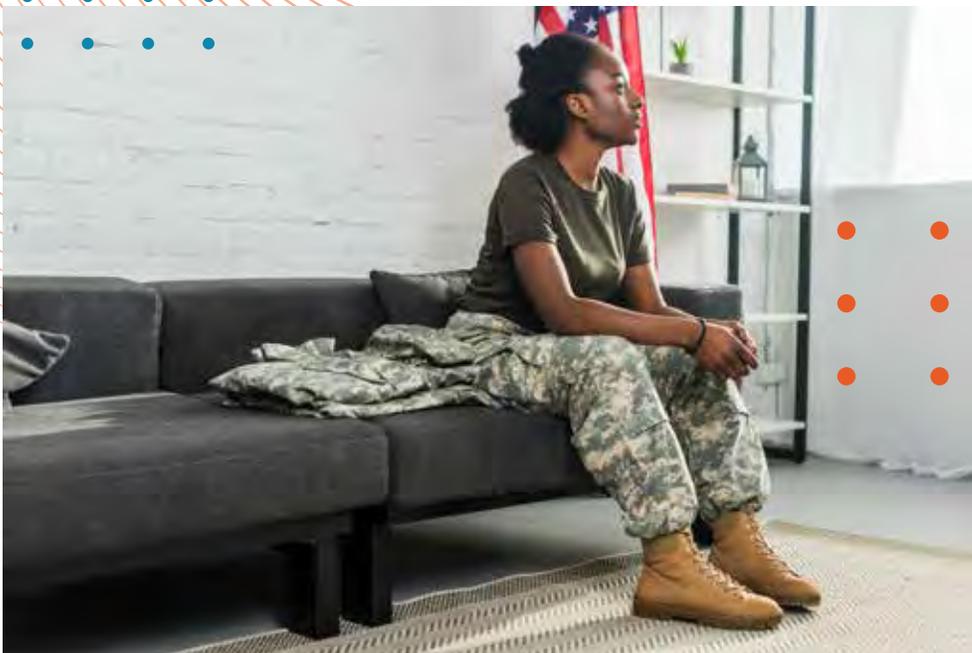


APRIL 2022

# Creating Seamless Pathways for Military Service Members: A Scaling Guide

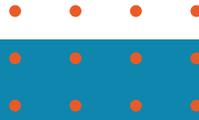


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## About DVP-PRAXIS LTD

Founded in 2005, we are an action-oriented consulting firm providing formative and summative evaluation services, strategic facilitation and advising, and technical assistance and training to support efforts to inform implementation and measure impact across postsecondary education and training systems. Our philosophy is informed by culturally responsive and equity-focused principles which we practice through listening with a keen ear to our clients and partners, seeking out diverse voices to be heard and acknowledged, and designing project activities and data collection efforts using participatory and inclusive approaches.

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## About Ascendium Education Group

Ascendium Education Group is a 501(c)(3) nonprofit organization committed to helping people reach the education and career goals that matter to them. Ascendium invests in initiatives designed to increase the number of students from low-income backgrounds who complete postsecondary degrees, certificates, and workforce training programs, with an emphasis on first-generation students, incarcerated adults, rural community members, students of color and veterans. Ascendium's work identifies, validates, and expands best practices to promote large-scale change at the institutional, system, and state levels, with the intention of elevating opportunity for all. For more information, visit <https://www.ascendiumphilanthropy.org>.

# Executive Summary

The Military Credentialing Advancement Initiative (MCAI) sought to improve how civilian education and training programs recognize military learning – an important task, as service members demonstrate high standards of proficiency in their training and occupational experiences. Four MCAI grantees (Indiana Wesleyan University, the Kansas Board of Regents, Lone Star College, and the Utility Workers Union of America) – all with extensive experience awarding credit for prior learning to support service members – worked to scale and systematize the mapping of military learning to civilian postsecondary and industry programs and credentials. They used technical assistance provided by Solutions for Information Design (SOLID), and grant funding provided by Lumina Foundation, Rockefeller Philanthropy Advisors, and Greater Texas Foundation to build 43 pathways from four military occupational areas (combined personnel and administration, food service, supply administration, and warehouse and equipment handling) to civilian credentials and training programs. The decision to focus on these four occupational areas was an equity-first design choice, as more than half of service members in these military occupations identify as Black, Hispanic, or Native American.

This Scaling Guide outlines three cases for approaching the mapping of military-to-civilian learning: a postsecondary system-level approach, an institutional approach, and through an industry training organization. These cases point to three important lessons for scale and systematization:

- First, faculty ownership of the mapping process is essential as it leverages subject matter experts to review military competencies for occupational specialties.
- Second, a supportive policy environment is necessary to facilitate and incentivize systematic processes over ad-hoc practices.
- Third, executive-level leadership and support creates expectations and accountability for the scaling and systemization of mapping military-to-civilian learning.

As postsecondary systems, institutions, and training organizations look to take responsibility for supporting service members by scaling and systematizing the mapping of military-to-civilian learning, this guide offers three recommendations:

- 1** Organizations should develop the necessary infrastructure that facilitates the systematic awarding of credit for prior military learning (e.g., Kansas' Military Articulation Portal or SOLID's proof-of-concept Learner Credit Analysis Tool).
- 2** Organizations should clarify policy requirements and remove policy barriers at the state and local levels to ensure that maximum credits or waivers are awarded for military learning.
- 3** Organizations should involve military and faculty subject matter experts strategically by leveraging resources that detail military learning to expedite the mapping process; faculty are key to ensuring credibility for the process of awarding credit for military learning.

