



Chairman walks with Major General Frederick M. Padilla, USMC, after change of command ceremony in which Major General Padilla became 15th president of National Defense University, November 2014 (NDU/Katherine Lewis)

Next Steps for Transforming Education at National Defense University

By Christopher J. Lamb and Brittany Porro

National Defense University (NDU) is implementing major reforms in the graduate-level programs it provides senior military officers and other national security professionals. If all goes as planned,

the result will be a transformation in the way the university educates senior national security leaders.¹ This article does not review the status of current change initiatives. Instead, it looks beyond the changes under way for the

2014–2015 academic year and identifies future steps senior leaders might consider in order to maintain momentum for the transformation of joint professional military education.

The basic rationale for the change at NDU is that in a period of declining defense budgets and increasingly complex security challenges, the Nation needs the best strategic leadership possible. By extension, we need the best possible

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Table 1. Senior War College Problem Areas According to Critics

Sources Evaluating Adequacy of Joint Professional Military Education (JPME)	Institutional Problems: Who Teaches What, How, and to What End?				Systemic Problems: Support for and Management of JPME	
	Faculty	Curriculum	Methods	Rigor	Support	Leadership
Cronin (2010)	X	X	X	X	X	X
Government Accountability Office on DOD JPME study (2013)		X				
House Armed Services Committee study (2010)	X	X	X			X
Johnson-Freese (2012, 2014)	X	X	X	X	X	X
Reed (2011, 2014)	X			X		X
Ricks citing Daniel Hughes (2011)	X			X	X	
Scales (2010)	X		X		X	X
Wiarda (2011)	X	X		X	X	X

Sources: *Another Crossroads? Professional Military Education Two Decades after the Goldwater-Nichols Act and the Skelton Panel* (Washington, DC: U.S. Government Printing Office, 2010); Patrick M. Cronin, "PME: A Strategic Education," *Marine Corps Gazette* 94, no. 6 (2010); *Joint Military Education: Actions Needed to Implement DoD Recommendations for Enhancing Leadership Development: Report to Congressional Committees*, 2013; Joan Johnson-Freese, "The Reform of Military Education: Twenty Five Years Later," *Orbis* 56 (Winter 2012); Kevin P. Kelley and Joan Johnson-Freese, "Getting to the Goal in Professional Military Education," *Orbis* 58, no. 1 (2014), 119–131; George E. Reed, "What's Wrong and What's Right with the War Colleges," *DefensePolicy.org*, July 1, 2011; George E. Reed, "The Pen and the Sword: Faculty Management Challenges in the Mixed Cultural Environment of a War College," *Joint Force Quarterly* 72 (1st Quarter 2014); George E. Reed, "Examining the War Colleges: An Administrative Perspective," conference paper presented at the Reforming Professional Military Education: A Clash of Professional Ethics session at the International Studies Association Annual Conference, San Francisco, CA, April 5, 2013; Thomas Ricks, "Need Budget Cuts? We Probably Can Start by Shutting the Air War College," April 11, 2011; Ricks cited Daniel Hughes chapter in Douglas Higbee, *Military Culture and Education* (Farnham, United Kingdom: Ashgate, 2010); Robert H. Scales, "Too Busy to Learn," U.S. Naval Institute *Proceedings* 136, no. 2 (2010); Howard Wiarda, *Military Brass vs. Civilian Academics at the National War College: A Clash of Cultures* (Lanham, MD: Lexington Books, 2011).

educational program for emerging strategic leaders. General Martin Dempsey, Chairman of the Joint Chiefs of Staff, argues that developing capable future leaders is the best hedge against an austere and uncertain future. Good leaders, he notes, can "see us through when our organizational structure is not perfect, when technology comes up short, when training misses the mark, and when guidance is late to need." In the future, leaders who can think through complex problems, out-think adversaries, reconcile context, uncertainty, and surprise, and seek and embrace adaptability will be "our decisive edge."² Producing such leaders is General Dempsey's intent and NDU's current ambition, but there are challenges to overcome.

A substantial body of recent work argues that the traditional approach to joint professional military education needs reform, particularly at the war college level. Criticisms fall into two categories (see table 1). Most attention is paid to immediate institutional issues: namely, who teaches what, how, and with what qualifications, degree of rigor, and efficacy. There are also broader, systemic

concerns about the way military culture and leaders manage joint educational institutions and programs. We review these criticisms to better explain how the changes taking place at NDU can improve the educational experience for students and, more importantly, why additional steps to reinforce and extend the changes are necessary.

