

Modernizing Professional Military Education in the Digital Age

Enhanced learning

Master Sgt. Noel DeJesus
Sergeants Major Academy

The Army is engaged in a complex and multifaceted struggle with technology. Fortunately, it is not in the way that many have predicted. Skynet is not here, and terminators are not roaming the streets hunting down the human race. Paradoxically, the United States Army's war with technology is far more perplexing, and it is adversely affecting the progress of professional military education (PME).

The Department of Defense (DoD) signed a 10-year, \$7.6 billion contract with Microsoft in 2019 (GSA, 2019). However, the Army's learning environment has failed to keep pace with innovative and collaborative technologies. The purpose of this paper is to analyze how the Army can implement the ethical use of artificial intelligence (AI) to enhance the learning experience for Soldiers throughout their professional military education (PME), and subsequently attract, train, and retain Generation Z Soldiers.

A Call for Change

The digital revolution has arrived, and advancements in AI have ushered in a new era of technology that requires a transformational change in leadership development (DeJesus, 2023). As technology continues to evolve at an unprecedented pace, organizations that value innovation and adaptability will survive and thrive, and organizations that do not will cease to exist (Siebel, 2019). The current state of PME lacks the technological implementation necessary to attract, train, and retain Generation Z. While the DoD has provided Microsoft's cutting-edge software portfolio, many of the Army's physical and virtual classrooms are resistant to using anything except Microsoft Word and Microsoft PowerPoint – software that debuted in the 1980s.

Enhancing the Learning Environment

Microsoft recently released Copilot, an AI platform that leverages a large language model to serve the user as an everyday AI companion (Stallbaumer, 2024). Microsoft Copilot is now available on government computers, and Soldiers have direct access to AI on their Microsoft Edge home pages. By allowing the use of the full suite of Microsoft products within PME, the Army can provide a relevant and realistic learning experience to its Soldiers. Generative AI software like Microsoft Copilot can enhance the learning environment by en-

couraging critical and creative thinking while preparing students for the rapidly evolving technological dynamics of the real world (Abramson, 2023). The rapid adaption of emerging technologies is having a profound impact on the global environment.

The DoD has officially recognized that AI provides service members with a competitive advantage of speed, precision, adaptability, and efficiency, and they have implemented programs to leverage this technology (Clark, 2023). As AI continues to impact and shape the operating environment at an inconceivable pace, the Army cannot afford for its Soldiers to fall behind the technological curve.

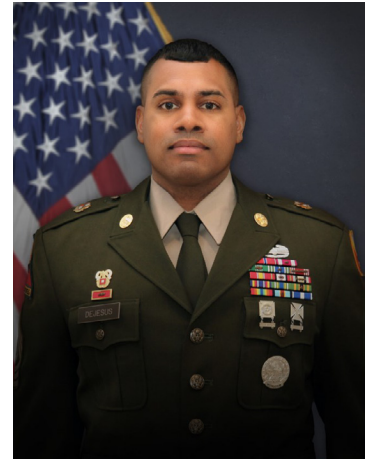
Research Capabilities

The Army's PME system emphasizes reading and writing comprehension. While generative AI platforms like ChatGPT have become popular for their writing capabilities, AI is more than a tool for strictly writing papers (Abramson, 2023). AI software like Microsoft Copilot expands research capabilities, improves the brainstorming processes, delivers multiple sources of information, and exponentially surpasses the limitations of previous research methods (Maslach, 2023).

One of AI's key advantages is its ability to quickly analyze extensive data sets, identifying intricate patterns and correlations that may be challenging for human researchers to detect (Smith & Zhang, 2022). This ability is instrumental in fostering new insights and hypotheses, enriching the research process. Furthermore, AI contributes significantly to ensuring the accuracy of research by cross-referencing information across various sources and identifying inconsistencies or errors (Maslach, 2023). This advancement represents a paradigm shift in the scope and efficiency of academic research and can significantly enhance the learning environment of the Army.

Redefining Academic Dishonesty

"Lead from the front" is a term that is often associated with the Army; however, the current academic



Master Sgt. Noel DeJesus, Sergeants Major Academy

policy displays a willingness and comfort in waiting for others to implement the change first. The University of Vanderbilt has recognized the value of AI, and they have implemented an academic policy that allows use of AI in the classroom (Villet, 2024). Furthermore, the University of Maryland Global Campus, which currently has 53,000 service members, veterans, and military spouses enrolled, has a policy on the ethical use of AI for its students (UMGC Library, n.d.).

The Paradox of Policies

For example, the Sergeants Major Academy (SMA) has partnered with Penn State University and Syracuse University to offer merit-based scholarships in adult learning and instructional design to sergeants major who are selected to serve as future instructors at the academy (NCO Worldwide, n.d.). The SMA does not allow use of AI in the learning environment (Department of the Army, 2023). Paradoxically, Penn State and Syracuse have academic policies that allow students to leverage AI during their coursework (Penn State University, n.d.; Syracuse University, n.d.). The Army can implement an academic integrity policy and syllabus language similar to those of Penn State and Syracuse to create instructional and institutional synergy.

