Prioritizing Active Learning in the Classroom

Reflections for Professional Military Education

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Abstract

This article explores the value of active learning to enhance classroom engagement of military learners, as outlined in the *Army Learning Concept*. It establishes a framework of four criteria that faculty should weigh as they consider integrating active-learning exercises into their coursework. The author discusses three activities piloted in a graduate program for defense/security professionals and analyzes them according to established criteria. The article concludes by discussing key lessons and observations on active-learning innovations that are relevant to broader military and adult education environments.

Whether sitting through lectures, participating in kinetic exercises, or drilling for exams, military learners (like other adult students) carry their ideas, concerns, and experiences to class with them. Faculty can ignore this dynamic but often at the cost of "losing" students and leaving learning outcomes unfulfilled (Butler, Phillmann, & Smart, 2001; Cashin, 1985; Freeman et al., 2014).

Recognizing learner context in an ever-evolving operational environment is one reason why many professional military education (PME) faculty embrace active learning (AL) as an alternative or supplement to traditional lectures. This reflects insights from the Scholarship of Teaching and Learning, or SOTL (Sawyer et al., 2017; Westler & French, 2019). An AL approach values students' problem-solving capabilities and prior experiences, acknowledging that these factors influence how learners process and utilize new information (Richardson, 2003).

In well-designed AL activities, students "take ownership of the knowledge-acquisition process … via consistent collaboration with each other" (Glasgow, 2014, p. 526). This peer engagement does not diminish faculty importance; rather, the role of teacher expands to that of trusted mentor.

McTighe and Willis (2019) present a construction metaphor to elucidate teaching/learning practices linked to neuroscience: professors act as "cognitive contractors" in a dynamic learning process, facilitating critical opportunities and resources that students' "brains need and want in order to construct knowledge" (p. 1), often in collaboration with peers and mentoring faculty. Active learning ultimately seeks payoffs in how well students comprehend and apply the assigned content and engage in their learning community (Shaw, 2010; Thatcher, 1990).

The *U.S. Army Learning Concept for Training and Education: 2020-2040* embraces AL ideas: "Learner-centric environments engage students in frequent context-based problem solving exercises, and, depending on the student population, by encouraging peer-to-peer learning" (U.S. Department of the Army, 2017, p. 17). Per Lira and Beurskens (2017), the Army's Center for Teaching and Learning emphasizes content mastery and teaching with diverse methods, focusing increasingly on learner-centered approaches. Problem-solving, experience-based reflection, and peer engagement are constituent elements for *Army Learning Concept* learner-centered priorities.

This article outlines a framework of four criteria to support faculty decision-making on integrating AL approaches. A few sample activities are analyzed according to these criteria, considering impacts based on faculty and student observations and relevant assessments. In conclusion, the article addresses benefits, challenges, and tips for integrating AL activities in PME and adult education classrooms.

Active-Learning Methods in Theory and Practice: Key Criteria

Based on broad literature review and reflections from classroom practice, these four criteria merit critical faculty attention in implementing AL activities: *complexity*, *learning model*, *targeted benefits*, and *potential risks* (Hamilton, 2018). Brief descriptions follow for each criterion, supplemented by an analysis of applied practice in the next section.

Levels of complexity: Low, medium, and high. In a practical sense, complexity is the first criterion faculty will consider in course development. Active-learning activities are usually added to existing course content, so professors must assess the limitations of class and preparation time and available resources.

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- *Low-complexity activities* require minimal faculty preparation and make minimal use of physical resources/props. They are short (often less than 30 minutes) and are used to stimulate engagement and complement lectures.
- *Medium-complexity activities* require more from faculty, including preparation of resources/props. Debrief time is also required to reinforce student learning, so these activities require an entire class session (50 minutes or more).
- *High-complexity activities* involve even more preparation and planning. They demand significant resources and may include the development of participant scripts. Activities usually span multiple class sessions, requiring prior student preparation and significant time for classroom debriefs. They may require collaboration from external actors.

Learning model: Experienced-based reflection versus problem-based learning. Per Richardson (2003, p. 1625), AL activities usually prioritize one of two learning models: they focus on students' previous or present (problem-solving) experience.