War College Critics and Reformers

Critics assert that war colleges and universities fail to attract top-flight faculty, teach outdated curricula, no longer pioneer or use innovative teaching methods, and pamper rather than challenge students (see table 2).³ Critics further contend that with a few exceptions, war college classes are pass/fail experiences where everyone passes, and performance at the colleges matters little to parent Services.

Most critics argue these conditions persist for reasons beyond the immediate control of the colleges and their faculties. They believe an anti-intellectual military culture devalues education and disinclines students and college administrators to

pursue education rigorously.⁴ Major General Robert Scales, USA, for example, argues that Service cultures do not value education enough to send the best and brightest officers to teach and claims the war colleges have become "intellectual backwater[s], lagging far behind the corporate and civilian institutions of higher learning."⁵ The Goldwater-Nichols Department of Defense Reorganization Act of 1986 makes joint assignments and promotion to general and flag officer contingent upon senior military education, so a steady flow of students to the war colleges is assured. However, long-time war college faculty members such as Joan Johnson-Freese of the Naval War College worry that the disdain for education in military culture diminishes student motivation to learn.⁶

Moreover, administrators who run military educational institutions come from the same culture and rarely are inclined to challenge it. War college commandants have short tenures and typically retire after their terms, so there is little incentive or opportunity for them to challenge the status quo. These factors make reform from within an unlikely prospect.

Table 2. Top Performance Issues as Identified by Critics

Summary of Major Criticisms	Institutional Issues: Who Teaches What, How, and to What End?				Systemic Issues: Support and Management of Joint Professional Military Education (JPME)	
	Faculty	Curriculum	Methods	Rigor	Value of JPME	Support and Management
	Active Duty: Services do not send top talent; thrown into classes unprepared; have short tenures.	Focus: not enough emphasis on critical thinking and leadership skills.	Innovation: lack of innovative teaching methods, particularly to balance demand for generalists and specialists.	Goals: focus is on social goals, not academic excellence.	Culture: Service cultures biased toward action, not reflection; training, not education.	Competency: administrators chosen because of former military careers are not qualified for academic administration.
	Former Military: retired military with PhDs lack published research records and areas of specialization.	Relevance: weak relationship to follow-on duty assignments.	Thinking skills: more focus on "training" (information transmittal) than on critical thinking.	Level of Difficulty: not challenging; no entry requirements; one year is not enough to cover the material.	Partiality: priority is hiring administrators with military, not academic, experience.	Value: burgeoning administrative ranks impose costs without compensatory value.
	Civilians: not attracting top civilian academic talent.	Balance: generalist and specialist models not reconciled.	Intellectual vibrancy: not sufficiently thought-provoking.	Standards: it is pass/fail, and everyone passes; not rigorous.	Personnel Systems: Service human resource requirements trump educational goals.	Tenure: war college presidents leave too quickly to make needed changes.
	Practitioners: too much emphasis on practitioner perspective.	Theory: topical issues emphasized without sufficient attention to theoretical framework.		Social Dynamic: catering to student preferences at the expense of education.	Academic Inquiry: military culture in general clashes with academic culture.	Proponency: no full-time, senior proponent for military education is up to the task.

In the past, Congress has intervened to “fix” military education. One consequence is that existing law and written guidance from the Chairman of the Joint Chiefs now require the war colleges to provide a “rigorous” educational experience. However, a recent House Armed Services Committee study declined the opportunity to take the side of critics who charge lack of rigor. Instead, perhaps cognizant of criticism that Congress has already legislated too many demands on military education, the committee study noted that pass/fail approaches, when based on objective learning standards and supported by comprehensive and timely feedback, do not necessarily detract from the rigor of the academic programs.⁷⁷ This arguably sets a low bar, considering the weighty, life-and-death responsibilities war college graduates often shoulder.

