General Martin E. Dempsey, Chairman of the Joint Chiefs of Staff (CJCS), has called on the U.S. military to integrate the lessons of the past 10 years of war into joint education objectives and institutions in order to develop “agile and adaptive leaders with the requisite values, strategic vision, and critical thinking skills necessary to keep pace with the changing strategic environment.” Furthermore, the capstone concept of Globally Integrated Operations states that the military will depend on distributed joint employment at the tactical level to have effects at the operational and strategic levels. To achieve this vision, joint education must start as early as possible, so junior officers begin their careers armed with the foundational knowledge they need to succeed as part of the joint force. This presents a compelling need for these young leaders to have a basic understanding of the synergistic effects of joint operations. The truth is, junior officers have been functioning in a joint environment across the globe daily, but unfortunately, our educational system has not kept up with this reality. Emphasis at the junior level must encompass more than broad overarching topics on the unique capabilities of each Service.

Instead, senior Department of Defense leaders should direct learning outcomes that expose their ensigns and lieutenants to the other Services’ tactics and doctrines. There are resource challenges to overcome, of course, and a fiscally constrained environment demands creative and cost-effective ways to inculcate joint thought in the joint force at an earlier stage of career development. Fortunately, the challenge is not as large as it may seem.

There are good reasons to improve joint education and its execution and not to accept the status quo. A core realization of the Goldwater-Nichols Department of Defense Reorganization Act of 1986 was the need for officers to have joint education and experience before achieving general/flag rank. “The Report on Military Education” in 1988 was commissioned by the 101st Congress House Armed Services Committee as a follow-through to Goldwater-Nichols. The members recognized that “Experience is the most basic and the most in-depth education. However, in the complex national security area, no one can directly experience everything he or she needs to know, especially during peacetime. The panel recognizes that formal education tours essentially are nodes in what should be career-long educational development.”

Currently, junior officers have been working in de facto “joint tours” at the tactical level during operations and exercises without the benefit of the formal professional military education (PME) recognized by the committee. The CJCS provides joint PME guidance to the Services through various policy documents, including the December 2011 Officer Professional Military Education Policy (OPMEP) and the recent CJCS white paper on joint education. Senior leaders have recognized the need for earlier education but have not provided implementation guidance. Most recently, the CJCS 2013 “Review of Joint Education” noted:

**The lifelong learning proposal includes the idea that joint learning must occur earlier for both enlisted personnel and officers. However, most of joint education has focused at the intermediate career level and up. The early years of both officer and enlisted education and training have been devoted to becoming proficient in Service and military specialties. A problem becomes obvious when we examine how to provide more joint education early in military careers: all Service courses are already overflowing with Service-specific learning objectives; thus, more joint education will have to come at the expense of Service topics, which could reduce Service and branch competencies. This is a delicate balance and requires thoughtful consideration as the schools determine how to incorporate the DLAs at all levels.”**

Fortunately, it is not a given that adding joint topics must come at the expense of Service topics. A solution is to enhance Service specialty training at the junior officer level by adding specific, appropriate, and targeted joint education corresponding to an officer’s specialty training. This approach assumes that young officers are most prone to absorb joint concepts if they directly relate to their own particular Service skills or specialties. Tying only those joint employment concepts that relate to the specific Service course into the curriculum will provide just enough “jointness” both to prepare officers to employ joint effects tactically and to further improve the ability to think critically about joint concepts.

The experiences of the past 12 years of war bring to light the reality that junior officers must routinely resolve joint tactical problems with little or no formal education in either joint or other Service tactics, techniques, and procedures (TTPs). Take the function of communications, for example. No Service exposes their junior communications and signals officers to the unique methods and views of the other Services with regard to communication employment as part of a Service skills course. This is a key point because a desired endstate is establishment of officers capable of effectively working through interoperability challenges. The idea of deliberate exposure to common skills is not simply pedagogy for its own sake. Imagine a young Army captain overseeing the network infrastructure at a forward operating base. He is unexpectedly required to integrate network capabilities with an Air Force lieutenant when neither has had early joint education. Only after a painfully slow period of developing the necessary shared vocabulary and breaking down Service prejudices are these junior officers finally able to focus on the task at hand.

