experience with IMI products. Moreover, it will inform the instructors about the type of IMI products they need to know and prepare to use prior to teaching a class.

Finding 2

The findings of this study identified the barriers to software licensing and technology support aligning with that of current literature. The software licensing and technology support barriers experienced by the participants aligns with the studies of Önalan and Kurt (2020) and Dinc (2019), which identified the lack of equipment or software and technology support as IMI product application barriers. The findings of this study support Önalan and Kurt's and Dinc's arguments that lack of equipment and technology support impede secondary education teachers' applications of IMI products in classrooms. Conversely, the identified connectivity issues, student dislocation from the instructors, distractions, and cultural barriers of this study are not aligned with Önalan and Kurt, and Dinc. However, these barriers contribute to the existing body of literature on barriers faced by participants while applying IMI products.

Recommendation. A collaborative effort is necessary to overcome the barriers mentioned above that involves developing a competent educational technology support team comprised of educational technologists, instructional designers, multimedia specialists, technology support specialists, network engineers, computer programmers, and software developers (Mayes et al., 2015). This team can comprehensively plan IMI product applications and manage technology and support services. The team leader can provide the School of Excellence and military instructors with the necessary services to mitigate any issues or inhibitors to IMI product application. Higher education and secondary education instructions have teaching learning and resource centers that provide comprehensive educational plans that can potentially serve as a model for the School of Excellence. It is recommended that policies or plans are revised to reflect the establishment of educational support team to explore the development of comprehensive educational technology plans.

Finding 3

The findings of this study identified helpful application strategies for using multiple IMI products in the classroom, promoting digital collaboration, using OER, requesting



prereading, and preparing an instruction backup plan for technology failure. Using OER aligns with Toteya and Grigorva's (2014) study, which posits that the learning process becomes adaptable and appealing when new material is presented through IMI products from casual or professional life settings. Finally, the learners' prereading strategy aligns with Liu et al. (2020), who found that students should adopt reading strategies to improve learner autonomy. Conversely, promoting digital collaboration and instruction backup plans for technology failure strategies are new and add to the existing body of knowledge on the application of IMI products in military classrooms.

Recommendation. Several helpful resources must be made available to the instructors in IMI product application strategies. First, a comprehensive IMI product list must be developed that supplements current IMI products in School of Excellence classrooms. This product list could include IMI products that meet U.S. Army cyber security guidelines and regulations, as well as various OER products that can be applied in military classrooms. Furthermore, an approved supplemental IMI product list can improve the quality and quantity of instructional content presented to learners (Toteva & Grigorva, 2014). Second, establishing courseware that requires learners to preread foundational content before engaging IMI products provides learners with background knowledge of course content. Finally, the School of Excellence should provide instructors with technology failure backup plans, as these plans will ensure minimal degradation of the instruction and learning experiences.

Finding 4

This study found professional development resources and technical support as requirements for applying IMI products in military classrooms. First, this study identified IMI product professional development training opportunities as a resource that informs instructors' knowledge of appropriate IMI product applications. This finding aligns with Hutchison and Woodard's (2021) assertion that learners' instructional needs require systematic approaches built upon the instructors' knowledge of digital technologies. Furthermore, this finding aligns with Aydın et al. (2021) in that professional development training programs can increase military instructors' IMI product application self-efficacy. Second, this study found that available technical support, such as a help desk, is a crucial resource for IMI product applications. The help desk can provide the technical expertise required to resolve or mitigate potential hardware or software issues. The technical support finding of this study is new and will add to the existing body of knowledge on IMI production applications.

Recommendation. Considering finding four, the researchers recommend consistent IMI product orientation and application of professional development opportunities. Professional development opportunities will give instructors the experience needed to become familiar with IMI products and their application in various instructional settings. Next, the researchers recommend that the School of Excellence develops a

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competent educational technology support team that will provide military instructors with the technical support resources required to mitigate inevitable technical challenges. The recommended members of the educational technology support team should consist of educational technologists, instructional designers, multimedia specialists, technology support specialists, network engineers, computer programmers, and software developers (Mayes et al., 2015). This team will ensure that instructors have the technical support required to pair or apply IMI products in appropriate instructional settings. Currently, higher education and secondary education institutions have adopted similar technology support team models as recommended in this study.

Limitations of the Study

One limitation of this study is the researchers' inability to recruit more certified military instructors from the School of Excellence to participate in semistructured interviews. Only seven participants attended this study. Moreover, the findings from this qualitative research study may not be generalizable in fields other than military training schools. Although similar instructional technology structures exist in K–12, higher education, and adult education settings, the generalizations of these findings may produce varying results. Lastly, the differences in credentialing requirements for civilians and the military can affect future research methodologies for studying this subject.

