

Modernizing the U.S. Army's Captains Career Course

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Abstract

Army University has taken up the call to assess, adapt, and innovate professional military education by modernizing the Army's Captains Career Course (CCC). The modernized CCC aligns closer to the future learning ecosystem concept as described by the Advanced Distributed Learning (ADL) Initiative, particularly in the dimensions of technological infrastructure and design. The next iteration of modernization can expand on the human infrastructure of CCC, specifically in distributed learning. Future modernization efforts can expand on the technological infrastructure, design, and policy dimensions of CCC. This has the potential to further progress toward the future learning ecosystem ADL describes.

On 1 May 2020, the Joint Chiefs of Staff (2020) published their new vision for the future of professional military education (PME). They stated that the “PME enterprise must continuously assess, adapt, and innovate” (p. 5) to create intellectual overmatch against its adversaries (p. 2). In conjunction with Army schools and Centers of Excellence, Army University has taken up the call to assess, adapt, and innovate PME by modernizing the Army's Captains Career Course (CCC) for fiscal year (FY) 2023. The modernized CCC aligns closer to the future learning ecosystem concept described by the Advanced Distributed Learning (ADL) Initiative, particularly in technological infrastructure and design dimensions.

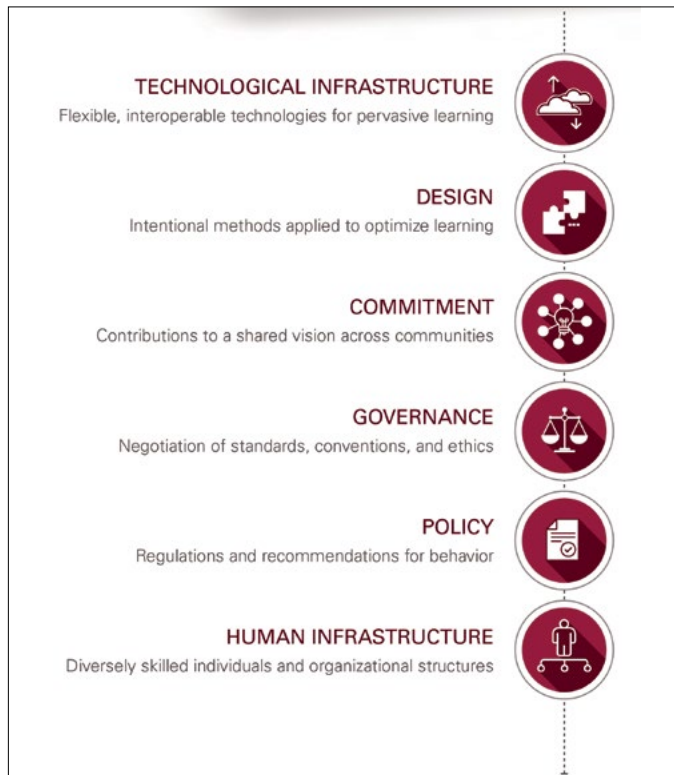
Modernization and the Future Learning Ecosystem

CCC modernization, like Army modernization, is a continuous process that involves the entire Army enterprise (U.S. Department of the Army [DA], 2019, p. 1).

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Figure 1

Six-Dimension Future Learning Ecosystem



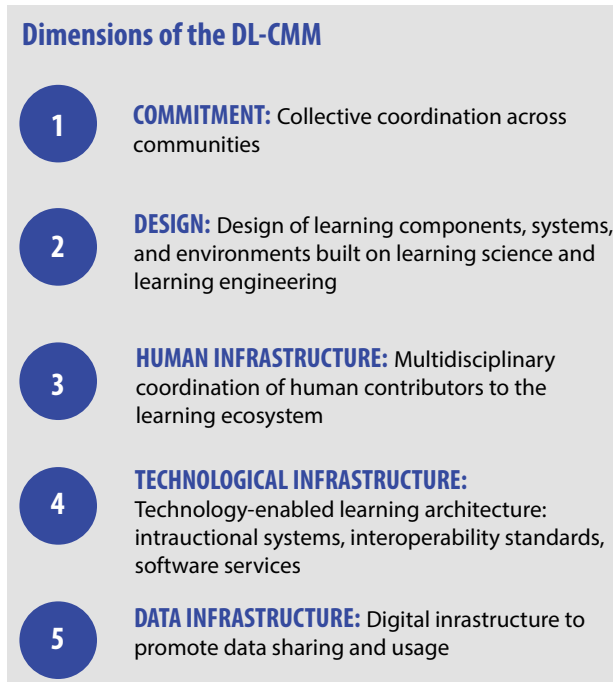
From *Modernizing Learning: Building the Future Learning Ecosystem*, 2019, by J. J. Walcutt and S. Schatz. U.S. Government Publishing Office.

