Teaching Noncommissioned Officer Professional Military Education in the COVID-19 Environment

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Abstract

Prior to the COVID-19 pandemic, most noncommissioned officer (NCO) professional military education (PME) courses such as the Basic Leader Course (BLC), the Advanced Leader Course, and the Senior Leader Course were delivered in a resident, face-to-face format. However, the Master Leader Course (MLC) and the Sergeants Major Course were always delivered in both a resident format and an online (distributed learning, or DL) format utilizing Blackboard.mil and Blackboard.com, respectively.

During the COVID-19 pandemic, instructors of all resident PME courses had to figure out how to deliver resident instruction to their students in a DL format. Since the NCO Leadership Center of Excellence (NCOLCoE) is the proponent of the program of instruction for BLC and MLC, those courses will be the focus of this article.

The Basic Leader Course–Distributed Learning

Blackboard.mil (Bb.mil) is the learning management system (LMS) currently utilized to safely teach BLC within COVID-19 restrictions. At the beginning of the first emergency BLC, during the initial outbreak of the pandemic, the Bb.mil service became overwhelmed by the number of users, which resulted in numerous problems. Both facilitators and learners had problems accessing the Bb.mil website or accessing the course materials and the learning resources. Some of the specific problems were as follows:

- Gateway timeouts. Facilitators and learners attempted to access course material. The proxy server did not receive a timely response from the upstream server.
- Latency issues. Facilitators and students would access course content, and it would take several minutes to load. Examples include downloading reading material and references, uploading assignments, and viewing graded assignments.
- No access to Bb.mil. There were several instances where noncommissioned officer academies (NCOAs) reported they were unable to access Bb.mil.
- Bb.mil proxy server crashed. After the server crashed, it still took four to five months to approve, purchase, and install.
- Bb.mil later had issues with allowing facilitators and students to access the site through civilian internet service providers.
- Bb.mil conducted updates on the first Tuesday of every month at 1600 EST. The updates interrupted other NCOAs who were in session. Bb.mil shut down until the maintenance was completed.
- Bb.mil is approximately five versions behind Blackboard.com (Bb.com) and cannot sustain a learning environment conducive to educate the Army's future leaders.

Basic Leader Course's Incorporation and Utilization of Virtual Collaboration Platforms

During the initial conduct of the emergency BLC, NCOLCoE and the NCOAs needed to quickly identify effective virtual collaboration platforms that could be utilized to deliver the course content in a synchronous, virtual manner. Synchronous instruction is instruction that is delivered online in real-time. The instructor and students are logged in the online classroom at the same time and interact with each other via chat sessions and/or via virtual discussions where the instructor and students can see one another.

The BLC course manager was able to send recommendations to the force such as utilizing defense collaboration services (DCS), global video services/video

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teleconferencing, Microsoft Office Teams (MS Teams), and Skype Business. The guidance was for the NCOAs to test which virtual collaboration platform would work the best for each respective academy. DCS was initially tested at the Eighth Army NCOA in Korea because Korea's quarantine took place before the quarantine in the United States. MS Teams eventually became the predominant virtual collaboration platform that NCOLCoE advocated due to the positive experiences reported by users and facilitators.

The NCOLCoE BLC team created distributed learning products in order for learning to continue in the DL environment. The learners were provided job aids and other resources to help them effectively navigate each lesson. During the asynchronous phases of learning, discussion boards were utilized to facilitate critical thought and reflection. Asynchronous instruction is online instruction that is not delivered/communicated in real-time. Asynchronous instruction involves the instructor and students posting and responding to discussion boards at their convenience within a predetermined amount of time. An example would be an instructor posting a discussion question in the online classroom and the students having up to three days to post a reply to the discussion question.

The drawback to asynchronous facilitation was the lack of real-time interaction between the students and the facilitators. This problem can be remedied by incorporating relevant prerecorded lecture videos related to the specific lessons the students are engaged in. Choe et al. (2019) conducted a research study and determined that online lecture videos incorporated into the online asynchronous lessons greatly enhanced engagement and student satisfaction while ensuring the learning outcomes were still met.