Recommendations for Further Research

This study explored military instructors' perspectives on IMI product applications in classrooms as a single phenomenon. Future research could compare the lived experiences of military instructors across multiple U.S. Army Schools of Excellence. Furthermore, research comparing the experiences of military instructors at U.S. Army Schools of Excellence to those at the U.S. Air Force and U.S. Navy training schools can enhance the existing body of knowledge on IMI product application in military education.

Conclusion

The findings of this study demonstrated the significance of preservice technology experiences in military instructors' success in applying IMI products in classrooms. Additionally, this study revealed that military instructors encountered various barriers, such as software licensing issues, connectivity issues, student dislocation from the instructor, interruption of the instructional experience cultural barriers, and



insufficient technology support. Consequently, military instructors implemented diverse strategies to promote and enhance students' learning with IMI products, including using multiple IMI products in the classroom to enable students to choose the most suitable ones, encouraging digital collaboration, utilizing OER, assigning prereading, and preparing for technology malfunctions.

References

- Adams, E. S., Carswell, L., Amruth, K., Meyer, J., Ellis, A., Hall, P., & Motil, J. (1996). Interactive multimedia pedagogies: Report of the working group on interactive multimedia pedagogy. *Association for Computing Machinery Special Interest Group on Computer Science Education Bulletin*, 28(SI), 182–191. https://doi.org/10.1145/237477.237646
- Alhassan R. (2017). Exploring the relationship between Web 2.0 tools self-efficacy and teachers' use of these tools in their teaching. *Journal of Education and Learning*, 6(4), 217–228. https://doi.org/10.5539/jel.v6n4p217
- Aydın, İ., Toptaş, B., Kaysılı, A., Tanrıverdi, G., Güngören, N., & Topçu, Ş. (2021). Professional development needs analysis of school administrators and teachers in Turkey. *Kastamonu Education Journal*, 29(2), 428–441. https://doi.org/10.24106/kefdergi.821505
- Dinc, E. (2019). Prospective teachers' perspectives of barriers to technology integration in education. *Contemporary Education Technology*, 10(4), 381–398. http://dx.doi.org/10.30935/cet.634187
- Hamilton, M. (2019). Prioritizing active learning in the classroom reflections of professional military education. *Journal of Military Learning*, 3(2), 3–17. https://www.armyupress.army.mil/Journals/Journal-of-Military-Learning-Archives/October-2019/Hamilton-Active-Learning/
- Hsieh, H., & Shannon, S. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277–1288. https://doi.org/10.1177/1049732305276687
- Hutchison, A. C., & Woodard, L. (2018). Examining the technology integration planning cycle model of professional development to support teachers' instructional practices. *Teachers College Record*, 120(10), 1–44. https://doi.org/10.1177/016146811812001002
- Koh, E., Shibani, A., Tan, J. P. L., & Hong, H. (2016). *A pedagogical framework for learning analytics in collaborative inquiry tasks: An example from a teamwork competency awareness program* [Conference session]. LAK '16: Proceedings of the Sixth International Learning Analytics & Knowledge Conference, Singapore. https://doi.org/10.1145/2883851.2883914
- Leedy, P. D., & Ormond, J. E. (2016). Practical research: Planning and design (11th ed.). Pearson.
- Liu, X., Liu. Y., & Tu, J. (2020). Multimedia technology and learner autonomy: An experimental study for asymmetric effects. *Symmetry*, 12(3), 462. https://doi.org/10.3390/sym12030462
- Martin, J. J. (2016). *Perspectives of digital technology in military education* [Unpublished doctoral dissertation]. Auburn University.
- Mayes, R., Natividad, G., & Spector, J. M. (2015). Challenges for educational technologists in the 21st century. *Education Science*, 5(3), 221–237. https://doi.org/10.3390/educsci5030221