# Table of Contents

The Problem: Military Learning is Not Adequately Recognized in Civilian Education and Training Programs	1
A Promising Solution: The Military Credentialing Advancement Initiative	4
Scaling and Systematizing the Process for Mapping Military-to-Civilian Learning	6
Case 1: A System-level Approach to Recognizing Military Learning	8
Kansas Board of Regents Background	8
Mapping Military-to-Civilian Learning in Kansas through MCAI	9
Key Strategies	11
Moving Forward	11
Case 2: An Institutional Approach to Recognizing Military Learning	13
Institutional Backgrounds	13
Mapping Military-to-Civilian Learning at IWU and LSC through MCAI	14
Key Strategies	16
Moving Forward	17
Case 3: A Training Organization Approach to Recognizing Military Learning	18
UWUA Power for America and UMAP Background	18
Mapping Military-to-Civilian Learning for UMAP through MCAI	19
Moving Forward	21
Lessons for Scale and Systematization	22
Recommendations	23
Resources Used by Grantees for Mapping	25
Additional Readings	25
Appendix A: Scalability Considerations for Resources Used by MCAI Grantees	
Appendix B: Evaluation Design and Approach	

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## The Problem:

# Military Learning is Not Adequately Recognized in Civilian Education and Training Programs

Veterans, active-duty personnel, reservists, and National Guard “service members” represent 6% of enrolled undergraduates, or almost 1.2 million students.<sup>i</sup> These students are a much-sought-after student population, bringing billions of dollars in education benefits with them to colleges and universities. Service members also bring considerable skills and experiences gained from years of military service and training. These two facts alone should bode well for service members’ academic success, since financial resources and academic preparedness have been shown repeatedly to improve college outcomes.<sup>ii</sup>

A recent report from Student Veterans of America using data from the National Student Clearinghouse found a 53.6% degree-completion rate for student veterans, which is comparable to the rate of 52.9% for non-veteran students.<sup>iii</sup> Data from the Institute for Education Sciences’ Beginning Postsecondary Students (BPS) survey show the six-year graduation rate for student veterans 25 years of age and older is 41.7% compared with 38.1% for non-veterans.<sup>iv</sup>

These modest results raise an important question about institutional responsibility: If service members enroll in college with the financial resources and skills needed to earn civilian credentials, why aren’t they completing programs at much higher rates than non-military students? Prior research points to several institutional policies – such as credit transfer, financial aid, and housing – that may affect veterans enrolling in and completing a college degree.<sup>v</sup> One specific reason that veterans are not completing college at much higher rates is that **colleges, universities, and training organizations don’t adequately recognize the military skills and experiences that service members bring with them.**<sup>vi</sup>

There are many practices colleges and universities use to award credit for prior learning to service members.<sup>vii</sup> These practices are often tedious and time-consuming for all involved, requiring service members, faculty, and administrators to review military exit paperwork<sup>viii</sup> and existing course mappings on a case-by-case basis.<sup>ix</sup> Also, service members may be required to prepare a portfolio to demonstrate their learning outside higher education. The core problem with these practices is they place the burden of receiving credit on the service members themselves as they transition from military to civilian life. They also reinforce ad hoc, inconsistent methods for awarding prior-learning credit – methods based on the decisions of individual faculty, staff, and administrators.



*Colleges make it so hard for veterans to get credit for what they already know. Schools will say they welcome veterans, but there's so much more to it than the college having a welcome sign or accepting military financial aid benefits. Instead, being military friendly means that we have a veteran staff member to help you navigate the enrollment process. As a veteran student myself, I was told that the college would give me physical education credit for basic training but otherwise I had to start from scratch to earn a degree, and I don't know a soldier that hasn't happened to.*

**- DeAndrea Stuart,**

former Project Program Coordinator  
at Lone Star College & retired Army Logistician



Most policies and practices that guide the awarding of credit for prior military learning are based on a lack of knowledge about the quality and standardization of learning within military occupational specialties.

While the learning that service members experience certainly varies across the six branches of the military, there is little variation in skills proficiency for service members in military occupational specialties at each rank. That is to say, student veterans with a similar *branch, occupational specialty, and rank* bring a common set of skills and competencies when they enroll, regardless of where they were stationed. For example, two Army veterans who worked in warehousing and equipment as Cargo Specialists with a rank of E4 have a similar set of skills and competencies.

Moreover, the service members' skills and experiences must meet a higher quality standard within the military than within most colleges and universities. In the military, service members must demonstrate 80% proficiency on skills and competencies to work in a specific occupational specialty, and for these competencies to appear on their military documentation. In contrast, colleges and universities commonly award credit to students who receive a grade of a D (65%) or better in their courses. Since the threshold for quality learning is higher in the military, and since the skills and competencies demonstrated by service members are standardized across all occupational specialties by rank and by branch, the need to review and validate military learning for each service member who enrolls in college is both wasteful and inequitable.



## *Military Terms: A Primer*

The military, like many complex organizations, uses acronyms and terms that may be unfamiliar to external audiences. Here are a few terms used often in this guide and what they mean in the civilian education sector:

- **Service member:** This is a term used to describe full-time and part-time members of the military as well as veterans who have been honorably discharged and are no longer serving.
- **Branch:** The military has six branches that are the largest, and most general, grouping of service members. These branches are: Air Force, Army, Coast Guard, Navy, Marine Corps, and Space Force. All branches except the Space Force have full-time (i.e., active-duty) and part-time (i.e., National Guard and Reserve) components. Putting this in an education context, serving in the military is akin to working in education, whereas serving in the Army vs. the Air Force is akin to working in higher education vs. K-12 education.
- **Occupational Area:** Occupational areas are groupings of similar jobs within the branches of the military and are often found in multiple branches. The four occupational areas focused on for the MCAI grant are combined personnel and administration, food service, supply administration, and warehouse and equipment handling. In an education context, distinct occupational areas are faculty member or instructor vs. student support staff vs. administration or college operations.
- **Occupational Specialty:** Occupational specialty is the actual job within an occupational area. Occupational specialties are called different things within different branches (e.g., Army-MOS Military Occupational Specialty; Navy-Rating; Air Force-AFSC Air Force Specialty Code). However, within branch and specialty, all service members have completed the same training and military education and are working in that specialty. In higher education, an occupational specialty would compare to a more specific role such as a member of the biology faculty, a registrar, or a custodian.
- **Rank:** In its simplest form, rank equates to the pay a servicemember receives, and rank increases with a service member's years of service and experience. Rank usually falls into two categories – “Enlisted” and “Officer” – and ranges from Enlisted 1-9 and Officer 1-10, with 1 being the lowest rank (e.g., E1, E2, ...E9; O1, O2, ...O10).<sup>x</sup> Enlisted service members make up most of the military, and they carry out orders. Officers manage enlisted service members and give orders. One must have a bachelor's degree before becoming an officer, though many enlisted service members also have postsecondary credentials.
- **JST, CCAF, DD214:** These types of official military documentation outline service members' military training and details about their time in service. JST: Joint Services Transcript (Army, Navy, Marine Corps, Coast Guard); CCAF: Community College of the Air Force (Air Force and Space Force); DD form 214: Service members' proof of military service issued after release or discharge from the military.