Comparing Civilian and Military Institutions of Higher Education

The critiques of joint education over the past decade did not generate a con-

sensus in favor of reform, much less a specific agenda. In part this is because some of the criticism is misplaced. For example, former National War College Professor Mike Mazarr rightly skewers critics for repeating the canard that war colleges focus on tactics at the expense of strategy, observing that “no one with even a glancing familiarity with National War College’s curriculum could possibly [think or] write such a thing.”⁷⁸

Another reason the reform agenda did not catch on is that critics and proponents of the war colleges tend to talk past one another. The critics start with the assumption that the war colleges should emulate top-tier civilian universities. They recommend tenure for professors, more emphasis on faculty research, and cultural changes to better align with academia, which is “open-minded, free-wheeling, questioning of authority [and] of any and all established truths.”⁷⁹ Some of these prescriptions seem antiquated given changes in higher education. For example, the value of tenure in civilian higher education increasingly is

questioned.¹⁰ The percentage of tenured faculty fell from 37 percent in 1975 to 24 percent in 2003, a trend that has continued over the past decade.¹¹ Similarly, the right balance of faculty research and teaching duties is debated. George Reed asserts that the “dirty little secret of top tier civilian universities” is that “great, and sometimes inordinate, emphasis is placed on research and publication that can detract from effective teaching.”¹² As for academic freedom, it may be easier to question orthodoxy in a war college than in a typical civilian graduate program. Free thinking at civilian universities increasingly is circumscribed by the vagaries of departmental politics,¹³ institutional review boards,¹⁴ and political correctness from academic disciplines that are overwhelmingly captured by one portion of the political spectrum.¹⁵

Those who defend the traditional war college approach typically start with the opposite assumption: that war colleges are unique institutions that should not be judged by or seek to emulate the best graduate programs at top-tier universities.

Reed, with experience in both war colleges and civilian higher education, notes the war college model is “more akin to that of a professional school (for example, law or medicine).” Like lawyers, engineers, and doctors, military officers are sent to senior Service schools to learn a well-established canon of professional knowledge.

It is true that war colleges are professional schools, but that does not explain their lack of rigor. On the contrary, the prevailing pass/fail standard at war colleges is not consistent with the professional school model. Professional schools mandate the acquisition and retention of specialized knowledge and are ruthless in testing whether students meet this requirement—and for good reason. Who wants a doctor who graduated from a medical school where everyone passes? Military culture is not a valid excuse for lack of rigor when it comes to education. At the Service academies, for example, cadets are constantly tested, rank-ordered, and not infrequently flunked, and their performance is directly tied to future assignments and career field selection.

War college practices diverge from established norms at professional schools in other respects as well. Professional schools use experienced practitioners with the gravitas and authority to transfer knowledge in their areas of expertise. Critics acknowledge that war college faculties have some extraordinary talents, but they also argue that too many civilian and military instructors have insufficient experience and academic credentials. They claim top-flight civilian academics are not attracted to war college culture and that uniformed instructors lack experience,¹⁶ academic credentials, and sometimes also practical expertise in the subject areas they are asked to teach. These faculty profiles contradict the professional school model, which emphasizes experienced, expert instructors. As Johnson-Freese notes, in the case of the Army, Air Force, and Marines, it actually is “easier and less competitive to be assigned to a War College as a faculty member than it is as a student.”¹⁷ In other words, selection as a student to a

war college is competitive whereas assignment as an instructor is not, which means instructors may have less credibility with their students. Scales emphasizes the need for the Services to change their ways and populate the war colleges with experienced, upwardly mobile instructors with long-term immersion in a subject.¹⁸

Another problem with using the professional school model to explain lack of academic rigor is that it overstates the dichotomy between professional schools and research universities. All graduate-level programs impart established knowledge and teach critical thinking skills. Medical schools want doctors who know not only the basics but also the results of recent research and how to solve uncommon medical problems. Law schools want lawyers who not only know the law but who can also devise creative ways to assist their clients within the bounds of evolving law. War colleges want strategists who understand not only current doctrine but also how to manage emerging national security problems. Thus, as Steven Metz argues, the purpose of the war colleges is actually a mix of professionalism (that is, sharing a body of knowledge related to the military mission) and higher education, which includes developing critical thinking skills.¹⁹

At issue is the proper balance between professionalism and higher education. In that regard, the consensus has shifted toward greater emphasis on critical thinking skills and less on transferring an existing body of knowledge. Most observers believe most professional military knowledge is better transferred earlier in officers’ careers when they attend command and staff colleges.²⁰ The war colleges are supposed to focus on higher order strategic problems and question established ways of doing business, particularly during periods of great change when the value of traditional methods and approaches is suspect.²¹ This is precisely the point that General Dempsey and many other senior leaders have been making in recent years: the war colleges need to impart the critical thinking skills that will allow future leaders to adapt and perform well in a dynamic, complex security environment.