- Miles, M. B, Huberman, A. M., & Saldana, J. (2020). *Qualitative data analysis: A methods source book* (4th ed.). Sage Publications.
- Önalan, O., & Kurt, G. (2020). Exploring Turkish EFL teachers' perspections of the factors affecting technology integration: A case study. *Journal of Language and Linguistic Studies*, 16(2), 626–646. https://doi.org/10.17263/jlls.759264
- Peck, M. W. (2020). Digital immigrant teachers' technology integration and in-service professional development: An interpretive phenomenological analysis. [Unpublished doctoral dissertation]. Liberty University.
- Pricilia, A., Abdurrahman, A., & Herlina, K. (2020). Teacher expectation towards interactive multimedia integrated with STEM in learning physics: Preliminary study on geometry optic learning material. Journal of Physics: Conference Series, 1572(1). https://doi.org/10.1088/1742-6596/1572/1/012065
- Smith, E. E., Kahlke, R., & Judd, T. (2020). Not just digital: Integrating technologies in professional education contexts. *Australasian Journal of Educational Technology*, 36(3), 1–14. https://doi.org/10.14742/ajet.5689
- Stofer, K. A. (2019). *Preparing one-on-one qualitative interviews: Designing and conducting the interview* (Publication No. AEC675). Institute of Food and Agricultural Sciences. https://edis.ifas.ufl.edu/publication/WC338
- Suddick, K., Cross, V., Vuoskoski, P., Galvin, K., & Stew, G. (2020). The work of hermeneutic phenomenology. *International Journal of Qualitative Methods*, 19, 1–14. https://doi.org/10.1177/1609406920947600
- Toteva, D., & Grigorova, E. (2014). Multimedia products as basis of new teaching organization (within foreign language teaching). *TEM Journal*, 3(2), 175–180. https://www.temjournal.com/documents/vol3no2/12/Multimedia%20Products%20as%20Basis%20of%20New%20Teaching%20Organisation%20(Within%20Foreign%20Language%20Teaching).pdf
- U.S. Department of the Army. (2018). *Faculty and staff development* (TRADOC Pamphlet 350-70-3). U.S. Army Training and Doctrine Command. https://adminpubs.tradoc.army.mil/pamphlets/TP350-70-3.pdf
- U.S. Department of the Army. (2019). 2019 Army modernization strategy: Investing in the future. https://www.army.mil/e2/downloads/rv7/2019 army modernization strategy final.pdf
- U.S. Department of Defense. (2001). *Development of interactive multimedia instruction (1M1) (Part 3 of 5 parts)* (MIL-HDBK-29612-3A). https://govtribe.com/file/government-file/m0026418r0012-mil-hdbk-29612-3a-dot-pdf
- U.S. Department of Defense. (2019). *Department of defense digital modernization strategy:* DoD information resource management strategic plan Fy19-23. https://media.defense.gov/2019/Jul/12/2002156622/-1/-1/1/DOD-DIGITAL-MODERNIZATION-STRATEGY-2019.PDF
- Yueh, H. P., Lin, W., & Sheen, H. J. (2012). Effect of student engagement on multimedia-assisted instruction. *Knowledge Management and E-Learning*, 4(3), 346–357. https://doi.org/10.34105/j.kmel.2012.04.027



Peer Coaching as a Leader Development Tool in Professional Military Education

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Abstract

Peer coaching is a growing practice within the fields of leadership education and leader development. More than general collaboration, peer coaching is a guided relational process between two colleagues of relatively equal status. Each person coaches the other utilizing a defined coaching dialogue to improve ways of thinking, being, and learning. As educators with the responsibility for facilitating the learning and leader development of senior naval leaders, we have used peer coaching for seven years as a functional tool for furthering leader effectiveness. Drawing upon adult development and adult learning principles, we have developed a deliberately structured process specifically designed for military leaders. In this article, we detail how we employ peer coaching in our leadership courses, describe likely obstacles (e.g., skepticism), provide insights for how to overcome these obstacles, and share feedback—from admirals and field grade officers—pointing to the positive outcomes from peer coaching. We conclude with thoughts on how professional military education educators might apply peer coaching in their learning endeavors as well.

ncreasingly, educators and leader development practitioners are utilizing peer coaching as an effective tool for furthering learning, growth, and career progression (Bialek & Hagen, 2022; Goysberg & Russman Halperin, 2022). The literature is replete with peer-coaching applications in business education, health-care education, faculty development, employee professional development, and human resources wellness programs, among others (Bell et al., 2020; Bialek & Hagen, 2022; Chesley et al., 2020; Fey et al., 2022; Kegan & Lahey, 2009; Schwellnus & Carnahan, 2014). These applications of peer coaching generate favorable outcomes for both the individuals and their organizations. Research shows that peer coaching increases job sat-

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isfaction, expands peer support, enhances collective engagement, improves leader effectiveness, heightens psychological safety, and fosters a collaborative organizational culture (Caporale-Berkowitz & Friedman, 2018; Cholli et al., 2016; Groysberg & Russman Halperin, 2022). Concomitantly, there is a growing interest in incorporating peer coaching within professional military education (PME), particularly aligning with the PME focus on joint-leader development (Joint Chiefs of Staff, 2020a, 2020b).