In today’s pace of war, any unnecessary tactical delay can be extremely costly to the military effort. While our individual Service branches cannot, and should not, abdicate their unique roles and doctrine, they must arm the “doers” with the basics of a joint foundation sufficient for them to function effectively in today’s environment.

Currently the system requires little to no early joint education. Each Service implements joint education throughout an officer’s career in accordance with various CJCS and legislated guiding policies; however, officers receive the preponderance of joint education at the O-4 to O-6 grades and beyond. Additionally, the system expends most of its efforts educating officers serving on joint and combatant command staffs, not those executing in the field. It assumes that field-grade and mid-grade officers have acquired enough ad hoc experience working with other Services to overcome the friction inherent in planning at the joint operational level. This assumption places the risk in the hands of the joint commander, an assumption more often than not based on a false premise. Adding earlier education while preserving current JPME courses will mitigate this risk.

There are some limited courses available to young officers that specifically teach joint employment by skill area. The Joint Engineering Operations Course and the Joint C4I Staff and Operations course both provide a joint curriculum for military engineers and communications specialists, respectively. The Defense Acquisition University offers classes to Servicemembers working in contracting and acquisition. There are several more courses like these, demonstrating that senior military leaders recognize the importance of formal education by joint function. The problem is that slots are
limited, so course designers expect some level of practical experience preceding attendance. Moreover, courses generally take more than a week, requiring commanders to prioritize waning travel funds. To understand where early joint education fits best, a brief review of the current junior officer education system is necessary.

**Lack of Joint PME**

Each Service has variations in training format, timing, and emphasis. Two patterns emerge. The first is the expectation that officers quickly develop expertise in their specific skill areas, tactics, and doctrinal employment. The goal of entry level and initial specialty skill officer training is to produce graduates ready to apply what they have learned as apprentices and quickly become practitioners. The second pattern is that each Service lacks a formal joint education program for its junior officers. It is almost as if each Service seeks only to meet the letter of the legislated joint education guidance rather than the spirit. Sufficient joint PME remains nonexistent for the O-1 through O-3 grades.

Each Service has similar educational models. The Marine Corps PME framework includes courses for all officers at the lieutenant, captain, and field-grade levels. All newly commissioned officers attend the Basic School to learn infantry skills before attending Military Occupational Specialty (MOS) school. Marine lieutenants are not required to complete any formal PME. Marine Corps Order 1553.4B, “Professional Military Education,” states, “Marines in the grades of WO, CWO, O-1, and O-2 do not have formal PME responsibilities aside from professional self-study as per the Marine Corps Professional Reading Program.” The Army model is similar to the Marine Corps model. All newly commissioned officers attend the Basic Officer Leadership Course to learn fundamental infantry skills as a precursor to specific MOS schooling. The Captain’s Career Course is at the 4- to 5-year mark, but there is little if any joint subject matter. The Air Force no longer requires a basic entry level PME course for newly commissioned officers. These officers enter skill-specific courses necessary for their Air Force Specialty Codes. Squadron Officer School is the first level of commissioned PME for Air Force officers. It is for midlevel captains, and the curriculum is not joint. New Navy accessions attend courses based on job assignment but do not have a specific PME course until the O-4 level.

The Services invest tremendous amounts of time and money in developing young officers into capable practitioners, yet they spend precious little time on formal joint instruction during basic officer courses and specialty training. In combat skills training, one will generally find some level of joint employment instruction, usually related to coordination of joint fires or other areas in which TTPs are standardized; however, there is little comparison of Service doctrines or instruction on planning the joint employment of fires. Service doctrine comparison and exposure to joint planning are two areas in which a small investment in curriculum will provide a large return in terms of human capital.