The overall guidance to the BLC NCOAs was to deliver courseware and collaboration as they would in a resident course. This proved challenging for many NCOAs because not many instructors had online teaching experience and because there were systemic issues with the Bb.mil LMS. Another issue was the lack of online virtual collaboration tools within the Bb.mil LMS. This problem was overcome through the separate use of MS Teams.

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The NCOLCoE oversaw management of access to Bb.mil. The NCOLCoE created self-enrollment instructions for each NCOA to send to its learners in order to streamline the enrollment process into Bb.mil. This made enrollment more efficient, much easier for the learners to navigate, and less stressful for the NCOA administrators.

Communicating Intent

Some of the NCOAs initially experienced a misunderstanding concerning when to utilize the DL products and when to utilize the discussion board threads. This issue was resolved through DL training provided to the facilitators by the NCOLCoE BLC course manager in order to better facilitate communication, coordination, collaboration, and comprehension. Specific guidance was given to the NCOAs to use DL products in the event facilitators were unable to use a virtual collaboration platform (MS Teams, DCS, Skype, global video services, and BlackBoard [Bb] Collaborate) to deliver course content. Guidance was also given to facilitators to conduct frequent virtual collaboration sessions that were synchronous and simulated the face-to-face interactions students had with their facilitators in resident courses. End-of-course critiques/after action reviews revealed that the students were receptive to the virtual collaboration sessions because they felt more engaged with the instructors and their fellow learners.

In a DL environment, it is necessary for learners to be able to take ownership of their learning in order to succeed in the course. It is up to the learners to absorb the material and to effectively communicate their understanding of the information through the use of discussion board threads, peer responses, and other means. However, no one should assume that adult students will instinctively know how to utilize effective self-regulating learning strategies. Online students must be introduced to the strategies they can utilize that are tailored to their individual needs or circumstances. A key indicator of future student success in a DL environment is the student's possession of effective self-regulating learning strategies/behaviors (Quesada-Pallarès et al., 2019).

Basic Leader Course Blackboard.com Pilot

The NCOLCoE BLC team conducted several train-the-trainer sessions on the use of Bb.com in preparation for the BLC Bb.com pilot. NCOLCoE conducted the Bb.com pilot in June 2020. Bb.com provided one virtual collaboration platform (Bb Collaborate). That platform is built inside of Bb Learn (Bb.com). This allowed the NCOAs to have one singular platform that included an LMS for the course content and also included an embedded virtual collaboration tool (Bb Collab-

orate). No longer did the facilitators and students have to utilize two separate tools from two separate platforms (Bb.mil and MS Teams) to achieve the learning outcomes. The built-in capabilities of Bb.com facilitated student learning. Bb.com allowed both facilitators and learners to access the website without a common access card, and facilitators and learners were able to utilize any commercial and government network to access the Bb.com website.

Government networks in some locations had difficulty accessing Bb.com. This was resolved by working with the Combined Arms Center (CAC) and local network enterprise centers by providing them with feedback from prior lessons. Bb.com allowed facilitators and learners to telework and attend class from their residences. One reported issue was that some learners did not have enough data space on their civilian internet data plans. This caused learners to have to contact their internet service providers and change their data plans in order to increase their available data, which resulted in increased monthly data plan payments for learners.

Bb Collaborate enabled facilitators to create small group discussions by utilizing breakout groups. Breakout groups allowed four learners per group (replicating a resident, small group, face-to-face session) to collaborate on a topic without interrupting other learners. The learners then returned to the larger group to discuss the breakout group's decisions or outcomes. This approach proved beneficial to the achievement of the overall learning outcomes and it facilitated student engagement with peers and facilitators.

NCOA facilitators had to successfully complete Bb Learn and Bb Collaborate training prior to receiving access to Bb.com. This training ensured that all facilitators were certified to teach in a DL environment utilizing the Bb.com LMS.