As PME educators responsible for facilitating the learning and leader development of U.S. Navy admirals and midgrade officers (across all service branches), we have used peer coaching in our leadership courses and command professional development over the last seven years. More than general collaboration, peer coaching is a guided relational process between two colleagues of relatively equal status. Each person coaches the other utilizing a defined coaching dialogue to improve ways of thinking, being, and learning (Parker et al., 2008, 2018). We have integrated peer coaching in one-week courses, throughout a 10-week academic trimester, in a yearlong leader development program, and within multiday professional development events.

We have employed our structured peer-coaching process with three distinct military populations: (1) approximately 150 admirals, generals, and senior civilians participating in a weeklong leadership course; (2) Naval War College in-residence students from ranks O-3 to O-6, where peer coaching is integrated into the leadership curriculum; and (3) participants in fleet command professional development ranging in rank from O-1 to O-6. Collectively, these military professionals indicate that their peer-coaching experience enhanced their peer relationships, enabled deeper exploration of their leadership challenges, afforded them more collaboration opportunities, and influenced the way they approach and address complex problems. Each of these outcomes points to peer coaching as an effective leader development tool for military leaders.

In this article, we begin with a general description of peer coaching. We then describe our step-by-step peer-coaching process. Importantly, we detail the key elements of our approach that enable effectiveness and mitigate obstacles (e.g., skepticism). Throughout, we incorporate feedback from participants highlighting their peer-coaching experiences and the impact on their leadership abilities. We conclude by discussing the utility of peer coaching for professional military education.

Peer Coaching

With peer coaching, each colleague coaches the other utilizing a guided coaching dialogue, while alternating the role of "coach" and "coachee" (Berg & Karlsen, 2012; Parker et al., 2018). Unlike mentoring, counseling, and executive coaching, peer coaching is reciprocal and mutually beneficial (Bialek & Hagen, 2022). The dyadic pairing with a peer—one likely to experience similar challenges—helps the coach and coachee

reflectively and jointly examine their experiences and challenges within their shared professional context (Goldman et al., 2013; Parker et al., 2008, 2018). Peer coaching requires candor, vulnerability, and trust to arrive at the attendant outcomes. Each person must be willing to open up to the other, potentially exposing personal vulnerabilities.

Peer coaching in the workplace is often facilitated by human resource development professionals or professional executive coaches. In the educational environment, the instructor facilitates the peer-coaching experience with students (Bialek & Hagen, 2022).

Facilitating Peer Coaching as Educators

Building peer coaching into a curriculum or learning plan first requires identifying its potential contribution to desired learning and development outcomes. In our leadership courses, peer coaching serves to build relationships, increase engagement with course topics, and promote collaboration and support in addressing leadership challenges. It is important to link peer coaching as an experiential learning activity to other course content, ensuring that it is integrated and serves the broader purposes of the course. Providing relevant context also helps secure student participation in a new or potentially uncomfortable learning experience.

Unsurprisingly, among our military participants, there exists natural skepticism and some resistance toward peer coaching. Engaging in such a self-revealing activity

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Table 1 *Peer Coaching Steps*

Step one:	Identify peer-coaching topic and develop prompt questions to shape the coaching dialogue
Step two:	Create peer pairs with consideration to similarities and dissimilarities
Step three:	Craft classroom conditions to foster psychological safety and openness
Step four:	Provide guidelines and instructions for the coach and coachee
Step five:	Engage in the reciprocal peer-coaching conversation
Step six:	Facilitate a group debrief to reflect on the process

with a peer butts up against the inherent peer competitiveness that exists in military culture. Thus, we designed our peer-coaching approach to deliberately address these obstacles. The process for the educator or facilitator involves six steps (see Table 1).

Peer-Coaching Topic and Discussion Prompt

Peer-coaching topics should relate to course content and desired outcomes—areas where peer reflection and guided dialogue might further learning and growth. Topics may also relate to student goals or concerns. A defined discussion prompt derived from the identified topic and framed as a question shapes the coaching dialogue for the coach and coachee. Clarity, relevance, and usefulness of the topic and the question are essential for gaining buy-in and encouraging adherence to process guidelines. The facilitator provides the discussion prompt to begin the coaching conversation.

Table 2 shows two examples of discussion prompts that we have used in our admirals' course. The questions are relevant to the admirals' leadership roles (as two-stars) and centered upon key course topics.

Creating Peer-Coaching Pairs

In general, the practice of peer-coaching advocates for peers selecting one another (Goldman et al., 2013; Parker et al., 2008, 2018). Giving peers the choice to choose a partner establishes the mutual relationship. At the same time, for military participants,

Table 2 Examples of Discussion Prompts

How do the qualities of your self-identified **complex adaptive challenge** make it particularly complex or intractable?

What elements of your leadership role are you currently grappling with through the lens of your **professional obligation** based on our discussion of the **profession of arms?**

we have found that thoughtfully creating the coaching pairs attenuates the awkwardness of choosing, helps overcome initial discomfort, and facilitates openness and trust.