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Figure 2

Five-Dimension Distributed Learning-Capability Maturation Model



From *Advanced Distributed Learning: Capability Maturity Model*, 2020, by N. Malone, M. Hernandez, A. Reardon, Y. Liu, B. Smith, J. Gordon, B. Andrejevic, and M. Neeley. Advanced Distributed Learning Initiative.

The 2019 Army modernization strategy states, “the Army will update its leader development and education processes to increase critical, creative, and systems thinking so that the next generations of Army leaders are prepared for the complexities of MDO [multidomain operations]” (p. 8). The Army’s push for modernization across the spectrum of doctrine, organization, training, materiel, leadership and education, personnel, facilities, and policy to meet the complexities of MDO necessitated a similar modernization effort for captains’ education.

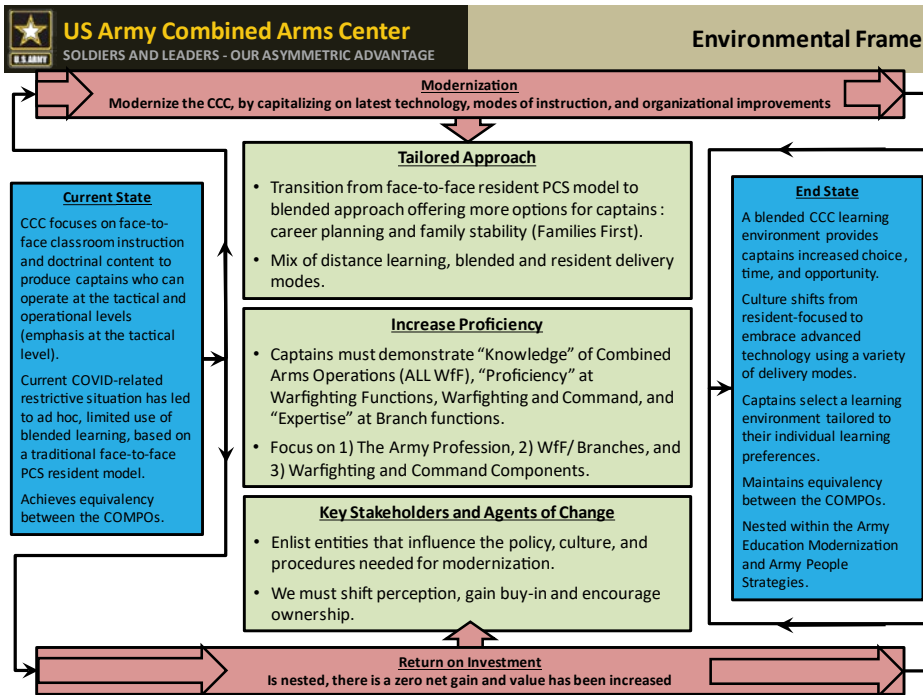
Understanding educational modernization requires a different concept than the concepts used for materiel or personnel modernization efforts. Army University’s Office of the Vice Provost for Academic Affairs (VPAA) used the ADL



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Figure 3

Army Design Methodology Environmental Frame for Captains Career Course Modernization



From *Tailorable Modernization Strategy (TMS) Model*, 2021, by N. Lequire, J. M. Persyn, and S. D. Celeen. Office of the Vice Provost for Academic Affairs, Army University.

Initiative’s “Future Learning Ecosystem” concept to analyze CCC modernization efforts (Walcutt & Schatz, 2019). Schatz and Walcutt (2019) define the future learning ecosystem as “a transformation—away from disconnected, episodic experiences and toward a curated continuum of lifelong learning, tailored to individuals, and delivered across diverse locations, media, and periods of time” (p. 4). The future learning ecosystem is a shift from an industrial age model of learning at scale toward a learning model that is holistic, lifelong, and personalized (p. 5).

The future learning ecosystem has six dimensions: technological infrastructure, design, commitment, governance, policy, and human infrastructure, as shown in Figure 1 (Walcutt & Schatz, 2019, p. 12). VPAA modified the five-dimension ADL Initiative Distributed Learning–Capability Maturation Model to



maintain visibility on governance and policy dimensions (see Figure 2; Malone et al., 2020, p. 16).