Student Management System

The student management system (SMS) assisted the NCOAs with access to future students based on an Army Training Requirements and Resources System (ATRRS) reserved seat. The NCOAs printed out the next class ATRRS attendees list and compared it to the enrolled students in SMS before granting the students access and before creating a Bb.com account for them. This practice ensured that only the students listed in ATRRS who enrolled in SMS were provided Bb.com accounts. NCOLCoE and CAC granted access for three SMS administrators for each NCOA. Those individuals attended training provided by CAC and were only given access upon successful completion of training.

It is highly recommended that the Army continue utilizing SMS and Bb.com as the platforms and LMS for the Army. Bb.com creates a learning environment conducive to student engagement and conducive to helping students achieve the intended learning outcomes in a DL environment.

The Master Leader Course

Background

The Master Leader Course (MLC) was initiated via Execution Order 236-15 in October 2014 (U.S. Department of the Army [DA], 2015). The course went through analysis, design, and development throughout the spring and summer of 2015. In November 2015, the MLC went through operational group trials. A second operational trial was conducted in January 2016. The course was fully operational in April 2016. In the summer of 2017, the design and development team for the DL version started to fill out the shell of a four-week model, an eight-week model, and then a six-week model. This means that the MLC team developed plans to deliver the curriculum in four-, six-, and eight-week options. The six-week option was determined to be the most viable option.

The six-week model was selected over the other course lengths in order to better facilitate the Select-Train-Educate-Promote (STEP) concept. The STEP concept involves ensuring soldiers are provided the training and education needed in order for them to be promoted to the next rank (U.S. DA, 2019). Analysis identified the six-week DL model as more inclusive for students from the U.S. Army National Guard and the U.S. Army Reserve, who may have full-time civilian employment and who may be seeking a way to continue their military professional development while working. The six-week DL model also facilitates the Guard and the Reserve's participation in the STEP program.

The MLC DL was initially piloted in 2017 using PowerPoint slides. The PowerPoint slides were cumbersome and hard to load across the learner spectrum. This means that the PowerPoint slide files were much larger than the web slides that were ultimately used. The size of the files made them difficult to load and resulted in latency issues during delivery.

Given the difficulties associated with PowerPoint, the NCOLCoE Interactive Multimedia Instruction department conducted research and discovered that a more efficient way to deliver content was to use a web-slide application that enables a smoother delivery using the Bb.mil platform. The new course design employed web slides with the Generalize New Information segment of the experiential learning model embedded. An embedded Generalize New Information segment frees up facilitators to have a more intensive observation of student interactions. Therefore, if a facilitator observes a student not engaging or identifies that the quality of the content in the student's posts is insufficient or not meeting the learning outcomes, the facilitator can then set up a direct session with the individual student or with the entire class using a virtual collaboration tool to refocus the student and/or the class.

Master Leader Course Distributed Learning

The MLC DL is a synchronous course encompassing all four of the Army Learning Areas: Army leadership and the profession, mission command, human dimension, and professional competence (U.S. DA, 2017). What makes the MLC DL synchronous is the real-time experience where the students have access to their facilitators via phone, text, email, and now video collaboration and facilitation sessions. Real-time experience refers to students and instructors communicating with each other at the same time just as if they were communicating with each other in a face-to-face environment such as what occurs in a typical classroom.

The MLC DL uses a flipped course or blended learning model where the students are provided the lessons as they proceed through the courseware answering questions, conducting research, and responding to their facilitators and classmates.

The courseware leverages the students' ability to manage time and to have a work-life balance. The course is gated so that the students must engage with the courseware for three hours per day. Three hours a day may not seem like a lot of time until one factors in the time necessary to research and write a portion of the group research project. At the same time, other course requirements must be met such as conducting research to incorporate the NCO common core competencies into six executive summaries based on historical events and current doctrine. These core competencies were developed by the NCOLCoE. The six common core competencies are leadership, communication, readiness, training management, operations, and program management.