We create peer-coaching pairs using demographic and psychographic variables. We identify at least one similarity shared between the two peers and one dissimilarity. The similarity helps enable ease of conversation and lower walls of resistance, while the dissimilarity helps ensure diversity of perspective. We consider professional specialty (e.g., pilot, special operations, medical officer), homogeneity or diversity of prior career experiences, and personality type and predispositions (e.g., decision-making preferences, rule following proclivities, and how leaders function under pressure). Participants are blind to our pairing process.

The feedback we receive from participants consistently affirms the effectiveness of the deliberate and opaque pairings. For example, one admiral offered this insight:

I think it was very helpful to chat with someone who is likely going through similar challenges in scale and complexity at the same time (as opposed to the past)—I think that sets conditions for a great degree of empathy on both sides. I also suspect conversation of equals allows one to show more vulnerability without the fear of "disappointing" a senior mentor you admire for example.

A Naval War College student in a yearlong leader development program reflected on the value of diversity in the pairings:

Peer coaching was particularly difficult because I didn't have a natural connection with my peer. In the end, it created one of the best relationships I have with another peer and someone I hope to work with closely again in the future. He pushed me and really forced me to expand my thinking since we were so different. So powerful.

The intentionality with which we create the pairs helps foster the trust, rapport, and psychological safety necessary for peers to be vulnerable with each other, and essential for learning and growth.

Crafting Classroom Culture

Similarly, deliberately crafting the classroom culture further sets the conditions for effectively leveraging peer coaching for learning and development. Our application employs the following elements in the learning environment to enable candor and vulnerability, while mitigating skepticism and resistance.

- Institute the "Chatham House Rule" or "nonattribution," prohibiting the attribution of comments to any specific individual.
- Create intimacy by arranging participants in small groups with active facilitator interaction.
- Introduce the practice through an interactive conversation rather than a didactic presentation.
- Distinguish peer coaching from typical solution-focused counseling and mentoring.
- Frame peer coaching as an opportunity to practice collaboration, jointly think through professional challenges, seek support and outside perspectives, and gain from peers' experience and insights.
- Prepare participants for a counterintuitive, one-directional conversation that requires active listening without interrupting (versus one that naturally goes back and forth).

Establishing the proper classroom culture sets the tone for psychological safety, reduces inhibitions, and opens the aperture for learning through an atypical process. Participants are often pleasantly surprised by the experience, as indicated by these examples of feedback from our flag course: "I found the peer coaching conversation refreshing." "[I was surprised by] The willingness of my peers to engage in the process." "Best part of the day was the peer coaching exercise. The opportunity to open up and be vulnerable in a one-on-one setting was revealing and allow[ed] a level of connection that could not have existed otherwise."

We have successfully overcome the skepticism and resistance to peer coaching among junior officers and senior naval leaders alike.

Peer Coaching Guidelines and Instructions

What sets our approach to peer coaching apart from mentoring and counseling are the strict guidelines for facilitating the counterintuitive coaching dialogue (see Table 3). The guidelines focus attention on the coachee rather than the coach while providing parameters for the person acting as coach. Moreover, because peer coaching encourages introspection and self-examination—placing emphasis on the person, not just the problem—we structure our process to help military leaders set aside the natural tendency toward fixing problems.

Table 3 *Peer Coaching Guidelines*

Guideline	Description
Ask open-ended questions only.	Ask curious questions that cannot be answered with a yes/no.
Use silence as a coaching tool.	Ask one question at a time and wait for them to respond; set the conditions for them to think and process.
Use active listening.	Listen attentively; don't interject; affirm that you understand; repeat back for clarification.
No advice. Facilitate, don't fix.	Facilitate dialogue to work through the challenge; don't jump to solutions; don't share your own examples; don't provide suggestions, guidance, or advice.
Stay in role, maintain focus.	Focus entirely on the coachee; don't break coach character; don't talk about yourself or your own challenges; fully inhabit coach role.

Notably, two guidelines tend to be particularly challenging but also the most important: (1) ask only open-ended questions and (2) provide no advice. Asking open-ended questions encourages the coachee to respond with a full explanation, rather than a quick one-word answer. Holding back advice keeps the coachee talking without interrupting the flow of thinking, prompting deeper processing and the surfacing of insights. We acknowledge upfront with the participants that adhering to these guidelines will be challenging. We provide a handout for reference.

To further assist the process, we provide examples of open-ended questions that coaches might use to help their coachee think and process (see Table 4). Closed-ended questions tend to shut down the conversation and can sound like advice (e.g., "Have you tried this?"), which violates the "facilitate, don't fix" guideline.