The benefits of providing only a small amount of joint classroom instruction are tremendous. We want young officers to trust doctrine and be able to question it when it needs to be updated. A truly adaptive force is composed of members at all ranks who have sufficient knowledge to avoid “one solution only” thinking. Operational planning and execution have both bottom-up and top-down dimensions. Operational planners on joint staffs develop synergy from the top down by linking multi-Service capabilities through tasking subordinate Service and functional components. Tactical planners and operators develop synergy from the bottom up when smaller units recognize joint solutions, generating a demand signal to the operational headquarters for joint support. The current joint PME structure facilitates the top-down aspect by preparing officers to serve on a joint staff at the operational level of war through a common curriculum regardless of specialty. If we truly want to maximize innovation, the system must also address the gap in junior officers’ understanding of joint capabilities in specific occupational fields. Only then will the bottom-up aspect of joint planning and execution mature. Coupling top-down joint planning with bottom-up plan refinement and execution will better enable the synergy sought from joint warfare.
An early education requirement must include all officers. Senior officers command joint employment, and field-grade and mid-grade officers plan campaigns, but it is junior officers who have to refine and execute jointly. This has been especially true of the recent U.S. conflicts and humanitarian assistance operations; however, the joint PME system has not set them up for success when working with other Services. Precommissioning programs provide only broad-brush exposure to strategic-level Service capabilities. Furthermore, officers do not graduate from specialty schools with the basics of a common vocabulary necessary to conduct effective and efficient joint operations. The reality in today’s joint employment is that young officers from different Services must frequently waste time establishing common references without the benefit of joint education. In most recent cases, young officers have succeeded at an acceptable level due to hard work and ingenuity. The concern is that they may be victims of their own success, as seen in the reluctance to expend additional resources to arm them with the background needed to move from “acceptable” to “truly effective” in the joint arena.

**Early Joint Education**

There is sound educational theory to draw on in developing effective implementation models. It is reasonable to assume that the mind of a junior officer is open regarding joint employment, hence the importance of getting the initial exposure correct. Instruction in joint doctrine and TTPs will increase critical thought regarding one’s own Service doctrine earlier in a career. In any effective education program, one must set the foundation of knowledge properly. Benjamin Bloom’s educational taxonomy posits several levels of subject cognition. Knowledge and comprehension come before the more advanced cognitive functions of application, analysis, synthesis, and evaluation. According to the taxonomy, “the knowledge level is operationally defined as information retrieval.” In essence, knowledge is the ability to recall ideas, facts, and categories, among other things, about a particular subject. It is the baseline requirement for increased cognition. The additional curriculum outcomes should only require the knowledge and comprehension level. If these officers learn the basics of joint employment, they will amaze commanders at all levels with the creative solutions they find.

Another overlooked advantage in establishing early joint education is critical thought about one’s own Service. A training program that incorporates other Services’ doctrines as a short introduction will help junior officers better understand their own Service doctrines. The juxtaposition of the different approaches to similar problems will force them to critically analyze what their own Services teach. By comparing Service approaches, young officers will develop a foundation for further differentiating, assessing, and organizing shared knowledge, giving them the necessary skills for evaluating information. Take a notional Army signals officer. If he has had exposure...
to Navy and Air Force communications systems during early training and education, he will face far less friction if he has to plan to set up a joint C4I system. If he has not had that prior exposure, the likelihood of severe mission impact increases, especially under time-compressed planning situations. The addition of limited joint education will sow the seeds in junior officers, enabling critical thinking about military employment in the future operational environment.

Currently the OPMEP directs that primary PME curriculums be "pre-dominantly Service oriented, primarily addressing the tactical level of war. Service schools that have programs centered on pay grade O-3 officers will foster an understanding of joint warfighting necessary for success at this level." The effectiveness of the primary Service PME courses in achieving this outcome remains in question. More significantly, waiting until O-3 is too late. Demanding earlier implementation of these outcomes capitalizes on the intellectual capacity of today’s military accessions. Young officers naturally ask questions, as everything they are learning is new. If an overarching goal of any educational program is to lay a foundation for creative thinking beyond graduation, officers must learn about each Service’s approach to tactical problems at the first real opportunity.

We want officers who can synthesize new solutions. Synthesis requires understanding related but separate knowledge areas. Evaluation further requires comparison between different aspects of a subject. The current system is so focused on teaching one element to a new officer that it neglects the overlapping elements. Earlier exposure to a more holistic view of joint operations will create a better prepared group of officers among the field-grade and mid-grade ranks. The purpose of the Joint Officer Development process is to create a pool of Joint Qualified Officers capable of succeeding at the joint operational level. Improving joint education at a younger stage will vastly improve the readiness of officers available to plan at higher levels. The experiences of officers before reaching the intermediate or senior stages of joint education significantly shape their notions of joint planning and employment. A more deliberate and formal exposure at the initial specialty school level will establish a baseline understanding of the why each Service employs in a particular manner. This baseline knowledge will empower the motivated junior officer to seek further self-directed learning. When these officers reach field-grade and mid-grade ranks they will have had the benefit of thinking about joint employment within their specialties, which will better prepare them to interact and think at the joint and combatant commander staff levels regarding warfare.