The first model highlights students' *critical reflection of previous experience.* Faculty facilitate student opportunities to engage and share what they bring to class—military, academic, and professional background, prior successes and failures, even sociocultural biases—then link reflections to course content.

The second model focuses on *problem-based learning.* Professors construct projects and case scenarios that "prompt students to immediately use the knowledge they discover, to apply the information, and to explain it to others" (Burch, 2000, p. 32). In this latter model, students learn by doing.

Targeted benefits: Content and/or process focus. Almost 50 years ago, Greenblat (1973) categorized potential benefits of AL activities in fulfilling learning outcomes. The list is adapted in Figure 1 (on page 6), incorporating ideas from Asal (2005) and Shaw (2010).

Effective AL programming requires careful attention to desired learning outcomes. Faculty may prioritize *content-focused benefits*, prizing cognitive learning or longer-term learning. Alternatively, the focus may be on *process-focused benefits*, enhancing students' affective learning, motivation, self-awareness, or faculty-student (classroom) relations.

Most AL activities address both content and process benefits, with one or the other more dominant. Generally, per Asal (2005), "content-focused simulations emphasize the amount of information the student needs to absorb about the background scenario or case while process-focused simulations emphasize and require more student effort in the process of interaction" (p. 361).

One of several helpful guides for developing outcome-driven and "authentic" curriculum is the three-stage "Backward Design" process from Wiggins and McTighe (2011): identifying the desired learning outcomes (benefits); determining appropriate assessment tools; and then planning the teaching-learning experience, which may include AL activities.

Potential risks for implementation. Finally, it is important to consider potential risks in using AL activities. Risk categories follow, with empirical engagement in the next section.
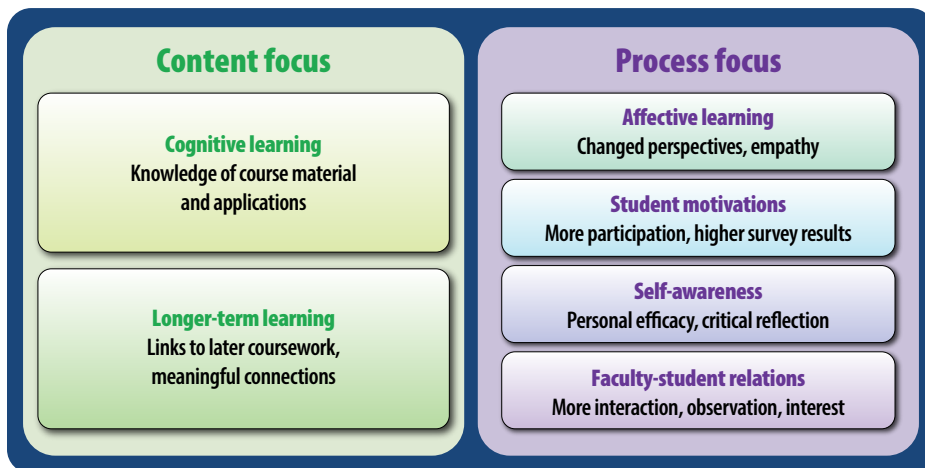
Figure 1. Benefits of classroom active learning activities. Figure drawn by author from "Playing Games with International Relations," by V. Asal, 2005, *International Studies Perspectives, 6*(3), 359–373; "Teaching with Simulation Games: A Review of Claims and Evidence," by C. Greenblat, 1973, *Teaching Sociology, 1*(1), 62–83; "Designing and Using Simulations and Role-Play Exercises," by C. Shaw, 2010, in R. Denemark (Ed.), *The International Studies Encyclopedia,* Blackwell Reference Online.

Potential loss of control. Use of AL, including simulations, games, and other exercises, means giving up some control in the classroom. Faculty abandon the comfort of a lecture podium in "passing the chalk" to their students (Chambers, 1997). Faculty with a strong internal locus of control—and years of anticipating canned responses—may feel unprepared for the unpredictability and moving parts of AL activities (Shaw, 2010).

Potential excess time requirements. This risk is linked to complexity criterion. Active-learning activities can take longer than a lecture. Faculty considering AL activities should estimate the preparation and class time required (and it is always more than expected). The same unpredictability that can contribute to loss of control can also contribute to time management challenges without a mitigation strategy.