Feedback evidence suggests that participants attempt to follow the guidelines, while also acknowledging the difficulty. An appreciation for the structured process also emerges. For example, "Peer coaching caused me to really focus on being a good active listener, staying in the role and asking open-ended questions. I can see me utilizing this coaching technique in the future." "Quit focusing on fixing as much as I do, but instead make first response facilitation."

In addition to structuring the peer-coaching process, the guidelines set the stage for practicing important leadership competencies—active listening and asking probing questions.

Table 4 *Open-Ended Questions*

INSTRUCTIONS

Questions must be open-ended, requiring descriptive and explanatory responses, rather than closed-ended (i.e., can answer with "yes" or "no").

THIS (Open-ended) **NOT THIS** (Closed-ended) Why is this important to you? Is this important to you?

EXAMPLES

- What do you most want to achieve?
- Why is this important to you?
- What are the barriers or obstacles to overcome?
- What are the opportunities or options to leverage?
- What are the possible outcomes?
- What could or would success look like?
- How could you think about this differently?

Peer Coaching Conversation

Generally, within any course, peer coaching will be practiced multiple times. The first peer-coaching conversation is usually brief, for example, 30 minutes—with each peer serving as coach for 15 minutes and then exchanging roles. This allows peers to get comfortable with each other and the structured process. We instruct the coach to start with the discussion prompt, and then follow up with relevant open-ended questions. In later peer-coaching sessions (which may last an hour), we encourage coaching pairs to return to prior conversations to further explore challenges. By continually unpacking a topic, the coachee can go deeper, exploring multiple layers of an issue. Once participants learn the practice, they can identify their own discussion points and engage in more self-directed conversations.

Reflective Debrief

A reflective debrief with the entire class or group occurs after the first peer-coaching interaction. The debrief utilizes experience- and emotion-based questioning versus content-focused exploration. Debrief questions might include the following:

- What did that conversation feel like?
- What was most challenging?
- Which guidelines did you fail to meet?

- What was the best part of the experience?
- What benefit did you get out of getting coached? Being the coach?
- How else could you use this process or these questions?

The collective reflection helps identify and process learning while drawing out the usefulness of the peer-coaching experience. It is important to emphasize that participants are not asked to reveal the content of their conversation but rather to examine the experience and illuminate the unique value of engaging in the peer process.

Here are two examples of reflections on the beneficial impact of peer-coaching experience: "[Peer] coaching got me to think about my wicked problems with a wider lens." "The [peer coaching] experience has been of great value, not only in problem solving, but also in the peer-to-peer connection that is so precious and not always easy to maintain due to the incredible demands on our time."

To sum, the process for the educator to build peer coaching into their curriculum or learning plan requires six steps. First, context-specific topic selection and discussion prompts center the coaching dialogue on a relevant issue or area of focus. Second, thoughtfully assigning coaching pairs minimizes the potential for peers to choose a too similar partner who approaches problems in the same fashion. Third, crafting the classroom culture sets the conditions for a psychologically safe learning environment that minimizes skepticism while enabling introspection and self-disclosure. Fourth, specific guidelines condition peer-coaching behavior. Absent the structure, peer coaching can easily devolve into general rather than targeted conversation. Fifth, engaging in the reciprocal peer-coaching conversations strengthens peer relationships, facilitates growth, and increases learning. Finally, asking participants to collectively reflect on their peer-coaching experiences draws out nuances that establish the value of the process, enhancing their motivation to continue.

Learning and Development Outcomes

Providing additional opportunities to reflect on the peer-coaching experience—for example, through feedback, written assignments, journaling—helps further assess the outcomes. Here are a few examples from participants of how our approach has served to further their growth, development, and leadership.

I'm picking up an insight in every one of these conversations. In many cases, my peer coach is part of a different organization so I am learning about the Navy more broadly while also picking up techniques they specifically use in their leadership walk (that would also be applicable where I am heading).

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By listening to some of my Peer Coach's issue/challenges it has helped me think of solutions just by listening to their responses to my open-ended questions. I did not expect that their questions on their issues would help me look at different solutions.

Others note: "Peer coaching forced me to take a hard look at my own strengths and weaknesses as I did the same for my peer mentee." "Appreciated the validation that we can ask for help and we can reach out to each other."

Notably, we have also received post-course feedback from military leaders who continue the peer-coaching practice in their operational environments. "[Peer coaching has been] most invaluable. We will be continuing our discussions on a periodic basis for the remainder of our time in the Navy."

Thanks to [peer's] coaching I have ... outbriefed each coaching session with my deputies and division leads who are helping me with the priorities we set together. Biggest benefit is by talking to him about the biggest issues within [leader's broad area of responsibility] he energized me to be bold and address them with the entire command.