## A Promising Solution:

# The Military Credentialing Advancement Initiative

**An important strategy for improving postsecondary education and training outcomes for service members is to develop and implement a process that systematizes and scales the awarding of credit to service members.** A systematic process acknowledges the high-quality and standardized skills and competencies service members have learned and demonstrated in military occupational specialties. An effective process that automates awarding of civilian academic credit based on military competencies can increase the number of credits awarded to service members for their prior learning. This can accelerate their attainment of credentials and enhance their opportunities for civilian jobs.

The Military Credentialing Advancement Initiative (MCAI) was an effort to demonstrate how this scale and systemization can happen. It provides a roadmap for institutions to ensure that military-based learning can count toward high-quality civilian credentials. Launched in August 2020, MCAI supported a leading training organization, two postsecondary institutions, and a state postsecondary system – each with a history of supporting service members in earning civilian credentials and gaining employment – to systematize and scale their processes for awarding prior-learning credit to service members.

MCAI was designed as an equity-first project. Grantees were required to focus on at least one of four military occupational areas in which more than half of service members identify as Black, Hispanic, or Native American. In 2019, these occupational areas included more than 170,000 active-duty personnel and reservists, and almost 25,000 veterans.<sup>xi</sup> These nearly 200,000 service members held many occupational specialties, including human resource specialist, culinary or food service specialist, logistics plan manager, material manager, cargo specialist, inventory management specialist, and packaging specialist.

**The goal for MCAI was for grantees to map military occupational competencies to their postsecondary courses and training programs, thereby creating infrastructure and capacity to systematically award credit for prior learning to any service member who enrolled from one of these occupational specialties.** In other words, neither individual service members nor individual faculty, staff, or administrators would need to validate prior-learning credits on a case-by-case basis. Rather, the policies and practices for awarding such credit would be automated and systematized across these (and potentially additional) occupational specialties. This would shift the onus for the recognition of military learning from the individual to the institution, organization, or system.

Through the MCAI project, **grantees made meaningful progress toward scaling and systematizing programs that recognize military learning, mapping competencies to 43 academic or training programs leading to credentials, and as of Fall 2021, all 43 programs were available for service members to enroll.** Mapping competencies to bachelor's degree programs was most common, followed by associate degrees, industry certifications, and certificate programs. Of the 43 new and existing programs, more than 70% mapped to the supply administration occupational area, followed by

60% for combined personnel and administration, 49% for warehouse and equipment handling, and 42% for food service. Well more than half (58%) of the programs mapped to two or more occupational areas. By mapping occupational areas that are overrepresented by people of color, more equitable credentialing opportunities were made available to Black, Hispanic, and Native American service members. For postsecondary programs that were mapped, service members could be awarded between six and 60 credits for their military learning. On average, the award was 22 credits – more than a full-time semester’s worth. Clearly, this approach can accelerate service members’ time to complete credentials and reduce redundant learning.

The MCAI project was an initiative of [Lumina Foundation](#) to create high-quality military-to-civilian pathways that are designed with scale in mind. The project had two main aims:

1. To articulate and expand pathways that recognize military-to-civilian learning (*scale*).
2. To *systematize* competency mapping and thus shift the onus of awarding credit for prior military learning from service members to institutions and training organizations.

Four grantees participated: [Indiana Wesleyan University](#), the [Kansas Board of Regents](#), [Lone Star College](#), and the [Utility Workers Union of America](#). They used funds from Lumina Foundation, [Rockefeller Philanthropy Advisors](#), and [Greater Texas Foundation](#) to build pathways from four military occupational areas (combined personnel and administration, food service, supply administration, and warehouse and equipment handling) to civilian credential and training programs.

Solutions for Information Design, LLC ([SOLID](#)) provided technical assistance to support the grantees’ work toward scale and systematization. As experts in occupational analysis related to civilian credentialing for military service members, SOLID cultivated competency and task statement libraries based on the four military occupational areas and supported the grantees in using these resources to map military-to-civilian learning. SOLID also connected grantees to military occupation and training manuals and training syllabi. In curating these materials, SOLID provided grantees with resources that are not publicly available (see Appendix A for more detail). SOLID also piloted its Learner Credit Analysis Tool (LCAT) with grantees, which is intended to “streamline the equitable application of credit for military-based learning.” LCAT is searchable portal, customized for individual institutions, training organizations, or state systems to map military competencies to civilian credentials.

To document progress and share insights from grantees, [Ascendium Education Group](#) supported a learning evaluation led by [DVP-PRAXIS LTD](#). This Scaling Guide is a product of that work.

# Scaling & Systematizing the Process for Mapping Military-to-Civilian Learning

This Scaling Guide presents three cases to illustrate how different types of postsecondary and training organizations can systematize and scale their processes to award credit for prior military learning. Unless otherwise noted, data for each of the cases was gathered through 1) background research on grantees and engagement in grant activities; 2) semi-structured interviews with grantees and their partners in the MCAI project; and 3) surveys to understand the programs created and the mapping processes. (For more information about the evaluation approach, see Appendix B). For each case, the Scaling Guide provides background information on organizational context, describes the strategies used by organizations to carry out their work, and highlights important considerations to address during the mapping process.