A Measured Approach

The Army has a history steeped in tradition and bureaucracy. This is not a call to overhaul the entire PME system, however, change is necessary whenever a variable emerges with the global impact and speed of AI. By taking a measured approach, the Army can fully embrace the DoD's investment in Microsoft while positioning their students to remain relevant and informed with the latest technological advancements in AI.

The Ethical Application

The ethical application of AI is possible in the academic environment, and the Army must rewrite its policies on academic dishonesty to provide Soldiers with a world-class learning experience. In following the syllabus language and policies of Penn State and Syracuse, a rewriting of the academic integrity policy letters would allow students to use AI with several requirements that include proper acknowledgment and citation of any generated work, prior instructor approval of generative software and platforms, and attendance of an ethical use orientation (Penn State University, n.d.; Syracuse University, n.d.). The creation of a baseline standard for the ethical use of AI in the PME system is necessary if the Army wants to develop adapt and innovative leaders who are ready for the challenges of the operating environment of tomorrow.

Conclusion

This paper aimed to analyze how the Army can leverage AI to enhance the learning experience for thousands of Soldiers. AI is here to stay, and just as the personal computer revolutionized the writing process and digital catalogs enhanced libraries, software like to Microsoft Copilot should be viewed as a tool for progress. Rather than a lagging, restrictive, and rigid approach to adopting emerging technologies, the Army should lead from the front and allow the structured and responsible implementation of AI.

Learn More

A longer version of this article has been accepted to be featured in the Army University Learning Symposium, to be held June 11-14, at Fort Leavenworth, Kansas. Interested readers can attend the event virtually and participate in a live 30-minute Q&A session with the author. You can register for the event [here](#).

References

- Abramson, A. (2023, March 27). *How to Use ChatGPT as a Learning Tool*. Apa.org. <https://www.apa.org/monitor/2023/06/chatgpt-learning-tool>
- Clark, J. (2023, November 12). *DOD releases AI Adoption Strategy*. U.S. Department of Defense. <https://www.defense.gov/News/News-Stories/Article/Article/3578219/dod-releases-ai-adoption-strategy/>
- DeJesus, Noel (2023). *Artificial allies: The intersection of AI and human leadership*. Pocket Sized Leadership.
- Department of the Army. (2023). SGM-A policy memorandum No. 17, academic integrity.
- GSA and DOD Award Defense Enterprise Office Solutions Cloud Contract*. GSA. (2019, August 29). <https://www.gsa.gov/about-us/newsroom/news-releases/gsa-and-dod-award-defense-enterprise-office-solutions-cloud-contract-08292019>
- Maslach, D. (2023, December 13). *Generative AI Can Supercharge Your Academic Research*. Harvard Business Publishing Education. <https://hbsp.harvard.edu/inspiring-minds/generative-ai-can-supercharge-your-academic-research>

- NCO Worldwide. (n.d.). SGM-A Fellowship program. <https://www.ncoworldwide.army.mil/Academics/SGM-A-Fellowship-Program/>
- Northrop, L., & Korpela, M. (2021). Artificial intelligence in academic research: Applications
- Siebel, T. M. (2019). *Digital transformation: Survive and thrive in an era of mass extinction*. Rosetta Books.
- Smith, J., & Zhang, L. (2022). Artificial intelligence in data-driven research: A new frontier in academic investigation. *Journal of Technology and Science Education*, 12(1), 15-29.
- Stallbaumer, C. (2024, January 3). *Introducing Microsoft Copilot Studio and new features in Copilot for Microsoft 365*. Microsoft 365 Blog. <https://www.microsoft.com/en-us/microsoft-365/blog/2023/11/15/introducing-microsoft-copilot-studio-and-new-features-in-copilot-for-microsoft-365>
- Syracuse University. (n.d.). *Syllabus recommendations, center for learning and student success*. <https://class.syr.edu/academic-integrity/syllabus-recommendations/#ai>
- UMGC Library: *Artificial intelligence: Home*. Home - Artificial Intelligence - UMGC Library at University of Maryland Global Campus. (n.d.). <https://libguides.umgc.edu/artificial-intelligence>
- Penn State University. (n.d.). *Syllabus statements. AI, pedagogy, and academic integrity*. <https://aiai.psu.edu/sample-syllabus-statements>
- Villet, R. (2024, January 8). Vanderbilt extends leadership in generative AI. *Vanderbilt University*. <https://news.vanderbilt.edu/2024/01/08/vanderbilt-extends-leadership-in-generative-ai>

About the author

A native of the Bronx, New York, Master Sgt. Noel DeJesus is currently assigned as a student at the United States Army Sergeants Major Academy, Class 74. He is a proud member of the Signal Corps with previous assignments as a first sergeant at Fort Detrick, Maryland, and Joint Base Lewis McCord, Washington. DeJesus holds a Master of Arts in Administrative Leadership from the University of Oklahoma. He is married to Sophia DeJesus, and they have two children.