Potential for student confusion/frustration. Lack of clarity in the initial instructions or during gameplay of AL activities may create confusion and/or a sense of general frustration for students. Faculty must consider this engagement time and be prepared to respond.

Potential audience sensitivities. This risk can emerge due to inadequate attention to student profiles or simply a lack of available information. Results may be serious and can undermine student motivation and classroom trust. For example, participants may take offense or feel alienated by a case-based characterization striking too close to home, a risk particularly relevant to military actors. Other students may feel bullied in role-play exercises, reinforcing their inability to engage with peers. Finally, there may be audience mismatch: exercise lingo may not resonate culturally, and

students may lack motivation for activities that do not connect with their interests or experiences. For these reasons, it is critical for faculty to carefully consider audience alongside targeted benefits in activity development.

Potential inability to meet expectations. A final AL risk factor considers unsatisfied expectations. An exercise may fail because its value is oversold or—as often occurs in PME settings—students have prior experience with similar activities, and a new exercise does not measure up in some way.

To close this discussion of potential risks, it bears mention that many can be mitigated with effective faculty planning.

Application and Assessment of Active Learning in a Classroom Environment

The author's classroom is a fascinating laboratory to analyze AL activities according to the aforementioned criteria. Exercises have been piloted in an academic program focused on defense and security cooperation. The Inter-American Defense College (IADC), based in Washington, D.C., offers an accredited master's degree and features international military leadership and a diverse, mainly civilian PhD faculty. IADC seeks to develop strategic advising capabilities in its student body: military, police, and civilian officials nominated by member governments of the Organization of American States (OAS).

IADC's student body is extremely diverse, drawing from up to fifteen countries and four languages in its recent cohorts. Institutional commitments include multilingual instruction, alumni-facilitated discussion groups, and collaborative problem-solving activities, in line with AL priorities (Hamilton, 2016).

Several AL exercises have been implemented in a course titled Multidimensional Security in the Americas (MDS), which analyzes shared human, public, and national security threats across the Americas. A trio of selected AL activities—Roving Comments, Tragedy of the Commons, and a Cyber Crisis exercise—are organized below by complexity (progressing from low to medium to high) and then analyzed according to the other three criteria recently introduced: learning model, targeted benefits, and potential risks.

AL Activity #1: Roving Comments exercise. Roving Comments is employed the first day of class to preview students' background knowledge and document critical reflections on the syllabus, assignments, and course themes. This activity, adapted from Francek (2016) and Brookfield (2011), allows for active student participation and knowledge sharing in a limited time frame and has proven an efficient course launch exercise.

After a brief welcome and introduction, students are assigned to one of four groups (numbering off verbally). They receive basic activity instructions and then move with numbered cohorts to one of four whiteboards preset in corners of the classroom. The boards contain a simple prompt written at the top of each one:

1. Interesting Aspects of the Syllabus
2. Questions/Doubts about the Syllabus, Assignments, etc.
3. Previous Knowledge of Course Themes ("Multidimensional Security")
4. Questions/Doubts about Course Themes ("Multidimensional Security")

When groups are sent to assigned whiteboards, they are asked to draft collective responses to their prompt within five minutes. When the time limit is reached, the professor calls "Rotate," and groups shift to the next station/whiteboard: group 1 to station 2, group 2 to station 3, group 3 to station 4, and group 4 to station 1. Groups are expected to take along an assigned marker, unique in color. At the next whiteboard, groups mark (+), (−), or (?) symbols alongside drafted responses to document agreement, disagreement, or confusion with other groups' comments. Each group then adds their responses (in a new color).

When "Rotate" is called, groups shift to the next station and follow the same procedure. Usually, one minute less is granted per rotation, under a practice-proven assumption that latter groups focus on review (adding symbols) more than adding new content, which take more time. At the close of the activity—after the students have moved through all stations—they return to their seats and faculty can offer a more comprehensive overview of the course, referencing and responding directly to the collective comments and concerns written on the whiteboards.

What follows is focused analysis of AL criteria, applied to the Roving Comments exercise implemented for course introductions.