## “ Advice from the Experts

*Once you begin working on credit for prior military learning, you realize how sophisticated military teaching and learning methods really are. Resources the military has for state-of-the-art training and equipment are often second to none. Interestingly enough, military trainers often have the same level of education as their college faculty peers – and their field experience may be superior.*

*Just as important, when an entity like the American Council on Education sends evaluators to compare military training with college-level coursework, those evaluators are faculty who teach for an accredited college or university – in the field being analyzed. So, when learning equivalencies are recommended by those faculty, they’re saying that the credits for military training should be granted for coursework in the major – instead of being tossed into an ‘electives bucket.’*

*Regarding the granting of waivers for employer training, the intensive work of mapping military training to industry training can be considered valid as well. Whether credits or waivers are recommended, industry trainer(s) will have access to the mapping procedures and curricula – and can validate for themselves, the equivalencies. Onsite ability tests can also be conducted to verify a service member’s mastery of the topic (welding, construction, electrical work, water technologies, etc.)*

*Our goal is to assure college educators and industry trainers that the service members coming to them are not only familiar with the topic at hand – but may be so experienced in it, that requiring them to enter through the ‘beginner’s door’ can create costly and unnecessary redundancy in training for the schools and employers, as well as service members. As the work of mapping sheds light on those redundancies, we hope to help employers fill critical positions more quickly and facilitate service members’ appropriate placement on the civilian pay scale.*

### - Marjorie Price,

US Army Veteran and Credit for Prior Learning Consultant for UAWA Power for America

**Case 1 – The Kansas Board of Regents (KBOR)** reflects a system-driven approach. In its governance role, KBOR sets policies for how credits and credentials are awarded across the state’s two-year and four-year public colleges and universities. KBOR can operate at scale by cultivating statewide resources for the mapping process. It can encourage coordination between community and technical colleges and universities, and it can leverage statewide transfer articulation agreements and prior work by community and technical colleges to map credits for military learning. KBOR joined MCAI with a level of systemization across community and technical colleges through its [Military Articulation Portal](#) – a significant asset that facilitates the awarding of credits for prior learning to service members across the state based on military occupational specialties.

**Case 2 – Indiana Wesleyan University (IWU) and Lone Star College (LSC)** reflects an institution driven approach. The work of these two colleges is supported by strong institutional and executive-level commitments that are crucial for mapping military learning to college programs. IWU leveraged an earlier experience creating the Associate of Science in Public Service and Management Degree – a credential for which service members and veterans can be awarded up to 45 prior-learning credits – to create four new pathways. LSC built on earlier efforts – and created more than 60 course alignments – to map military competencies to an Associate in Applied Science Degree in Logistics Management and to expand the work to a Business Administration Degree. In both cases, faculty played a central role in the mapping process, with organizations tapping the subject matter expertise of faculty when implementing changes in policy and practice related to curriculum.

**Case 3 – Utility Workers Union of America (UWUA)** reflects an approach tailored for a customized training program that guarantees program completers a job with a local employer. The Utility Worker Military Assistance Program (UMAP) enrolls service members from all military occupational areas. Enrollees are not required to demonstrate what they have learned, and service members earn college credits through UWUA’s partnership with Kennedy King College in Chicago. UWUA found considerable alignment between seemingly disparate military occupations such as food service and human resources, and the competencies required to work in the gas industry. UWUA is an example of a training organization partnering with a local community college and an employer to facilitate the awarding of credits, thus helping service members earn credentials and gain employment while helping fill an industry need.

## Case 1

# A System-level Approach to Recognizing Military Learning

The Kansas Board of Regents (KBOR) can recognize military learning at a system level, which means its organizational policies and processes influence actions across all of the state’s public two-year and four-year colleges and universities. Working through a system can accelerate scale and systemization for crediting military learning; however, leadership and ownership at the institutional level is vital to the success of a system-level approach. Although KBOR governs the public universities, these institutions have local control over awarding credit for prior learning.

*We had to reassure the colleges and universities that the military service members are getting their learning at a certain level. In the military it is different than in higher education. In the military you have to have an 80% to pass the training, and then service members have actual work experience using that training. So that was an ‘aha’ moment for our institutions.*

**- April Henry,**

Director of Workforce Development  
at the Kansas Board of Regents

## Kansas Board of Regents Background

KBOR is the state board that governs the public four-year universities and is the convening body for the public two-year community and technical colleges in Kansas.<sup>xii</sup> KBOR has a long history of providing resources to military service members, in part because of the concentration of major military bases in the state across branches and because more than 9% of adults in Kansas are veterans.<sup>xiv</sup>

In 2015, KBOR implemented statewide policies designed to better meet the educational and employment needs of service members. The policies focused on establishing Kansas residency, awarding financial aid for service members, and mapping military training to college credit.<sup>xv</sup> An important result of this effort, which initially focused on community and technical colleges, was the creation of a statewide infrastructure known as the Military Articulation Portal.<sup>xvi</sup> This systemwide resource provides transparency for service members and for colleges about credits that can be awarded for civilian courses and where these courses are offered (i.e., at which institutions in Kansas). Through the MCAI grant, KBOR expanded this infrastructure for mapping military pathways to the state’s four-year institutions.