Critics argue that innovative methods are needed to impart critical thinking skills. The traditional reliance on the Socratic method of open seminar discussion moderated by faculty has its advantages but falls short as a means of replicating complex problem-solving under stress, an essential requirement for strategic leaders. They believe the customary Socratic approach should be augmented with more advanced simulations and crisis decisionmaking exercises to better prepare students for future strategic leadership challenges.

Typically, the deviations from professional school norms and outright contradictions in the traditional war college model are attributed to a military culture that favors its own members at the expense of civilian faculty. War colleges often (but not exclusively) hire retired military officers with doctoral degrees as administrators. At NDU in 2014, for example, the chancellors of the College of International Security Affairs and iCollege as well as the deans of the Eisenhower School and National War College were all retired military colonels or Navy captains holding doctorates and having substantial professional military education experience, as were the university provost and director of research. (In addition, the commandants of the National War College, Eisenhower School, and Joint Forces Staff College are Active-duty flag officers.) Critics may see this as favoritism, but military leaders understandably want war college administrators who comprehend military culture, professional requirements, and modes of operation. A natural byproduct is that the war colleges are inclined to give students the maximum latitude to determine how much effort they put into their education rather than “coercing” them with grades, tests, and onerous reading lists. The net effect is an educational experience that, while impressive in some respects, lacks the rigor typically associated with top civilian graduate programs.

A Better War College Model

Powerful cultural factors prevent the war colleges from fully emulating civilian research universities, and in some

Table 3. The NDU Educational Transformation Strategy

Elements	Attributes	Value
Student Assessment	Reviews with faculty mentors across NDU	Tailored experience, motivated students, distributed mentoring burden
	Multiple progressively difficult educational tracks	Meet student demand without watering down rigor
	Topics of individual interest identified	Allows construction of elective schedule tailored to student demand
	Individual learning plans	Self-conscious goal-setting; basis for student learning assessments
	End-of-year student self-assessments	Identifies areas for improvement and continuing education plan
	Continuing learning plan for the student	Students continue to learn after 10-month program
Phase I	NDU-wide core curriculum	Identifies core priorities for national security professionals
	Foundational material	Logical building block; less redundancy
	Chairman of the Joint Chiefs of Staff content added	Prepares for complex security environment
	Taught by NDU-wide best talent	Students receive the best NDU can offer
	Students pair with others from different profiles	Expands student learning perspectives from start
	Exploit Washington, DC, location for experiential learning	Gives students memorable practical insights
Phase II	College core curricula	Students benefit as colleges concentrate on core competencies
	Colleges hire/focus faculty on expertise	
Phase III	Tailored to student needs	Individualizes student research experience
	Electives to support research and student careers	Increases chances students can focus on relevant, specialized research topics
	Research projects under direct faculty mentorship	Students demonstrate problem-solving capability using critical learning skills
	Optional travel in support of research projects	Students control research design and maximize ability to generate good products
	Mentors are best experts from across university	Students receive the best that the university has to offer
	Thesis for those pursuing master's degree	Elevates the rigor of a 1-year graduate program for a degree
Program Evaluation	End of year program evaluations	Empirical feedback permits objective program improvements
	Learning-based feedback from students	More objective assessment
	Feedback from "customers"	Provides critical perspective from objective source
	Evaluations managed outside of components	Facilitates objectivity
Common Academic Calendar	Common annual calendar	Permits collaboration among all NDU components
	Common class lengths	Facilitates taking classes in other colleges consistent with student learning plans
	Common times for no classes	Permits students to get the best from full range of activities at NDU

respects that is a good thing. The war colleges are always going to respect and reflect military service and values, as they should. They also are going to be populated with students who often value practical experience more than reflection and research and who are assigned to the war colleges rather than selected as the most likely to succeed in the halls of higher education. Students at civilian universities compete for positions in graduate programs and pay hefty tuitions to obtain their graduate educations, so they are highly motivated to succeed and exploit their investments. They also have a wide choice of institutions and programs to choose from to best meet their personal needs and goals. Officers assigned to war col-

leges must attend, and a good percentage—the numbers are debated—may undervalue the opportunity. It is not uncommon to hear war college faculty guesstimate that one-third will end up valuing and profiting from their educational experience, another third will just meet the requirements as necessary, and the final third will never really engage or exploit the opportunity.