CCC Modernization Design and Planning

Lt. Gen. James E. Rainey, the Combined Arms Center (CAC) commander at the initiation of the CCC modernization effort, directed CCC modernization in December 2020 (Office of the Vice Provost for Academic Affairs [VPAA], 2021a, p. 2). Rainey's guidance was to "create a flexible and adaptive course design responsive to future pandemic-like contingencies" (VPAA, 2021a, p. 2). Primary responsibility coordination fell to the office of the VPAA for Army University through its instructional design division (IDD). IDD conducted a series of design sessions in the second quarter of FY22 using Army design methodology to develop an operational approach (see Figure 3).

Staff work throughout six operational planning teams (OPTs) and dialogue with Army University and CAC leadership significantly changed the scope and pace of CCC modernization efforts. Initial objectives during OPT1 to create "options for TDY attendance during Resident Phase" and "flexibility in timing of attendance at Resident Phase did not come to fruition" (VPAA, 2021b, p. 9). Subsequent OPTs identified limitations in the Joint Travel Regulations that precluded providing flexibility on mode of attendance for a single course offering. Additionally, subsequent OPTs could not find acceptable costs for TDY attendance without reducing the resident phase of CCC to 14 weeks and four days (U.S. Army Combined Arms Center [CAC], 2021, p. 4).

CAC initially set CCC modernization for complete implementation in FY24 (VPAA, 2021b, p. 9). By the second quarter of FY22, CAC set full implementation for the first quarter of FY23 (CAC, 2022, p. 3). This reduced time for developing updated learning products and further reduced the scope of the modernization effort. IDD analyzed and designed new learning products for submission to the identified contractor to develop the Captains Career Course common core C5 distance learning (DL) in four months. The identified contractor then had a shortened eight-month period of performance to develop C5 DL and test it before implementation via the Army Learning Management System on 1 October 2022. Schools and centers will have to develop face-to-face products to be delivered six months after, by 1 April 2023.

Evaluating the Modernized CCC

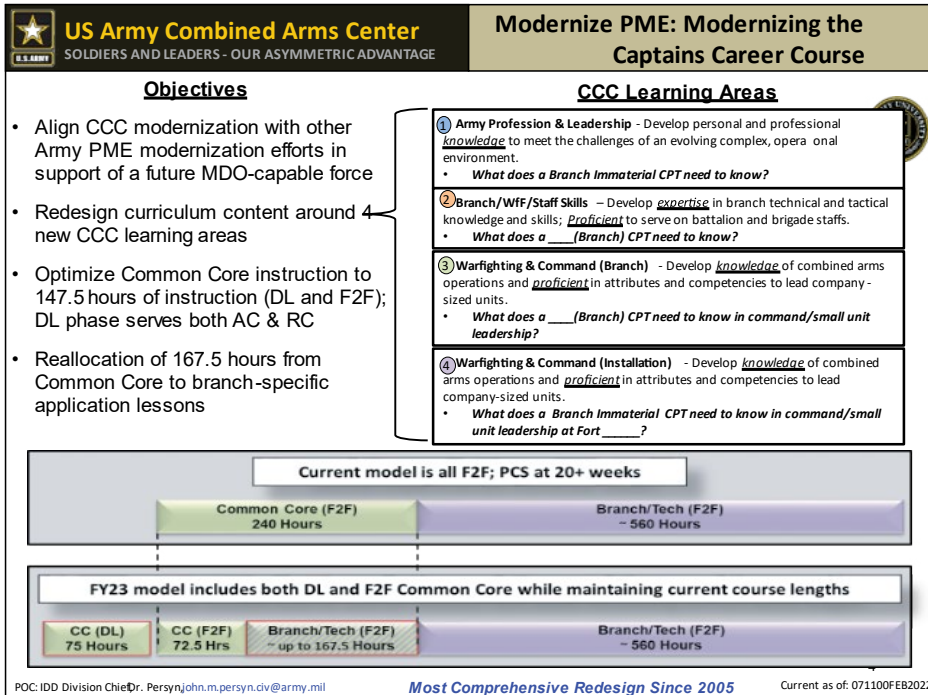
Changes to the scope and pace of CCC modernization affected the extent of modernization. FY23 CCC modernization focused mainly on technological infrastructure and design dimensions. The modernization process itself affected the commitment dimension. Dimensions of governance, policy, and human infrastructure



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Figure 4

Captains Career Course Objectives, Learning Areas, and Redesign Model



From *CCC Modernization O'PT 3 Executive Summary*, 2022, by J. M. Persyn. Army University.

remained untouched due to the refined scope and pace of the modernization effort. This section will assess the modernized CCC against the following three dimensions: technological infrastructure, design, and commitment.

FY23 CCC modernization directly impacted the technological infrastructure of the course. Combining asynchronous DL through the 75-hour C5 DL component and redesigned resident instruction resulted in a blended learning model for the FY23 CCC. Blended learning is the optimal learning modality for achieving CCC learning outcomes. Students who participate in blended learning environments improve their learning outcomes more than those who learn in online or face-to-face environments alone (Means et al., 2013, p. 29).