*Our Military Articulation Portal was built with community and technical colleges with the intention that the four-year universities could hop right on. We did that not by assigning credit in chunks but rather by specific courses in programs. This enabled us to upscale to the universities so when they added a program of theirs, they could easily connect coursework to military credit. I like the way it unfolded and worked; now what we have with the portal is that it is accessible to service members.*

**- Tobias Wood,**

Associate Director Career Technical Education  
at the Kansas Board of Regents and an Army Reservist

## Mapping Military-to-Civilian Learning in Kansas through MCAI

Through the MCAI grant, Kansas' seven universities mapped military skills and experiences to civilian programs, primarily within business programs such as management and administration, and a few in general studies, culinary, or workforce development programs. Military occupational competencies were mapped to certificate, associate, and bachelor's degree programs. Institutions that mapped certificate and associate degree programs also embedded these within higher-level credentials (i.e., certificates were embedded within an associate degree; associate degrees were embedded within a bachelor's degree).

A key feature of KBOR's work during MCAI was that universities were asked to partner with a Kansas community or technical college that had previously mapped military-to-civilian learning. To reinforce that this mapping process continued existing policies and practices, the system referenced current statewide transfer agreements for community and technical college credit to transfer to the four-year universities, including credit awarded for military learning. University program leads in Kansas indicated that they successfully navigated the transfer process with their partner community college during MCAI. Although transfer agreements also exist among four-year universities in Kansas, university program leads indicated lower engagement in the articulation process with peer four-year universities during MCAI.

KBOR leveraged its experience from implementing the Military Articulation Portal with the community and technical colleges and provided resources to the universities. These resources included the ACE Military Guide evaluations and through their relationships with military training schools, KBOR was able to gather military occupation and training manuals and training syllabi. In general, many of these manuals and syllabi are not publicly available and KBOR relied on SOLID to supplement these materials and to provide occupational task and competency statements. KBOR experienced some obstacles in the mapping process. In some cases, faculty misunderstood the quality of military learning. In others, concerns over accreditation led to inconsistent acceptance of transfer credit for military learning. KBOR convened faculty, military, and policy subject matter experts to address these issues.

Below are the steps taken in Kansas to map military-to-civilian learning at the state level, and the important considerations for each step.

## Mapping Steps

## Important Considerations

**01 KBOR cultivated resources related to military learning:** KBOR built a resource library comprising ACE Military Guide evaluations, military occupation and training manuals, training syllabi, and occupational task and competency statements. KBOR made these materials available to teams at the universities tasked with mapping the military training and experience of service members to courses at their institution.

By curating these resources on behalf of the colleges and universities, the system reduced institutional burden. KBOR staff believe that this allowed institutions to move more quickly through the mapping process.

**02 University program leads compared military learning to course and program learning outcomes and recommended course-specific credits to be awarded:** Institutional teams compared or crosswalked the military learning, primarily from military occupation and training manuals and from training syllabi, to course- and program-level student learning outcomes. This process yielded a set of recommended course-specific credits that could be awarded, which were forwarded to institutional faculty subject matter experts who were often military affiliated themselves.

KBOR and institutional staff reported that it is essential to ensure that military-affiliated faculty are involved in mapping. These faculty have the background knowledge to translate what military training is equivalent to college coursework. Their expertise is especially important in clarifying how military learning relates to general education rather than to specific programs.

**03 KBOR convened and facilitated panels of military trainers and faculty subject matter experts for each military occupation to discuss quality of learning:** KBOR leveraged its resources to facilitate occupation-specific panels of military trainers and college faculty subject matter experts to discuss the quality of learning in the military and how it compares to college learning.

KBOR staff and university faculty emphasized that it is critical to talk with faculty and military subject matter experts about the quality and quantity of learning on both sides of the learning equation (military and college). This can help ensure that academic standards are upheld and that military students are prepared for subsequent coursework.

**04 KBOR set policy guidance for specific-course credit to be awarded based on prior military learning:** Ultimately, college faculty in Kansas decided what college credit to award. However, KBOR advised that credit awarded should fulfill specific course requirements and not articulate as elective credit. It also said that if course credit is awarded in one program area or college, then it should be awarded across the board.

The Military Articulation Portal codifies what faculty have already approved and provides transparency around the credit a servicemember will receive based on their JST or CCAF, military occupation, and military rank. This infrastructure gives credibility to the mapping process and reinforces that quality standards are met.

*One of the important things [to our mapping process was] using the military members within the faculty because military faculty recognize service members' credentials and experience as learning. Those individuals were very honest as well. For example, leadership was tossed around [as a criterion for awarding credit], and a military faculty (member) said: "You have to be careful because military uses leadership with everything, and it doesn't [always] mean the same as [the competencies in] our leadership program."*

**- Sheila Markowitz,**

Registrar at Emporia University in Kansas



## Key Strategies

In addition to the Military Articulation Portal, key strategies that KBOR leveraged included:

- Policy and guidelines governing credit for prior learning.
- System-level capacity to help institutions navigate accreditation.

KBOR's position as a statewide educational system allows it to leverage policies and other strategies to support colleges in mapping military-to-civilian learning. Through its "Kansas Credit for Prior Learning Guidelines"<sup>xvii</sup> and "Kansas Board of Regent Credit for Prior Learning Policy,"<sup>xviii</sup> the board sets expectations that colleges establish residence credit requirements (i.e., the minimum number of credits that must be completed at the credential-granting institution); defines how military credit for prior learning can be earned; outlines how credit for prior learning should transfer with a student; and sets standards for clearly communicating the process to students.

During MCAI, KBOR created system-level capacity by designating a staff member to work with colleges and universities to remove policy barriers and clarify accreditation requirements. This system administrator helped demystify state policy on accreditation, thus streamlining the awarding of credit for military learning by institutions across the state.

## Moving Forward

KBOR had notable success in mapping military-to-civilian learning and can scale its efforts by expanding mapping to additional military occupations. The Military Articulation Portal is an exemplary tool that provides infrastructure for the systematization of awarding course credit to service members. The process by which credits are awarded in Kansas could be further improved and the burden on students reduced by automatically awarding credit at the institution level if, while applying for enrollment, service members provide their occupational specialty, branch, and rank.