Since most experts on adult education agree student motivation is the greatest single determinant of learning outcomes, any predisposition to doubt the value of higher education is a significant hurdle to learning. This makes the war college professor's job difficult. The onus is on the institution to capture the interest of the students and motivate them to learn.

Given these realities, many people who teach at the war colleges believe they must woo students with stellar classroom efforts and hope the inherent professionalism of the U.S. military will incline its charges to get as much from the classroom experience as possible.

For example, this is the case Mazarr makes in rebutting the "lack of rigor" charge made against the war colleges. He argues graduate students anywhere can take a half-hearted approach to education: "Graduate school is like that. Really smart folks can sample a little stuff, stay mostly quiet, binge for exams, and get by." He believes the vast majority of U.S. military professionals refuse to do that and consequently get a lot from their war college experience. It is doubtful

that graduate students can loaf their way through programs at top universities where entry is extremely competitive and successful completion not at all assured. Fewer than half of all admission applications to master's programs are accepted,²² and fewer than half of all doctoral students finish their degrees.²³ Data for completion rates for master's degrees are harder to come by and tend to focus on science and technology degrees, but one study indicates a completion rate of about 66 percent.²⁴ By contrast, informal discussions with many who have attended and taught at the war colleges reveal deep skepticism about the assertion that the "vast majority" of military students are too professional to skate through a no-fail system, especially given competing demands on their time and the fact that the program offered to students is not tailored to their specific needs.

One hopes Mazarr is right, but other inside observers have expressed the opposite concern, arguing that "students who maximize the learning experience at the war college are in a decided minority."²⁵ Thus, many conclude we must do better than the traditional war college model, which inconsistently adopts the practitioner focus of professional schools without the faculty and rigor such schools typically demand. General Dempsey holds this view. He charged leaders at NDU to "break out" from established ways of doing business and directed the "transformation of joint professional military education programs."²⁶ The response was a plan that markedly increases student choice and thus student motivation to learn.

NDU Education Transformation Plan

National Defense University's education transformation plan is explained elsewhere²⁷ but can be briefly summarized to illustrate how the university is moving forward from the traditional model of military education (see table 3). The plan has six major elements, the first of which is a comprehensive student evaluation that takes into account individual student circumstances, previous education, career

paths, and interests. Faculty mentors help students craft an academic program that will meet their individual needs and then work with the student to monitor results over the year. The next three elements restructure curriculum into different phases: a common core curriculum that provides a foundation of knowledge necessary for any graduate-level national security student, a second phase that delivers the core curricula that each of the five colleges specializes in and allows the colleges to offer students greater depth of expertise in those areas of specialization, and a third phase that focuses on electives and research that students can tailor to meet their personalized learning objectives. The fifth element in the overall plan is detailed program evaluations based on student self-evaluations and reviews from the organizations that benefit from receiving war college graduates. These empirically based evaluations would enable better management of the overall educational experience, including faculty development programs. The last element is a common academic calendar that facilitates collaboration across campus and better allows students to attend the many diverse educational opportunities at NDU.

The entire NDU transformation plan is intended to be student-centric. Rather than forcing all students into a single, common program irrespective of their individual career paths, desires, and future objectives, this approach explicitly embraces diversity, expanding the choices available to students and inviting them to participate in managing their own education. The entire approach is consistent with well-acknowledged principles of successful adult education, which emphasize partnering with students, taking their unique circumstances into account, linking the educational experience to their career needs, and tapping the internal as opposed to external factors that typically motivate adults to learn.²⁸

Table 3 depicts the advantages that should accrue from the program as originally envisioned. In practice, the program is being modified during implementation as necessary to accommodate

limited resources (such as time, staff, and faculty). Opposition by some teaching faculty has also played a role in diluting or limiting the scope of the transformation effort in its inaugural stages. Reworking the curricula, programs, and standards to give students more choices and instituting systems for empirical feedback on staff and student performance are demanding tasks. The best way to ensure success is to retain sight of the original strategic logic underlying the transformation plan and to carry that logic forward in successive iterations of the academic program.