In all, our peer-coaching approach has the potential to serve as a useful education and leader development practice within the military arena and beyond.

Applicability to Other PME Audiences

Peer coaching is an impactful experiential learning activity for any PME course, particularly those with a leadership effectiveness focus or leadership component. The peer-coaching practice is applicable to leader development within every rank and professional specialty. The practice is backed by research in adult learning, adult development, education, leadership, and organizational studies (Caporale-Berkowitz & Friedman, 2018; Cholli et al., 2016; Garvey-Berger, 2012; Goysberg & Russman Halperin, 2022; Kegan & Lahey, 2009; Knowles et al., 2020; Kolb, 2014; Parker et al., 2018). We have utilized our peer-coaching approach with Navy, Army, Air Force, and Department of Defense civilian audiences ranging in rank from O-1 to O-8. What we have learned about overcoming obstacles to peer coaching with flag officers highlights the utility and applicability of peer coaching for broader audiences. Moreover, our effectiveness in dismantling skepticism among our senior leaders—likely the most resistant to these types of learning activities—points to even greater potential for engaging peer coaching with more junior audiences.

Additionally, the reflective debrief can be leveraged by educators and leader development practitioners to deliberately connect peer coaching to leader effectiveness. Discussion points might include the following:

- the value of improving active listening, open-ended questions, and rapport-building;
- the applicability of these skills for leaders to engage in mentorship, team development, situational leadership, and self-coaching;
- the value of honesty, transparency, and open communication to enhance team effectiveness;
- the benefits of connection, community, and seeking support to build resilience;
- the utility of addressing difficult or sensitive topics with a trusted colleague, especially as leaders become more senior and more isolated;
- the importance of leaders' willingness to be open, candid, and vulnerable, which enhances authenticity, promotes quality feedback, and is essential for learning from complex adaptive challenges;
- the need for trust, supportiveness, empathy, and psychological safety as colleagues help each other uncover underlying assumptions or disrupt entrenched thinking; and
- the imperative for leaders to display intellectual humility, engage a growth mindset, and overcome the natural tendency for heroic leadership.

Through our structured peer-coaching process, PME educators can build on these leader development ideas. The peer-coaching discussions give students the opportunity to think about and apply their learning to their own leadership. By drawing out their own insights, aha moments, surprises, and struggles through peer coaching, students will be more receptive to related developmental imperatives in their leadership courses and leader-development opportunities.

Conclusion

In recent guidance, the Joint Chiefs of Staff (2020a) issued a charge to reenvision PME, asserting a requirement for more focused leader development. Peer coaching as an experiential learning and development practice meets this charge. As military leaders continue to employ peer coaching in their operational environment, it shores up their leader effectiveness by providing a vital source of peer support for addressing their leadership challenges.

References

Bell, A. E., Meyer, H. S., & Maggio, L. A. (2020). Getting better together: A website review of peer coaching initiatives for medical educators. *Teaching and Learning in Medicine*, 32(1), 53–60. https://doi.org/10.1080/10401334.2019.1614448