Although many colleges in Kansas said they considered jobs and wages when deciding which programs to map, programs in the state do not routinely connect military students directly to in-demand and high-wage jobs. Leveraging its statewide influence, KBOR could help create formal partnerships that guarantee jobs for service members who complete degree programs. It also could prioritize mapping of credits to programs that align with these high-demand jobs and industries in areas where employers commit to hiring credential earners.

## Demystifying Accreditation Requirements

The Higher Learning Commission (HLC), the accreditation body for Kansas, allows up to 45 credits to be awarded to service members at a community or technical college based on their military skills and experiences, and up to 90 credits at a university. Specifically, HLC establishes:

- “That 30 of 120 credits for a bachelor’s degree and 15 of 60 credits for an associate degree be earned at the institution itself.”
- “That institutions have clear policies on their maximum allowable credit for prior learning as a reasonable proportion of credits required to complete the students’ program.”
- “And that credit awarded for prior learning is documented, evaluated, and appropriate for the level of degree awarded (which does not apply to credit transferred from other institutions).”<sup>xix</sup>

HLC is more specific than other major accreditation agencies (e.g., it quantifies the minimum number of credits that must be awarded by the credential-granting institution). However, the other major accreditation agencies have similar policies requiring institutions to establish consistent policies and ensure the quality of credit accepted (see SACSCOC<sup>xx</sup> and MSCHE<sup>xxi</sup>). Helping institutional teams know and understand the limiting factors related to accreditation can help smooth the process of awarding credit for prior learning.



## An Institutional Approach to Recognizing Military Learning

Indiana Wesleyan University and Lone Star College represent institution-level cases of mapping military learning to college credit. Even when mapping is approached at a system level, the institution is where service members are awarded credits and earn credentials for employment. As accredited institutions that award credits and credentials, colleges can vastly improve military students' civilian educational journeys by formally acknowledging the skills and experiences they have already demonstrated.

*At IWU, awarding credit for military-based learning to meet core requirements, not just electives, was made possible through access to military occupational training documentation, which provided clear evidence to faculty that service members have the college-level competency they need to earn their degree without repeated coursework.*

**- Deanna Bowman,**

Project Manager at Indiana Wesleyan University

*You need an interpreter on the staff side to explain how to map programs. We had a military person (me) on the staff side and a faculty liaison from the curriculum team. Being paired together worked perfectly. It started the dialogue, it gives credibility to the mapping, and the program ends up in a language that faculty understands.*

**- Mark Murrill,**

MCAI Instructional Designer at Lone Star College and military veteran

### Institutional Backgrounds

Indiana Wesleyan University (IWU) is a private, nonprofit, Christian, comprehensive institution located in Marion, Indiana. IWU enrolls over 13,000 students, 10,000 of whom are students through IWU's national global online campus that offers accelerated pathways to postsecondary credentials. The online nature of IWU's degree programs allows them to reach service members regardless of location. Prior to MCAI, IWU built a military-specific Associate of Science in Public Service and Management<sup>xxiii</sup> using a "bucket design," where blocks of military learning were applied to blocks of credit in this degree. This approach gave IWU greater flexibility in awarding credit for military learning because it was not limited by a course-to-course articulation.

Lone Star College (LSC) in Texas is a large, public, community college district with seven campuses and more than 10 smaller sites spread across the greater Houston area. It enrolls more than 85,000 students. While LSC's service area does not include military bases, it maintains strong relationships with several of the largest military installations in the United States so that it can help service members in their educational pursuits.<sup>xxiii</sup> These relationships position LSC well to serve service members' needs for postsecondary education. Prior to MCAI, LSC had mapped military learning to several courses based on the military branch and occupations of its enrolled service members. For example, due to its connections with medical training facilities at Joint Base San Antonio, LSC had already mapped military learning to health care degrees such as nursing and dental hygiene.

## Mapping Military-to-Civilian Learning at IWU & LSC through MCAI

Through MCAI, IWU and LSC sought to map military learning to specific degree programs based on the four occupational areas designated in the grant. The initiative's equity-first approach was a shift for the colleges, which had previously mapped military occupations based on individual student enrollments. In MCAI, they proactively mapped the military occupations which had the largest representation of Black, Hispanic, and Native American service members.

IWU and LSC used market research – informed by Emsi data on projected job growth and high-value careers – to select the degree programs to which they mapped military learning. Staff at these institutions also indicated that programs leading to high-demand, high-wage jobs were the preferred choices. IWU built on its experience with “bucket design” in the Associate of Science in Public Service and Management program to create two new degree programs: 1) an Associate of Science with a major in Operations Management with specializations in Advanced Manufacturing Process and Logistics Management and 2) a Bachelor of Science in Service and Leadership Management. IWU also launched an undergraduate Human Resources Certificate program, which stacks into its existing Bachelor of Science in Human Resource Management. Finally, it created a non-credit certificate program in Advanced Manufacturing that stacks into the Manufacturing specialization. LSC mapped military learning to two Associate in Applied Science degrees, one in Logistics Management and another in Business Administration.

Both institutions mapped military learning to course and program outcomes by building ownership with faculty. They centered faculty in the mapping process to ensure that military learning was high quality and thus help create accelerated pathways to degrees.

Through these accelerated programs, IWU and LSC were further incentivized to map military-to-civilian learning because of its potential to increase service members' enrollment at their institutions. These colleges experienced some obstacles in their mapping process, such as translating military learning experiences into civilian learning outcomes and navigating the academic approval processes. To overcome these obstacles, colleges employed and included military-affiliated faculty and staff in the mapping process.

On the next page are the steps taken by IWU and LSC to map military-to-civilian learning and the important considerations for each step.



## Mapping Steps

## Important Considerations

**01** **Colleges identified military-affiliated faculty and staff to champion the mapping process:** Both colleges leveraged faculty and staff who were military-affiliated and who had subject matter expertise in the discipline being mapped. IWU and LSC partnered with military-affiliated faculty, and LSC also hired former military logisticians to serve as an instructional designer and a project coordinator.