Extending the Diversity Logic

To realize the promise of a better educational experience for students, NDU can advance its change program in three areas. In each case, the university could offer more diversity that will facilitate its burgeoning commitment to a student-centric approach. The new program currently being implemented was designed to enhance diversity by allowing students to have a greater say in structuring their graduate programs. The university needs to reinforce this trend over time.

First, NDU should create a variety of graduate-level educational tracks for students, including a doctoral program. Doing so would further circumvent the contradictions that previously handicapped the ability of the war colleges to offer an exceptional educational experience. Relatively speaking, for many years, professional military education has been "one size fits all" with several negative consequences. A regimented approach inclines the war colleges to treat all faculty the same regardless of qualification, which undermines quality; reduces student motivation by forcing students to devote too much time to material they know is not relevant for their particular career path; and ultimately requires the watering down of educational standards. Standards are kept low to accommodate students who—often for good reasons—cannot manage a typical graduate program full of tests, papers, exams, and other hurdles but who also cannot be allowed to fail. Providing students with

multiple educational tracks—directed study, certificate, graduate degree, honors, doctoral candidate—with different levels of difficulty tailored to student needs and interests allows university leaders to set and insist on standards appropriate for each path.

For example, students interested in particularly challenging issues in their career fields could focus singularly on those issues without being constrained by master's degree requirements. Perhaps these students already have a graduate degree and know they will not become a flag officer, but would value the opportunity to solve a problem that has repeatedly surfaced in their careers. Alternatively, students with no graduate degree who aspire to promotion might want master's degrees in strategy to maximize their chances for advancement. Still other students already in possession of master's degrees might aspire to publish their theses and ask for honors tracks and chances to compete for scarce slots in doctoral programs. Embracing student choice acknowledges the reality of different student abilities and aspirations and also the preferences of mid-career learners. It balances the need to educate both generalists and specialists, gives war college students a chance to get the most from their graduate experience, and helps mid-career professionals take the next step toward becoming senior leaders. Allowing students to choose the best fit for their circumstances will increase student motivation to learn, which is the key to success in adult education, particularly for seasoned professionals on well-defined career tracks.

Second, NDU needs a guiding theory and approach to adult education that informs its graduate programs.²⁹ The Socratic method alone does not constitute an optimum approach to adult education. A hybrid approach that supports a commitment to student-centric graduate education can better serve the target population. The war college foundational approach could and should be a humanist approach that emphasizes the importance of meeting the student's full range of needs: emotional, spiritual, physical, and intellectual. During student

assessment, all the factors affecting the students' needs and motivations to learn are considered to craft programs of study that will maximize chances for students to emerge at the end of the year better prepared for their follow-on assignments.

In the first phase of the curricula, which is short and focused on transferring foundational material (mandated by legislation and Joint Staff guidance) to students, the guiding approach should be social learning where students dialogue with colleagues, network, conduct team projects, and demonstrate they have acquired knowledge of material by passing "no-fail" online exams they can take at their leisure. The idea would be to transfer basic knowledge while exposing the students to other points of view about the significance of the material. During this period, students would have a chance to decompress from the taxing operational assignments they complete prior to arriving at National Defense University.

The approach taken in the second phase would depend on the student's educational track, but if the student is pursuing a master's degree, it should be a behaviorist approach with well-identified learning objectives and graded papers and examinations.

The third phase, focused on student research, should be administered with a cognitive approach that emphasizes sense-making, problem-solving, and self-directed learning via case studies, projects and simulations, and papers. Mentors should assist students in setting up their research problems and constructing appropriate methodologies to solve the problems, but the level of difficulty would depend on the topics and educational tracks chosen by students. Such a hybrid approach to adult learning would permit university staff and faculty to better administer the new program in a way that supports multiple educational tracks for students.

Finally, the university needs to embrace and rationalize its faculty diversity. War colleges, with their relatively generous salary structures, are well positioned to recruit faculty with both impressive practical and academic credentials. However, there will always be a mix of

Active-duty military personnel, retired military with academic credentials, and civilians with senior-level experience in the national security system. With rare exceptions, civilians with no practitioner experience ought to be avoided in professional schools such as the war colleges. The main point is that rather than treating all instructors largely as interchangeable cogs in a teaching machine, the university should distinguish between levels of qualifications and categorize faculty and their duties accordingly. The war colleges already distinguish faculty by titles and offer some assistance and mentoring to new instructors thrown into the classroom, but we are suggesting a much tighter alignment of experience and expertise with teaching responsibilities.