PEER COACHING AND PME

- Berg, M. E. & Karlsen, J. T. (2012). An evaluation of management training and coaching. *Journal of Workplace Learning*, 24(3), 177–199. https://doi.org/10.1108/13665621211209267
- Bialek, T. K., & Hagen, M. S. (2022). Cohort-based leadership development for high-potential employees: A model for programmatic design. *Human Resource Development Quarterly*, 33(4), 361–382. https://doi.org/10.1002/hrdq.21459
- Caporale-Berkowitz, N., & Friedman, S. D. (2018, October 12). How peer coaching can make work less lonely. *Harvard Business Review. https://hbr.org/2018/10/how-peer-coaching-can-make-work-less-lonely
- Chesley, J. A., Egan, T., & Jones, H. E. (2020). Elevating leadership development practices to meet emerging needs. *Journal of Leadership Education*, 19(4), 180–191. https://doi.org/10.12806/V19/I4/T3
- Cholli, C., Sreeraj, P. S., & Kaur, R. (2016). Peer coaching: A tool for career development. *International Journal of Research in Commerce and Management*, 7(11), 54–56.
- Fey, N., Nordbäck, E., Ehrnrooth, M., & Mikkonen, K. (2022). How peer coaching fosters employee proactivity and well-being within a self-managing Finnish digital engineering company. *Organizational Dynamics*, 51(3), Article 100864. https://doi.org/10.1016/j.orgdyn.2021.100864
- Garvey-Berger, J. (2012). Changing on the job: Developing leaders for a complex world. Stanford University Press.
- Goldman, E., Wesner, M., & Karnchanomai, O. (2013). Reciprocal peer coaching: A critical contributor to implementing individual leadership plans. *Human Resource Development Quarterly*, 24(1), 63–87. https://doi.org/10.1002/hrdq.21153
- Goysberg, B., & Russman Halperin, R. (2022, May-June). How to get the most out of peer support groups: A guide to the benefits and best practices. *Harvard Business Review*. https://hbr.org/2022/05/how-to-get-the-most-out-of-peer-support-groups
- Joint Chiefs of Staff. (2020a). Developing today's joint officers for tomorrow's ways of war: The joint chiefs of staff vision and guidance for professional military education and talent management. https://www.jcs.mil/Portals/36/Documents/Doctrine/education/jcs_pme_tm_vision.pdf
- Joint Chiefs of Staff. (2020b). Officer professional military education policy (Chairman of the Joint Chiefs of Staff Instruction 1800.01F). https://www.jcs.mil/Portals/36/Documents/Doctrine/education/cjcsi_1800_01f. pdf
- Kegan, R., & Lahey, L. L. (2009). *Immunity to change: How to overcome it and unlock the potential in yourself and your organization*. Harvard Business School Press.
- Knowles, M. S., Holton, III, E. F., Swanson, R. A., & Robinson, P. A. (2020). *The adult learner: The definitive classic in adult education and human resource development* (9th ed.). Routledge.
- Kolb, D. A. (2014). Experiential learning: Experience as the source of learning and development (2nd ed.). Pearson FT Press.
- Parker, P., Hall, D. T., & Kram, K. E. (2008). Peer coaching: A relational process for accelerating career learning. *Academy of Management Learning & Education*, 7(4), 487–503. https://doi.org/10.5465/AMLE.2008.35882189
- Parker, P., Hall, D. T., Kram, K. E., & Wasserman, I. C. (2018). Peer coaching at work. Stanford University Press.
- Schwellnus, H., & Carnahan, H. (2014). Peer-coaching with health care professionals: What is the current status of the literature and what are the key components necessary in peer-coaching? A scoping review. Medical Teacher, 36(1), 38–46. https://doi.org/10.3109/0142159X.2013.836269

Upcoming Conferences of Note

December 7-8, 2023: Military Scholarship of Teaching and Learning Forum Quantico, VA

https://www.airuniversity.af.edu/TLC/MSOTL/

The theme of this year's conference is "Creating/Live Teaching and Learning Communities." This free conference will feature plenary sessions and breakout presentations of research specific to military education in seven tracks: (1) evidence-based instructional strategies, (2) faculty development, (3) assessment, (4) learning theories and andragogy, (5) distributed learning, (6) educational technology, and (7) research methods.

January 4-6, 2024: Lilly National Conferences: Teaching and Learning

San Diego, CA

https://www.lillyconferences-ca.com

The Lilly Conference provides opportunities for the presentation of the Scholarship of Teaching and Learning. Faculty and administrators at various stages in their academic careers come from across the United States, representing nearly every discipline found in higher education.

January 23–26, 2024: Future of Education Technology Conference (FETC) Orlando, FL

https://www.fetc.org/

The conference features presentations on new technologies, best practices, and pressing issues.

April 13-16, 2024: Higher Learning Commission Conference

Chicago, IL

https://www.hlcommission.org/Programs-Events/conference.html

Held annually in the spring in Chicago, the conference offers learning, professional development, and networking opportunities for Higher Learning Commission members.

May 13-16, 2024: The American Council on Education's Annual Meeting Washington, D.C.

https://www.acec.org/education-events/events/future-conferences/

Regarded as the most distinguished higher education event nationwide, more than 2,000 executive leaders in higher education regularly attend the annual conference. With a focus on data-driven insights, participants can look forward to three days full of networking opportunities, information sessions, and more.

June 4-5, 2024: EduData Summit

Washington, D.C.

https://insights.qs.com/registeredudatasummit2024

EduData Summit is a premier forum for data-driven educators. Learn and share best practices regarding big data, predictive analytics, learning analytics, and education.

UPCOMING CONFERENCES

June 7-9, 2024: The Teaching Professor Conference

New Orleans, LA

https://www.magnapubs.com/conferences/2024-teaching-professor-conference/

The conference focuses on practical, evidence-based tools and practices to help instructors excel in the classroom.

June 18–21, 2024 (Virtual) / June 25–27, 2024 (Hybrid): Army University Learning Symposium

Fort Leavenworth, KS

 $\underline{https://armyuniversity.edu/Organizations/LearningSymposium/Home}$

Army University hosts this biennial symposium to develop partnerships among military, government, academic, and industry partners that advance the art and science of learning.