Students do not have embedded readings in the courseware. They are given the core doctrine as a starting point for research; after that, they must go to the Army Publishing Directorate and retrieve the appropriate doctrine to support their executive summaries. They also must study for three exams and prepare briefings.

Facilitators engage with the students in the threaded discussion area, posing thought-provoking questions to each student and providing feedback to the students' thoughtful and reflective posts. The facilitators observe group interactions in the discussion areas and will follow up with additional thoughts regarding students' posts. Online facilitation is very intensive for facilitators, who spend much of their time assessing the students' discussion posts, papers, exams, and executive summaries. The facilitators also form the audience for the students' briefings to provide feedback.

COVID-19 Mitigation

The MLC DL pilot during the COVID-19 pandemic entailed disenrolling the remaining fiscal year 2020 MLC resident classes and then reenrolling all of those

students into the MLC DL classes. The MLC was able to scale for size using the active-duty Army facilitators and the U.S. Army Reserve NCOAs. The staff at Fort Bliss MLC DL was able to provide mentorship for those facilitators who had never taught in a virtual environment. One of the MLC DL classes had to be conducted in a two-week time frame instead of a six-week time frame. The comparison between the emergency two-week DL class and the regular six-week DL class taught a major lesson: the six-week DL class is tenable whereas a two-week MLC DL class is not.

The two-week DL class was executed in a two-week emergency mode and was very time-intensive to the point of untenability. During the emergency two-week DL class, facilitators and students alike experienced a great amount of stress trying to meet all gates in the course. Especially challenging for the facilitators was trying to provide timely feedback to the students during the two-week time frame.

MLC DL was normally delivered via Bb.mil prior to the COVID-19 pandemic. During the pandemic, facilitators decided to conduct an MLC DL pilot utilizing Bb.com in order to compare and contrast the Bb.mil LMS with the Bb.com LMS since BLC was also participating in a Bb.com pilot. The MLC DL Bb.com pilot received accolades from students and facilitators alike due to its excellent functionality, reliability, and inclusion of Bb Collaborate within the LMS. Utilizing Bb.com and web slides in the six-week model, the students obtained a much richer educational experience. They experienced reduced stress since they were able to achieve a work-life balance that is unattainable in the two-week resident version of the course.

With the Bb.com platform, latency and content loading issues were mostly nonexistent in contrast to the Bb.mil LMS, which was/is fraught with issues and outages. However, a lack of funding for Bb.com licenses forced the NCOLCoE to have to revert to the Bb.mil platform after the Bb.com pilots ended.

Master Leader Course Teaching Strategy

The MLC teaching strategy is about making connections with previous experiences and pieces of knowledge with courseware to provide linkage with future applications in the field. This is referred to as experiential learning (Girvan et al., 2016). The students are encouraged to take notes to mitigate the forgetting curve so they can recall key points brought out by the lesson's questions. The MLC teaching strategy also highlights the importance of DL facilitators staying abreast of newly discovered value-added practices pertaining to the facilitation of online learning. Online learning is constantly evolving with the advent of new educational technology that will require new online teaching skills and methodologies (Ferdig et al., 2020).

The Future

Facilitators learned and continue to learn many lessons from making these changes as a result of the COVID-19 pandemic. They realized the need for educational institutions to be able to continue their training and education mission by incorporating DL into the way curriculum is delivered (Basilaia & Kvavadze, 2020; Chick et al., 2020).

The DL model enables the Army to educate more soldiers over time with fewer facilities and workforce required. Utilizing the Bb.com LMS made BLC and MLC just as effective as their resident counterparts. The achieved learning outcomes illustrated that when facilitators utilize a university model, BLC and MLC can deliver cognitive courseware products with maximum efficiency.

From an educational standpoint, making students responsible for their learning by leveraging communication, research, and group problem-solving, the Army can achieve an industry-standard level of competency.