Although there would be exceptions, in general assistant professors would help administer the educational program as team teachers, graders, and program administrators; associate professors would teach the lower level courses; and full professors would teach mostly higher level courses in their area of demonstrated expertise. Full and distinguished professors would mentor doctoral candidates, and so on. Uniformed faculty without academic credentials or exceptional experience in the subject matter would begin in the assistant professor category and move up as they benefit from faculty development efforts, experience, and research. Deeply experienced practitioners (military and civilian) would lead those classes in which their practical experience is clearly relevant. If they stay on and publish, they could rise and be assigned more traditional academic and research duties. There would be no tenure, but full professors would have more time for research and control over their course content.

General Dempsey gave National Defense University a chance to be the first military institution of higher education to break away from the model of military education that critics have been assailing for the past decade. The new program under way at the university is a clear step in the right direction. It requires modifying the curricula, programs, and standards to give students more

choices and instituting empirical feedback on staff and student performance—all difficult tasks. It will be tempting to compromise to make the program less stressful for staff and faculty. Change can be hard, but it is important to remember that the first, most difficult steps already have been taken. What is most important now is to maintain momentum toward a better and more challenging war college experience for the next generation of strategic leaders. JFQ

Notes

¹ Gregg F. Martin and John W. Yaeger, “Break Out: A Plan for Better Equipping the Nation’s Future Strategic Leaders,” *Joint Force Quarterly* 73 (2nd Quarter 2014), 39–43.

² “From the Chairman: Building Tomorrow’s Leaders,” *Joint Force Quarterly* 67 (4th Quarter 2012).

³ The term *war college* is used here to encompass both senior-level Service colleges, including the Air War College, Army War College, Naval War College, and Marine Corps War College, and senior joint professional military educational institutions, including the National War College, Dwight D. Eisenhower School for National Security and Resource Strategy, Joint and Combined Warfighting School, and Joint Advanced Warfighting School at Joint Forces Staff College.

⁴ Milan Vego offers good insights on military culture, anti-intellectualism, and creative thinking in his article, “On Military Creativity,” *Joint Force Quarterly* 70 (3rd Quarter 2013), 84.

⁵ Robert H. Scales, “Too Busy to Learn,” U.S. Naval Institute *Proceedings* 136, no. 2 (2010), 2.

⁶ Joan Johnson-Freese, “The Reform of Military Education: Twenty-Five Years Later,” *Orbis* 56 (Winter 2012).

⁷ U.S. House of Representatives, Committee on Armed Services, Subcommittee on Oversight and Investigations, *Another Crossroads? Professional Military Education Two Decades after the Goldwater-Nichols Act and the Skelton Panel* (Washington, DC: U.S. Government Printing Office, April 2010), available at <http://democrats.armedservices.house.gov/index.cfm/files/serve?File_id=d4748d4a-b358-49d7-8c9a-aa0ba6f581a6>.

⁸ Mike Mazarr, “Disruptive Thinkers: The PME Debate Needs More Informed Thinkers,” *Small Wars Journal*, April 13, 2012.

⁹ Howard Wiarda, *Military Brass vs. Civilian Academics at the National War College: A Clash of Cultures* (Lanham, MD: Lexington Books, 2011), 153.

¹⁰ The debate over tenure is longstanding, but a representative case against tenure is found in James C. Wetherbe, “It’s Time for Tenure to Lose Tenure,” *Harvard Business Review*, March 13, 2013, available at <<http://blogs.hbr.org/2013/03/its-time-for-tenure-to-lose-tenure/>>.

¹¹ Mark Purcell, “Skilled, Cheap, and Desperate: Non-Tenure-Track Faculty and the Delusion of Meritocracy,” *Antipode* 39, no. 1 (2007), 121–143; Robin Wilson, “Tenure, RIP: What the Vanishing Status Means for the Future of Education,” *The Chronicle of Higher Education*, July 4, 2010; “Faculty Not on Tenure Track Rises Steadily Over Past 4 Decades,” National Public Radio, February 20, 2014, available at <www.npr.org/2014/02/20/279987644/faculty-not-on-tenure-track-rises-steadily-over-last-4-decades>.