**Debunking the Time Argument**

It is hard to argue that improved training and education of junior officers is a bad thing. For those trusted with the Nation’s defense, no amount of preparation is ever enough. However, opponents may argue that adding more educational requirements to an officer’s already hectic early career is not worth the additional money, and even more important, the time it would take. Since it is hard to measure the value in dollars, we will focus on the time requirements.

Creating a military officer is a significant investment in time as it is. There is the prerequisite 4-year college degree coupled with a mountain of screening events to demonstrate leadership potential and moral fortitude. These venues range from Service academies to Reserve Officers’ Training Corps (ROTC) units to the many nonstandard pathways to officership from the population of educated civilians and the exceptionally talented enlisted corps. Add to this the entry level and occupational specific training and it gets to be quite dramatic.

Consider a notional Marine’s pathway to becoming an officer. Four years of college and summer ROTC events plus 6 months of the Basic School plus 3 months of occupational school training produces a Marine second lieutenant ready for service in the operating forces. This is essentially a 5-year process, 1 year of which counts against this notional officer’s obligated Service commitment. For all Services, this process focuses on indoctrination and occupational skill proficiency. Once the lieutenant takes his first real job, he is still essentially an apprentice requiring a great deal of on-the-job training, mentoring, and experience to become a truly effective leader. Once this Marine becomes a first lieutenant, his apprenticeship is largely considered over, but he only has 2 years of obligated service left. Basic training, this amounts to some 6 years of education and training for 2 years of journeyman officership. If it takes 2 years of nonresident seminars or a year of resident school to educate a field- or mid-grade officer in joint concepts under the current joint PME I rubric, there is simply no time in this notional lieutenant’s career to absorb any more education aside from the on-the-job variety.

What about the more “senior” junior officers, the Army captains and Navy lieutenants? These officers do not have any statutory requirement for truly effective joint education. They may have 5 or 6 years in grade depending on Service promotion policies and are typically considered career officers. Unfortunately, time at this rank is even more constrained though it is more abundant. Aviators typically begin their operational careers at this rank and spend virtually the entire time becoming proficient pilots. For other officers, a combination of Service schools, career milestones, and supporting establishment requirements compete for attention. Picking up with a notional Army captain, for example, within 5 years he must try to spend half a year in a career course, complete an operational assignment as a company commander as part of a 3-year rotation, and spend another 3-year rotation in a supporting billet or possibly attend one of the postgraduate schools for an advanced degree. Finally, this is the point where most officers are expected to become masters of their Service TTPs. There simply is not time for “more,” even if it is “better.”

The key to debunking this opposing view is to fundamentally change the officer development paradigm without giving up what the Services are already doing well. The fundamental change in the existing training and education venues should be to make existing
events more joint without making them significantly longer or more expensive. This may require a wholesale review of all junior officer training curriculums, but the benefits already articulated outweigh what is largely a one-time cost.

Incorporating Joint Criteria

There are many ways to make this a reality, some more resource intensive than others, but a simple, relatively low-cost approach to improve tactical joint proficiency would be to incorporate joint educational criteria into the Services’ specialty schools already in existence. This would not require the creation of an additional joint PME course. It scopes the joint curriculum to what is most relevant to what an officer has just learned—specific tactical skills—that serve to reinforce course concepts by comparison. Including lessons on other Services’ employment would arm young officers with the basics of joint knowledge they will need in their immediate future, not 10 years later. Additionally, it is much more cost efficient to include joint instruction at the specialty school and leverage computer-based technology for continuing education.

A limited amount of joint education at the end of an initial skills course would pay large dividends within the force. Junior officers would be better prepared to execute in the joint environment they find themselves in today. Exposure to three additional perspectives on the same subject strengthens critical thought concerning one’s own Service doctrine. Finally, joint doctrine is always evolving, and the next generation of officers must be better prepared to refine joint thought than current and past generations have been.