Level of complexity: **Low**

This is a simple activity calling for minimal preparation, other than the setup of the whiteboards and drafting of prompts. It also requires minimal resources (other than whiteboards/markers) and under 20 minutes of class time for rotations. The time required for faculty debrief (to engage student responses) depends on the desired level of detail and time available in plenary. For MDS, the professor usually dedicates an additional 20–30 minutes.

Learning model: **Experience-based reflection**

The activity offers students an opportunity to reflect on prior experiences (related to course content), share knowledge and areas of interest, and expose doubts and concerns for the new course. The emphasis here is not solving student problems per se but rather opening a dialogue to support future learning.

Targeted benefits: **Content—longer-term learning; Process—student motivation and faculty-student relations**

Roving Comments permits faculty to observe gaps in students' content understanding and respond directly to commonly expressed concerns. It sets the stage for longer-term learning because the ideas raised may be referenced in future class sessions.

The AL activity also adds process value via increased efficiency and student engagement. In a limited time, the entire class can express their ideas and compare perspectives with peers. Student motivation—particularly for military learners—is heightened by its physical movement and informal peer interactions. Faculty-student

relations are improved through increased mutual understanding, and professors can also observe subtle classroom dynamics (participation, engagement, cliques, etc.) to prepare them for future classroom interactions.

Risk factors: **Potential loss of control, excess time**

Allowing students to move all around the classroom may feel to some professors like a loss of faculty control. In reality, it represents an intentional sharing of control as part of the AL facilitation process. Still, this can be disquieting for faculty mostly accustomed to traditional lecture. Excess time can also produce "free riding" (lack of engagement by some participants). It is critical to keep the activity moving and encourage diverse writers for each rotation. Ultimately, though, activity risks are very limited, especially given the benefits and the low complexity and preparation required of the professor.

Activity summary. Roving Comments is a good example of a low-complexity, medium-high impact AL activity. It sets a participative tone from the first day of class, and most students respond affirmatively in course surveys on the value added by this AL activity.

AL Activity #2: Tragedy of the Commons. A second AL activity, Tragedy of the Commons, was incorporated into the MDS course after reviewing the relevant literature and adapting existing exercises focused on sustainability issues (Barnett, n.d.; Szerlip, 2003). It is implemented early in the course to highlight collective-action problems related to social and environmental vulnerabilities, which is a new topic for many military officials. The exercise addresses collective costs of overusing nonrenewable resources, building on the "tragedy" outlined by Hardin (1968), among others. What follows is a brief analysis of AL criteria applied to the exercise.

Level of complexity: **Medium**

This activity is more complicated than the previous Roving Comments. For faculty preparation, Tragedy of the Commons requires purchase of materials, like bowls (one for every five students), forks, spoons, and cups (for majority of students), packages of goldfish crackers (sufficient to refill the bowls multiple times), and a few reward prizes.

Before class, the professor fills a predetermined number of the bowls (representing lakes) with goldfish crackers (representing the fish). Also apportioned are a specified number of utensils—spoons or forks—for the players to use as "fishing poles." A student volunteer is selected for each group to act as a sort of referee/administrator to oversee the "fishing process."

The professor leads multiple "fishing" seasons (rounds of play), and communication among fisherman is usually banned during the first season. After each season/round, the number of fish caught is tabulated per student and collectively per group.

Students are initially incentivized to fish as much as possible. At the start of the game, they are told the winner will receive a prize. They lack communication (banned initially) as well as regulatory norms or a "shadow of the future" critical to game theory "prisoner's dilemma" (Axelrod, 1984). Based on experience at IADC (with a large class of 60 or more students), the activity needs approximately 60–75 minutes for implementation, including final debrief.

Learning model: **Problem-based learning**

Tragedy of the Commons focuses on problem-based learning. In the first fishing season, students' focus is relatively simple: How should I maximize points? They are prompted to win without any consideration for community implications. In subsequent seasons, the strategy becomes more complex: How should I maximize points in context of limited resources? Students discover that future spawning depends on the number of fish available in the lake. The professor will only replace goldfish crackers in proportion to the number still in the bowl. During debrief, students are asked to reflect on implications/cases from their previous experience; still, the primary focus is problem-based learning: reinforcing key concepts by doing.