Project leads and faculty at IWU and LSC emphasized that having *faculty* subject matter experts was essential to institutional success. These individuals championed the adoption of the mapping process and created ownership among their peers.

**02** **Institutions identified staff (registrars, project leads, instructional designers) to crosswalk military competencies to course and program learning outcomes and to determine how much credit to award:** Using military occupation and training manuals provided by SOLID and the ACE Military Guide evaluations, college staff first narrowed down military learning that could be applied to college courses and crosswalked these to the college's course and program learning outcomes. Staff compiled sets of recommendations for credit that could be awarded toward specific courses and prerequisites.

Hiring project *staff* who had military experience in the discipline area helped LSC improve the mapping process. Such staff could offer faculty experts important insights into what military learning could translate to credit. This strategy for project leadership points to the positive and persuasive influence of veterans in mapping military-to-civilian learning.

**03** **Institutions prioritized awarding course-specific credit:** IWU took an innovative approach for some programs, awarding credits in a "subject bucket," in which a set of military competencies counted toward a grouping of credits in a learning area. These credits counted directly toward the degree and were not elective credits.

Convening faculty curriculum teams to review crosswalks and validate, decline, and suggest additional alignment to create military-to-civilian pathways helped build faculty ownership at both colleges. Institutional staff indicated that, where applicable, faculty also helped ensure alignment with industry standards and licensure and certification.

**04** **Institutions submitted the programs that map military-to-civilian learning to their academic approval processes:** Before a program was finalized, curriculum teams ran the programs that map military-to-civilian learning through the institution-specific processes of academic approval.

Colleges said the academic approval processes was easier to navigate when military-affiliated faculty champion programs; these faculty can credibly address questions about the quality of military learning and how it meets or exceeds academic standards.

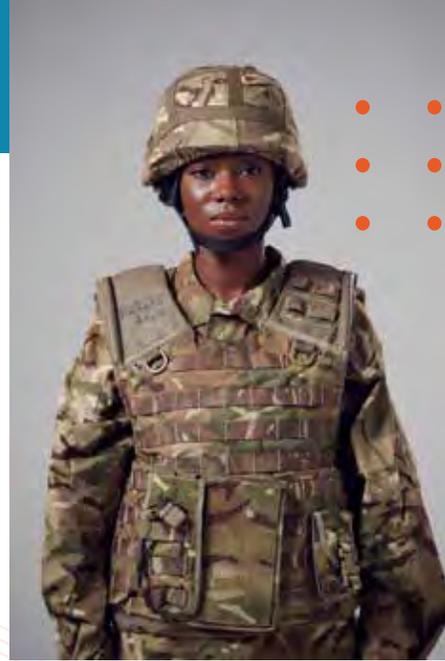
**05** **Institutions created policies and processes for awarding credits for prior military learning:** Colleges created processes to evaluate military transcripts during the student's application process. The registrar or admissions staff manually initiate the evaluation process on the student's behalf.

Moving forward, automation is an important objective to ensure that credits are applied systematically for all service members across all programs. Thinking about how to achieve a systematic process at the outset of the process to map military-to-civilian learning is an essential aspect of this work.

*We do not want students to repeat what they have already learned. Students come to us with a myriad of collegiate-level learning experiences from their military service and beyond. As much as possible, we transfer these credits to meet actual, program-specific requirements through equivalency and bucket design. While there are times certain credits transfer as electives, it is a last resort, not the first.*

**- Deanna Bowman,**

Project Manager at Indiana Wesleyan University



## Key Strategies

Key strategies that IWU and LSC leveraged included:

- Institutional academic approval processes.
- Prior learning assessment (PLA) policies.

Individual institutions navigate their own policies, state policy (where applicable), and accreditation regulations to provide high-quality programs for service members. One of the major policies IWU and LSC navigated was the academic approval processes, and that created some challenges for the colleges. Before embarking on the mapping process, IWU and LSC recommend that programs know or determine in advance what documentation would be required, per institutional policy, to demonstrate military learning as equivalent to the college's course credit. Also, the colleges say it's important to involve faculty who are military-affiliated and who are subject matter experts. Such faculty can facilitate a smoother approval process because they can answer questions about the quality of learning on both sides of the equation and interpret military jargon.

As highlighted in the case of the Kansas Board of Regents (see page 12), accreditation agencies outline requirements for institutional Prior Learning Assessment (PLA) policy. Such requirements typically invest institutions with considerable autonomy to create common definitions, communicate the process to students, and establish the amount of credit awarded for prior learning. To facilitate their successful mapping processes, IWU and LSC relied on their PLA policies covering how to assess prior learning and award credit.<sup>xxiv</sup> Aligning the mapping of military-to-civilian learning with established policies and processes for prior-learning credit helped ensure institutional consistency and transparency. A college's PLA or credit for prior learning (CPL) policies also address residence requirements – how many credits must be completed at the granting institution – and any cap on the number of transfer credits accepted. PLA policies may also include a description of fees, though charging fees to evaluate military learning presents additional barriers for service members.

## Moving Forward

As IWU and LSC look to continue scaling and systematizing their mapping of military-to-civilian learning, they should expand their efforts to include additional military occupations. These institutions can further their progress toward systematization by automatically awarding credit to applicants who provide their branch, occupational specialty, and rank. Automation requires robust student information systems, as well as training for admissions and registrar staff responsible for awarding credit for military learning.

A key benefit of systemization is that it means service members no longer have to *individually* demonstrate their military skills and experiences. In addition, although these colleges have taken steps to prioritize programs that lead to high-demand fields, a direct connection to employment is not currently part of the process. By leveraging community and business partnerships, colleges can expand opportunities with local and regional employers to guarantee jobs for service members who complete degree programs. Colleges can also prioritize mapping of military-to-civilian learning to programs that feed into high-demand jobs and industries in regions where employers commit to hiring credential earners.