The first step to this proposal is to identify shared skill areas and further categorize Service specialties. Some possible methods to grouping skills could be to separate them by broad occupational function such as logistics, communications, surface/subsurface combat (land and sea), combat support, fixed-wing aviation, rotary-wing aviation, and administration, or possibly even by Joint Capability Areas. There are likely multiple solutions for developing these groups, but creating them should be as easy as developing a starting point and allowing the Service education establishments to identify specialties that belong to each area. The Joint Staff, in conjunction with the Services, would then need to develop a common educational task list for each common core skill area. An example of the type of question the Joint Staff might ask of the Services during this process is, “What do the Marines want Navy, Air Force, and Army junior officers to know about movement and maneuver or logistics?” The answer might be that the Marines think of the sea as potential maneuver space for land operations, and therefore it would be good for the maneuverists and logisticians of the other Services to be prepared to support Marines from over the beach. The final
result of this top-down review of curriculum requirements would be a list of joint education subjects grouped by specialty or capability area. This would ensure a common knowledge baseline of joint concepts from which to build.

The next step is to determine the scope of joint instruction for each specialty school. It must remain manageable since each Service would then be responsible for incorporating those subjects into the appropriate junior officer education venue. Ideal objectives, all tied to specific skills, might be exposure to common vocabulary, understanding differing Service doctrine, learning the typical employment and support requirements, and gaining familiarization with differing TTPs and joint doctrine. The overall purpose is to give junior officers a starting point for joint tactical employment, not graduate-level expertise. Based on the experience of the Service staff colleges’ implementation of joint PME, Service junior officer training and education venues could incorporate the majority of the additional subject matter into existing lessons. This proposal would require an estimated additional 15 to 20 instructor-led contact hours specifically targeting joint subject matter, plus background reading to fully realize the potential benefits of initial joint orientation.

The individual Service specialty schools are the only time and place in which all junior officers are a captive audience to joint instruction. Implementation of this concept must not tread on the Service requirements to train within their legislated roles. The proposed model would give the joint instructor 2 to 3 days added to each course. The CJCS would be responsible for coordinating instructors and curriculum development. Truthfully, it might require the Office of the Secretary of Defense or congressional direction and funding to fully implement, but if earlier joint education is truly important, the relatively low cost for return is worth the effort.

There is an inherent geographic and fiscal challenge in ensuring availability of instructors for the many schools throughout the United States that a successful program must also overcome. Leveraging the Reserve force to create these instructors is cost-effective, and it also solves the geographic challenge. The model already exists on a smaller scale. The Institutional Training Regiments within the Army Reserve provide instructors, cadre, and drill sergeants to both Active and Reserve component institutions such as basic training, ROTC, the Simultaneous Membership Program, and Noncommissioned Officer training academies. A joint oversight body could coordinate Reserve billets associated with the many schools. Individual augmentee instructors would be ideal for continuity and minimal overhead. During the final phases of a course, one instructor from any Service could spend 3 days teaching without taxing the Service with additional lesson requirements.

Another option to save cost and additional manpower is to allow the Service schools to identify a qualified officer from another military department to teach the CJCS-approved block of instruction. For example, most military bases are within a few hours’ drive of another Service base and many already have other Service tenant units. Think of it as a kind of instructor exchange program that accomplishes the additional training at little cost while potentially improving inter-Service relationships at the installations involved.

The joint education system can also take advantage of noninstructor-based media as a recurring tool. Considering the current fiscally constrained environment, the military’s expanding use of e-learning would provide a suitable avenue for recurring education in joint fundamental concepts. Training could be incorporated into an officer’s required yearly general military training curriculum. While certainly not a panacea, limited online self-learning is a low-cost method to keep officers exposed to changes in joint doctrine and TTPs.

In the future, more junior officers are likely to find themselves responsible for tactical planning and execution of joint operations whether in conventional support to special operations or military-to-military engagement for security cooperation events. This proposal is advocating more than the typical “more training is better.” Since Goldwater-Nichols, the joint force has evolved from simple deconfliction to true operational synergy evidenced in over a decade of sustained conflict. This synergy starts with commanders and joint planners who have a broad understanding of joint operations as a result of mandated joint education. It is high time for the synergy to enter the tactical realm by educating and training younger officers to understand and seek joint solutions to tactical challenges.

Notes

4 Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 1800.01D, “Officer Professional Military Education Policy,” The Joint Chiefs of Staff, September 5, 2012.
5 Dempsey.
13 Ibid.
16 Marzano and Kendall, 7-8.