Targeted benefits: **Content—cognitive learning and longer-term learning; Process—affective learning and faculty-student relation**s

The Tragedy of the Commons activity addresses at least four of six benefits discussed by Greenblat (1973). To support students' content mastery, it facilitates cognitive learning on sustainability challenges, reinforcing ideas from class discussions and assigned readings. Additionally, lessons from the exercise can be linked to and referenced in many other courses, thus contributing to longer-term learning.

On the process front, the activity usually strengthens affective learning, as students practice more collaborative strategies in each round. Finally, the general excitement of the activity and students' chance to eat goldfish crackers during class contribute to improved faculty-student relations; playing the game and reflecting on implications is perceived as fun and worthwhile. Scheduled at a stressful juncture of the academic year at IADC, this activity helps to reset student engagement and inspire renewed interest (drawing on faculty observation and student comments).

Risk factors: **Potential loss of control, excess time, confusion/frustration**

The multistep decentralized nature of Tragedy of the Commons presents the potential risks of losing control, exceeding time limitations, and fomenting student confusion/frustration. It is incumbent on faculty to acknowledge and mitigate these risks with proper planning, and it bears mention that none have served to undermine implementation to date at IADC.

Activity summary. The scope of potential benefits for Tragedy of the Commons exceeds the prior low-complexity AL activity. Meanwhile, the potential risks are assessed as medium but very manageable. Tragedy of the Commons is an example of a medium-complexity, high-impact AL activity.

AL Activity #3: Cyber Crisis exercise. A third analyzed activity at IADC—a Cyber Crisis exercise—requires at least a four-hour teaching block. It features key operational support from the OAS, a partner/parent organization for IADC. The primary goal of the AL exercise is to provide an experiential platform for students to critically analyze the coordination, privacy, and communication challenges likely to emerge during a widespread cyberattack. It fulfills a diagnosed "practice" gap on cybersecurity that emerged in prior class assessments.

After months of dialogue between faculty and the OAS information management team, the activity was adapted from a technical cyber exercise implemented as a mobile laboratory for OAS member states. For IADC, it has been refocused at a strategic level and takes place in a large room with space for six hardwired pods, each comprised of a table with four laptop computers. Students are asked to simulate leadership roles for critical infrastructure institutions facing simultaneous cyberattacks.

Six groups populate the exercise, representing major public and private institutions in a fictitious country: the presidency, the defense ministry, the national airport, a private bank, a university, and a regional utilities company. Simulated cyberattacks prompt each institution to engage senior leadership, manage expectations via external media (Twitter/online newspapers), and direct (outsourced) technology staff to manage the cyberattack.

In the background of the simulation, OAS information management leaders assume the roles of senior leadership and (email-based) technology staff for all institutions. They guide the exercise and exert pressure on student groups. IADC staff and interns play a critical media role, interviewing groups' public affairs specialists and often provoking controversy with sensationalist journalism published in online newspapers (broadcasted both online and on large screens visible to all groups). IADC faculty move between actors and provide support as needed.

After a fast-paced 90–120 minute simulation, groups draft their critical reflections on assigned whiteboards: (1) analysis of the cyberattack and key challenges, (2) helpful responses employed by the group, and (3) general lessons learned. After a short break, students circulate to review reflections of other groups. Much like the simple Roving Comments exercise explored previously, this activity increases debrief efficiency because it limits the time for verbal sharing in plenary. A brief faculty-facilitated conclusion includes summary insights from the students and OAS partners. What follows is an analysis of AL criteria, applied to the Cyber Crisis exercise.

Level of complexity: **High**

The Cyber Crisis exercise is far more complex than the prior two activities. It requires coordination with diverse actors, and activity development starts months before the class session, including brainstorming sessions, script adaptations, and sequencing decisions based on prior lessons learned.

To satisfy equipment requirements, locale has traditionally been off campus at the OAS. This brings key coordination challenges: buses must be contacted, building access secured, and class size divided in half (two cohorts of 30 or more students). Transportation is arranged to efficiently support morning and afternoon schedules. Student time is planned for four hours (4.5 hours with travel), and faculty and staff/partners manage a very long day (more than nine hours).