¹² George E. Reed, “Examining the War Colleges: An Administrative Perspective,” conference paper presented at the Reforming Professional Military Education: A Clash of Professional Ethics session at the International Studies Association Annual Conference, San Francisco, CA, April 5, 2013, 6.

¹³ Here again, tenure is not seen as particularly helpful. As one commentator notes, those seeking tenure are often counseled to “avoid risk, collegial work, and even their students” to improve their chances of acquiring it. See Ernst Benjamin, “Some Implications of Tenure for the Profession and Society,” American Association of University Professors, available at <www.aaup.org/issues/tenure/some-implications-tenure-profession-and-society>.

¹⁴ Philip Hamburger, “The New Censorship: Institutional Review Boards,” *Supreme Court Review* 271 (2004).

¹⁵ Tom Bartlett, “Social-Psychology Researchers Are Very Liberal. Is That a Problem?” *The Chronicle of Higher Education*, July 30, 2014. See also John Tierney, “The Left-Leaning Tower,” *The New York Times*, July 22, 2011, available at <www.nytimes.com/2011/07/24/education/edl-24notebook-t.html?pagewanted=all&r=0>.

¹⁶ Proponents of the current system often assert military officers are experienced because teaching is inherent in leadership. Critics disagree, arguing that teaching is a profession with attendant skills, not just a subset of leadership. One observer who has taught in half of the six joint professional military education granting courses at National Defense University (NDU) over an 8-year period notes there is “no serious faculty development program” available to uniformed officers thrown into the classroom. They learn by doing; “you just figure it out yourself.” Email to authors from experienced faculty member at NDU, September 18, 2014.

¹⁷ Joan Johnson-Freese, *Educating America’s Military* (London: Routledge, 2013), 71.

¹⁸ Scales.

¹⁹ Steven Metz, “Strategic Horizons: U.S. Professional Military Education on the Chopping Block,” *World Politics Review*, April 17, 2013, available at <www.worldpoliticsreview.com/articles/12879/strategic-horizons-u-s-professional-military-education-on-the-chopping-block>.

²⁰ For example, a major finding in *Another Crossroads?* was that “there is an increasing need for additional joint and service-specific subject matter to be taught earlier in officers’ careers.”

²¹ By policy, the intermediate joint professional military educational institutions focus on “warfighting within the context of operational art” and senior schools “prepare students for positions of strategic leadership and advisement.” See Chairman of the Joint Chiefs of Staff Instruction 1900.01D, “Officer Professional Military Education Policy,” July 15, 2009, CH I, December 15, 2011, A-A-4, A-A-5.

²² Council of Graduate Schools, “Graduate Enrollment and Degrees 2002 to 2012,” available at <www.cgsnet.org/ckfinder/userfiles/files/GEDReport_2012.pdf>.

²³ Council of Graduate Schools, “Ph.D. Completion Project,” available at <www.cgsnet.org/phd-completion-project>; see also “U.Va’s Ph.D. Graduation Rate in Line with National Average,” April 29, 2001, available at <www.virginia.edu/insideuva/textonlyarchive/92-04-01/2.txt>.

²⁴ Although “master’s education is the fastest growing and largest component of the graduate enterprise in the United States . . . little is known about completion and attrition rates.” See Council on Graduate Schools, “Master’s Completion Project,” available at <www.cgsnet.org/masters-completion-project>.

²⁵ A former National War College student and professor.

²⁶ Martin E. Dempsey, “From the Chairman: Investing in the Minds of Future Leaders,” *Joint Force Quarterly* 74 (2nd Quarter 2014).

²⁷ Martin and Yaeger.

²⁸ Malcolm S. Knowles, *The Adult Learner: A Neglected Species* (Houston, TX: Gulf Publishing Company, 1990), 57–63. More than two decades later, the principles articulated by Knowles remain the bedrock of adult education theory. See Malcolm S. Knowles, Elwood F. Holton III, and Richard A. Swanson, *The Adult Learner: The Definitive Classic in Adult Education and Human Resource Development* (Amsterdam: Elsevier, 2005).

²⁹ Sharan B. Merriam and Rosemary S. Caffarella, *Learning in Adulthood: A Comprehensive Guide* (San Francisco, CA: Jossey-Bass Publishers, 1999).