The Bb.com LMS provides a suite of tools that enable a real-time or blended approach to education that the resident course simply does not provide. With those tools, facilitators are able to moderate with fractional engagement to keep students on track. Fractional engagement is the point of need with a fraction of the engagement of resident (in-person) delivery.

The flipped approach using web slides allows the student to manage time and engage with courseware at the time and place of his or her choosing. The web slides allow all students to see all content, thus ensuring all students across all compos achieve the same learning outcomes.

The future of NCO PME may very well be blended learning. Blended learning involves combining face-to-face (resident) instruction with online instruction and has the potential to increase students' level of knowledge retention, thereby facilitating effective learning (Westerlaken et al., 2019). Utilizing blended learning affords PME institutions the flexibility to deliver their curriculum all resident, all DL, or a combination of the two methods (blended). This translates into PME as an option for just about any environment that requires soldiers to quarantine and/or telework.

References

Basilaia, G., & Kvavadze, D. (2020). Transition to online education in schools during a SARS-CoV-2 coronavirus (COVID-19) pandemic in Georgia. *Pedagogical Research,* 5(4), 1–9. https:///doi.org/10.29333/pr/7937

Chick, R. C., Clifton, G. T., Pease, K. M., Propper, B. W., ale, D. F., Alseidi, A. A., & Vreeland, T. J. (2020). Using technology to maintain education of residents during the COVID-19 pandemic. *Journal of Surgical Education,* 77(4), 729–732. https://doi.org/10.1016/j.jsurg.2020.03.018

Choe, R. C., Scuric, Z., Eshkol, E., Cruser, S., Arndt, A., Cox, R., Toma, S. P., Shapiro, C., Levis-Fitzgerald, M., Barnes, G., & Crosbie, R. H. (2019). Student satisfaction and learning outcomes in asynchronous online lecture videos. *CBE-Life Sciences Education, 18*(55), 1–14. https://doi.org/10.1187/cbe.18-08-0171

Ferdig, R. E., Baumgartner, E., Hartshorne, R., Kaplan-Rakowski, R., & Mouza, C. (Eds). (2020). *Teaching, technology, and teacher education during the COVID-19 pandemic: Stories from the field*. Association for the Advancement of Computing in Education (AACE). Retrieved 15 June 2020 from https://www.learntechlib.org/p/216903/

Girvan, C., Conneely, C., & Tangney, B. (2016). Extending experiential learning in teacher professional development. *Teaching and Teacher Education, 58*, 129–139. http://dx.doi.org/10.1016/j.tate.2016.04.009

Quesada-Pallarès, C., Sanchez-Martí, A., Ciraso-Calí, A., & Pinedo-Herrero, P. (2019). Online vs. classroom learning: Examining motivational and self-regulated learning strategies among vocational education and training students. *Frontiers in Psychology, 10*(2795), 1–13. https://doi.org/10.3389/fpsyg.2019.02795

U.S. Department of the Army. (2015). *Army-wide implementation of noncommissioned officer professional development system* (NCOPDS) (HQDA EXORD 236-15). Washington, D.C.

U.S. Department of the Army. (2017). *The U.S. Army learning concept for training and education 2020-2040* (Training and Doctrine Command Pamphlet 525-8-2). U.S. Army Training and Doctrine Command. Retrieved 7 October 2020 from https://adminpubs.tradoc.army.mil/pamphlets.html

U.S. Department of the Army. (2019). *Enlisted promotions and reductions* (Army Regulation 600-8-19). U.S. Government Publishing Office. Retrieved 7 October 2020 from https://armypubs.army.mil/ProductMaps/PubForm/Details.aspx?PUB_ID=1004369

Westerlaken, M., Christiaans-Dingelhoff, I., Filius, R. M., Devries, B., Debruijne, M., & Vandam, M. (2019). Blended learning for postgraduates: An interactive experience. *BMC Medical Education, 19*(289), 1–7. https://doi.org/10.1186/s12909-019-1717-5