IDD designed C5 DL as 39 distinct but related CBI modules. These modules will be hosted on the Army Learning Management System beginning 1 October 2022. All 39 modules are Shareable Content Object Reference Model (SCORM) 2004 third edition compliant. SCORM is a technical standard for eLearning products



that enables interoperability between learning content and SCORM-compliant learning management systems. NCO Professional Development System Distributed Leader Course numbers I through VII use the same technological infrastructure (NCO Leadership Center of Excellence, n.d.). The pre-modernized CCC for Reserve Component officers also uses similar technological infrastructure.

FY23 CCC modernization resulted in an updated course design, as seen in Figure 4. VPAA coordinated with each school and center to review critical learning requirements during CCC modernization OPTs 3–5 (Persyn, 2021a, 2021b, 2021c). Course redesign resulted in a streamlined common core with optimized modalities depending on desired levels of learning for each lesson. Critical learning requirements reviews aligned C5 learning objectives to four new CCC learning areas (see Figure 4). IDD reduced C5 length from 240 hours to 147.5 by combining requirements, adjusting required proficiency levels, and removing redundant or outdated learning content. IDD identified 75 hours of the reduced 147.5 hours for DL development as 39 CBI-based lessons. IDD maintained the remaining 72.5 hours as face-to-face C5 lessons.

Schools and centers conducted independent reviews of branch-specific CCC content. The pre-modernized CCC model allocated up to 560 hours for branch-specific CCC instruction. Army University identified up to 167.5 additional hours for each school and center for branch-specific education in residence. As of 7 September 2022, schools and centers were still developing the specifics of their modernized resident CCC for implementation. The intended result of allocating 167.5 additional hours in resident instruction to each school and center is for students to become experts in their branch.

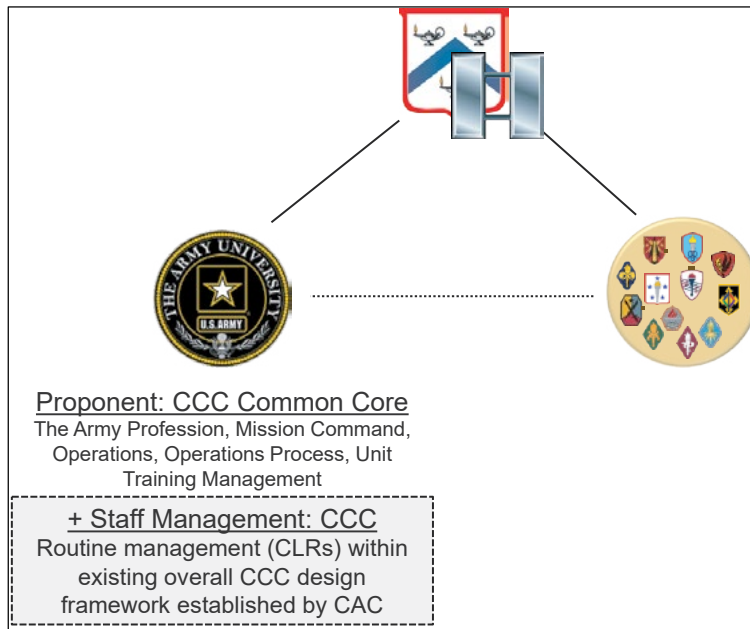
FY23 CCC modernization indirectly affected the dimension of commitment. Implementation of CCC modernization at scale required constant coordination throughout the enterprise. Much of this coordination involved partnerships that would be unnecessary during routine curriculum updates. This coordination increased awareness of CCC modernization and the role of VPAA, Army University, and CAC in educational modernization initiatives. A shared vision was developed and agreed to during design of the CCC modernization effort in FY22 (Lequire et al., 2021, p. 2). VPAA, the Office of Primary Responsibility for FY23 CCC modernization efforts, grew commitment to the shared vision by including the Army learning enterprise and critical institutional and operational partners to monthly OPT sessions, biweekly VPAA CCC modernization updates, and monthly telephone conferences.

Modernization did not affect governance, policy, or human infrastructure dimensions. Based on guidance from the November 2021 Training and Doctrine Command Education Summit (Dillon, 2021, p. 3), CAC directed implementation of CCC modernization in FY23 instead of full implementation in FY24 (CAC, 2022, p. 3). New guidance resulted in an expedited development timeline for C5



Figure 5

Proponency and Staff Management Functions for the Captains Career Course



DL of less than nine months. The new timeline also included obtaining necessary resourcing for C5 DL development through an unfunded request for over \$2 million through CAC. Army University's necessary focus on C5 DL development led to deliberate improvement in technical infrastructure, design, and commitment without change to the remaining dimensions of the future learning ecosystem.