A final layer ratcheting up activity complexity is its political nature: IADC's relationship with the OAS raises the profile for institutional leadership. Coordination is thus challenging in a logistical and political sense. The decision to incorporate external actors adds complexity for any AL activity.

Learning model: **Problem-based learning**

This activity targets problem-based learning: students respond in real-time with assigned roles to several cyberattacks and media challenges. After one year using a real-country scenario, it was decided to focus on a fictitious country to help level the playing field in terms of harnessing students' prior knowledge.

Targeted benefits: **Content—cognitive learning and longer-term learning; Process—student motivation, self-awareness, faculty-student relations**

The Cyber Crisis exercise addresses five of the six targeted benefits framed by Greenblat (1973). To support content-area knowledge, it targets cognitive learning on cybersecurity, highlighting institutional coordination and preventative action, as discussed by OAS and Inter-American Development Bank (2016) and Vautrinot and Beard (2013). Another key benefit is longer-term learning: students are exposed to the real-time stresses of a cyber crisis and learn experientially on cyber-related issues.

Process-focused benefits also are supported by this AL activity. Based on surveys, essay discussion, and informal interactions, it usually increases student motivation. It elicits benefits for self-awareness and faculty-student relations, at least when the potential risks, discussed below, are overcome.

Risk factors: **Potential loss of control, excess time, confusion/frustration, inability to meet expectations**

This exercise presents higher potential risks, as compared to the other two activities discussed in this article. The first concern is potential loss of control, as it involves approval, participation, and support from many actors. As configured at IADC, the exercise requires voluntary support from an external partner, multiple bus trips through a major U.S. city (during rush hour), and coordinating the schedules of 70 or more students and staff. Finally, due to financial and political dynamics, it requires top-level support from IADC and OAS leadership. In other words, the "loss of control" from a faculty perspective is a reality that must be managed.

In terms of excess time, delays can always emerge the day of the exercise but most can be mitigated via effective preparation. More challenging is the faculty time commitment required for planning and evaluation. This activity requires significant coordination with internal and external actors. Particularly in the first year of implementation, time dedicated to proposals, scripts, logistics, and approval meetings far exceeded the planning requirements for all other class activities combined.

Student confusion/frustration is another potential risk for any complex simulation. Participants need to understand the objectives, requirements, and available tools. For this activity, students not only experience the realistic frustrations of managing a complex cyberattack; additionally, they must adapt to new computer tools and an unfamiliar classroom setting. At IADC, language differences further complicate activity coordination, so student confusion/frustration is a risk worth consideration.

A final potential risk is addressing student expectations. Most military learners are quite familiarized with war-gaming and tabletop exercises, so AL expectations

for similar activities are heavily conditioned. Simulations (a subset of AL activities) have prepared soldiers tactically and operationally for field engagement but often with less emphasis on how they may engage strategically in the face of incomplete information. Previous military experiences heighten student expectations for detailed operational instructions, which are purposefully limited for this cyber exercise (to highlight coordination challenges amid uncertainty).

Still, to overcome unnecessary student frustration and potential resistance, a short prebrief on activity expectations has now been added. Additionally, students receive clear guidance on norms for intergroup communication and are granted additional time in the preattack stage to explore their group roles and experiment with available software tools. There are trade-offs with these adjustments (adding time requirements, potentially limiting groups' creativity, etc.); however, as with other AL activities classified as somewhat higher risk, it is key to manage student expectations and mitigate potential problems.

Activity summary. In synthesis, the complexity and potential risks for the Cyber Crisis exercise are relatively high; however, learning benefits and impacts (measured via surveys, faculty observation, and student writing samples) make it a high-value addition to IADC's curriculum. The activity is highly interactive and builds students' critical engagement in content and process realms, overcoming common shortcomings of PME technology simulations (Sevcik, 2011). It exemplifies a high-complexity, high-impact AL activity.

Comparative Analysis of Sample Activities: Criteria Application

Figure 2 (on page 14) summarizes criteria application for the three classroom activities described in this section and may also be used as a tool for faculty developing and validating other AL activities.