Future Opportunities for Modernization

Modernization is a continuous process (DA, 2019, p. 1); it is misleading to frame FY23 modernization initiatives for CCC as complete or final. Instead, we should frame FY23 modernization initiatives as a part of an ongoing campaign for educational modernization. The remainder of this article outlines possible directions for FY24 CCC modernization initiatives and beyond.

Technological infrastructure for the modernized CCC can evolve in two distinct ways. The first way is by shifting toward ADL Initiative's cmi5 specification. Cmi5 is the latest instantiation of eLearning standards. It expands on the Experience



API (xAPI) standard and provides SCORM-like capability for eLearning products that must interface with various learning management systems (Army Distributive Learning Initiative, 2021, p. 5). Using cmi5 will enable comprehensive data collection of learner interactions and allow learning professionals to conduct fuller analysis based on actual learner experience data. Additionally, it will ensure that learning products remain technically viable over a more extended period. Future iterations of the Army's learning management solution, such as the Army Training Information System (TPO Army Training Information System, n.d.), should be capable of hosting cmi5 compliant courseware.

The second direction for modernizing technological infrastructure is to enable social learning experiences. Social learning “is collaborating with others to make sense of information and to create new ideas” (Craig et al., 2020, p. 117) and has the potential to increase engagement and improve student abilities to apply, analyze, and synthesize knowledge in a collaborative environment (Kimball & Byerly, 2013, pp. 1, 33). Unfortunately, students completing C5 DL CBI modules designed for FY23 will not have any feedback or interactions with either an instructor or their fellow students. Future modernization initiatives can work toward creating a fully blended learning environment that provides social scaffolding and enables social learning throughout C5 DL. Integrating synchronous and asynchronous virtual learning technologies into the Army's next learning management system is key to enabling these social learning experiences.

Army University should continue to grow in-house DL development capabilities to update C5 DL in response to rapidly changing doctrine. VPAA's Faculty and Staff Development Division is growing this capability internally. This capability should expand to ensure IDD can rapidly update and eventually create new C5 DL learning products without reliance on contracted capability. Untethering development cycles to the FY is critical to increasing responsiveness to the rapidly changing operational environment while reducing costs. Training developers should be proficient in designing face-to-face and DL-specific lesson authoring tools such as Adobe Captivate or Articulate Storyline 360 to meet captains' educational needs.

Army University should continue to work with enterprise partners to increase commitment to modernization efforts for FY24 and beyond. Most potentially impactful changes to the CCC have a scope, cost, and time horizon that will require increasing levels of commitment from the Training and Doctrine Command; Human Resources Command; Headquarters, Department of the Army; and each Army school and center of excellence. Army University must build this commitment through frequent engagement and progress toward the common goal of increasing Army readiness.

Future modernization efforts should clarify governance procedures. Proponency for C5 and various branch-specific domains remains valid regarding learning content development. However, there is a gap in staff management of the entire CCC.



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By default, staff management of CCC functions (see Figure 5) has also fallen to IDD. Army University, through CAC, should define the staff management function and work with schools and centers to refine critical processes. Defining the staff management function will result in streamlined integration of C5 learning products and synchronization of future modernization efforts.

Policy frames the extent of modernization possible for CCC. Changes to the Joint Travel Regulations are essential to meet the original intent to create tailorable and flexible paths for CCC attendance. Without this policy change, each course offering will be either PCS or TDY, with a break-even point of 14 weeks and four days between both options. A concerted effort to allow hybrid course offerings will open possibilities for flexible CCC attendance options during future modernization efforts.

Human infrastructure should be improved by continuing to develop talent needed to facilitate modernized instruction. Army University can facilitate this understanding in the short term by engaging educators across each school and center. In the midterm, small-group leaders across the institutional Army should be proficient in DL and resident instructional techniques. Organizations such as Army University's Vice Provost for Digital Education offered courses during the pandemic to facilitate expertise in distributed learning. A similar course should be provided to small-group leaders to posture them to maximize student learning regardless of modality.

Conclusion

FY23 CCC modernization efforts aligned technological infrastructure and design of the course closer to the ideal future learning ecosystem. However, modernization is a continual process, and significant opportunities remain to modernize across all six dimensions of the future learning ecosystem. With thorough analysis, a thoughtful approach, and energetic implementation, continued modernization in these directions may reap further benefits to the readiness and cognitive development of the Army's junior officers. ✍

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