Reflections on Active-Learning Practice: Observations for Other PME Settings

These are just a few AL activities that have been implemented to enrich teaching in a particular course. Activities vary in their complexity, learning model, targeted benefits, and potential risks. Each contributes to the learning outcomes in the course syllabus and also at the broader institutional level at IADC. All three activities may work in other institutions (and support students in their own learning process), but the emphasis here is the decision-making process for faculty looking to integrate AL activities more generally in a PME environment.

Variety as a priority in selecting teaching modalities. Effective teaching requires variety in styles and methods to maintain students' interest and connect content to pre-

Activity name	Complexity level	Learning model	Targeted benefit	Potential risks
	L: Low **M:** Medium **H:** High	**ER:** Experience-based reflection **PB:** Problem-based learning	**Content focus** **CL:** Cognitive learning **LL:** Longer-term learning **Process focus** **AL:** Affective learning **SM:** Student motivation **SA:** Self-awareness **FS:** Faculty-student relations	1) Loss of control 2) Excess time requirements 3) Confusion/frustration 4) Audience sensitivities 5) Inability to meet expectations (Seriousness) *Match complexity*
Roving comments	L	ER	**Content:** LL **Process:** SM, FS	1,2 (L-Potential)
Tragedy of the commons	M	PB	**Content:** CL, LL **Process:** AL, FS	1,2, 3 (M-Potential)
Cyber crisis exercise	H	PB	**Content:** CL, LL **Process:** SM, SA, FS	1,2, 3, 5 (H-Potential)

Figure 2. Applying criteria to active learning activities at Inter-American Defense College. Figure by author.

vious experience (Sawyer et al., 2017; Westler & French, 2019). Too many lectures may keep students at a distance; however, the overreliance on AL activities may become tiresome (especially for faculty) and can distract from critical content. It is important to change the pace in adult education and build in feedback mechanisms to adapt to students' diverse learning needs and perceptions (Wiggins & McTighe, 2011).

Low-complexity activities also support student engagement. Some professors simply default to lecture because of a perceived barrier to AL activities. Developing simulations is perceived as complex, time consuming, and risky, so faculty often give up on AL activities before even trying (to the detriment of student engagement). It is important to offer feasible alternatives. Low-complexity AL

activities (like Roving Comments) can enhance participation in large classroom environments. There are still potential trade-offs for preparation, class time, content focus, and professor control, but complexity barriers are relatively low and learning benefits still high (vis-à-vis lecture).

Beware of activities too close to students' experience. Given military students' highly specialized experience, their learning receptiveness is often greater for unfamiliar exercises (such as Roving Comments or Tragedy of the Commons). The closer an activity approaches students' previous competencies (like the Cyber Crisis exercise), the more resistance may be expected. Students usually enjoy familiar activities; however, military actors may shift their focus to differences in activity implementation (thinking as military planners) rather than opening themselves as students to desired learning outcomes.

Relationships matter for professional military education. In addition to content benefits, AL activities implemented in the IADC classroom show significant value added in the process realm. AL activities often catalyze or deepen affective learning (healthier class relations), student motivation, self-awareness, and faculty-student relationships.

Military learners arrive to class with rich, often conflicted experiences, and they appreciate opportunities to share their stories, provide feedback, ask questions, and investigate areas of interest. At IADC and elsewhere, highly motivated students are more likely to achieve class objectives and take ownership for their own learning. Military students, like other learners, thrive when they feel respected by their professors, accepted by their peers, and incentivized by results. Professors are wise to value relationships and process in AL activity development to enhance student learning.

Conclusion

In conclusion, this article has explored the benefits and a few relevant challenges of incorporating AL activities in PME and adult education settings. It provides a framework and set of four criteria to help professors to develop, analyze, and make relevant adjustments to AL activities in their own classrooms. Finally, critical reflections and analyses of several activities applied at IADC are provided as lessons learned to strengthen AL implementation in other military and adult education settings. ☙

The opinions, conclusions, and recommendations expressed or implied within this article are those of the author and do not necessarily reflect the official policy or position of the Inter-American Defense College, the Inter-American Defense Board, the Organization of American States, or the U.S. Department of Defense.

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