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*PLA is something service members have to know exists and then know to apply for it. We find students are overly humble and don't recognize that they already have earned college credits because of their experience. And many don't know PLA exists. Our hope is that we can semi-automate PLA, we can create easier processes, and we hope to help students to anticipate the credit and get it easier.*

**- Administrator,**  
Lone Star College

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## A Training Organization Approach to Recognizing Military Learning

The Utility Workers Union of America’s (UWUA) Power for America Utility Worker Military Assistance Program (UMAP) demonstrates how military learning can be recognized by a civilian training program. UMAP is an important example of how an industry training organization partners with a local community college to provide job-specific training that meets industry standards and needs. Importantly and uniquely, UMAP leverages military skills and experiences to customize training for service members that leads to guaranteed employment. This approach is timely given the recent passage of the federal Infrastructure Investment and Jobs Act. That law includes \$65 billion to upgrade American’s power infrastructure, including \$10 million for career skills training grants;<sup>xxv</sup> UMAP serves this industry sector and provides career skills training.<sup>xxvi</sup>



*Our overall philosophy is that the training leads to a middle-class lifestyle in careers where someone can raise a family, buy a house, send their kids to college, and be able to retire. All of the jobs we train for are aligned with good employers who will take care of their workers. We are looking for people who want to stay with these companies for their career, until retirement and individuals who are willing to commit to them*

**- Jon Harmon,**

Executive Director at UWUA Power for America



### UWUA Power for America & UMAP Background

UWUA is a union representing more than 50,000 utility workers across the United States.<sup>xxvii</sup> It manages the Power for America training trust, and in 2009 established a partnership with 12 employers in the utility industry across 11 states to provide training and apprenticeship programs for current and future workers.<sup>xxviii</sup> UMAP is one of the Power for America programs that focuses on training service members for jobs in the gas utility industry.<sup>xxix</sup>

UWUA Power for America began offering the UMAP training program in Chicago in 2012. UMAP is a six-month, cohort-based training program for service members that results in a high-wage job at People’s Gas. Trainees attend classes and applied learning labs from 8 am to 5 pm each day. UMAP is free for service members, and the program includes a paid internship during the last month of the program.

Predating the MCAI grant, and through consensus with leaders at the union, at the community college, and the employer, UMAP accepted service members from all military occupations, and prospective students participated in a competitive application process to be admitted. Each UMAP cohort ranges from 10-25 service members, and as of January 2022 the program has served over 700 service members. According to program leaders, 40% of graduates are Hispanic, 39% are African American, and 16% are women.

A unique aspect of UMAP is a partnership with Kennedy King College in which service members earn credit toward a postsecondary certificate and associate degree. Power for America also partners with community-based organizations to provide student supports such as transportation expenses, funding for equipment, child care, groceries, and housing. These basic needs supports are essential, since service members earn no wages during the program.

*The reason why People's Gas and others wanted UMAP were three big things: They wanted someone who could show up on time and would work from 8am-5pm reliably, they wanted an individual who wasn't going to put up any issues wearing safety equipment – their PPE – and they wanted someone who was drug-free. Our veterans do these three things, and they show up early for every shift and stay late.*

**- Jon Harmon,**

Executive Director at UWUA Power for America

## Mapping Military-to-Civilian Learning for UMAP through MCAI

During MCAI, the mapping process for the targeted military occupation specialties revealed opportunities for service members to receive waivers for some courses embedded in the UMAP training. With course waivers, program participants could have more time for field experience. This poses a challenge in a cohort-based training model designed to give all students a common experience. Though UWUA indicated it intended to grant course waivers, as of November 2021 UWUA and Kennedy King College had not discussed awarding course waivers and college credit for military skills and experiences. Nor had they explored the potential for accelerating the training program or enhancing it with more field experience.

UWUA began the mapping process by comparing the broad competency areas of service members to those needed for successful employment in the gas industry. In reviewing military skills and experiences, they focused on physical, office and computer, communication and teamwork, safety, and technical skills needed in the gas utility industry. UWUA Power for America brought industry and military trainers together to discuss learning outcome articulation and to increase the level of confidence for aligning learning across military and industry sectors.

One the next page are the steps taken by UWUA Power for America to map military-to-civilian learning and the important considerations for each step.

## Mapping Steps

## Important Considerations

**01 UWUA Power for America identified key competency areas and industry-specific requirements for the UMAP training program:** UWUA used its training curriculum and identified five competency groups: physical, office and computer, communication and teamwork, safety, and technical skills. These included specific industry requirements such as Commercial Driver’s License (CDL) and Occupational Safety and Health Administration (OSHA) levels 10 and 30.

The industry competencies in the UMAP training program are akin to those in college non-credit and workforce development programs, which are typically outside of credit-bearing academic programs. Creating the “course catalog” for the training program creates a common way to compare competencies between academic programs and training programs. It is a precursor for mapping military-to-civilian learning.

**02 UWUA documented learning that occurred through military training:** UWUA gathered the documents – called “exhibits” – that outline the weekly and daily curriculum covered during military training as well as the number of seat hours by topic.<sup>xxx</sup> They relied on the JST, CCAF, DD214, and the ACE National Guide for employers and trainers.

UWUA cited the importance of using the ACE National Guide that has archives of industry training, pointing out that learning is verified by peer trainers who are industry subject matter experts. This signals credibility and legitimacy of the recognized learning.

**03 UWUA aligned military training with industry employment standards:** UWUA mapped, by training topic, military training exhibits with industry competencies required for entry-level jobs and jobs at pay scale steps 1 and 2. UWUA then translated military training into industry language (e.g., what physical and stamina test was required in the military and what is the industry equivalent).

Details matter for employers. To ensure the quality of mapped and translated competencies, it is important that there is a high level of detail in the aligned competencies. For example, regarding physical competencies, it is important to know exactly how many pounds the service member had to carry so it can be mapped to requirements for extreme weather scenarios in the gas industry.

**04 Industry trainers (similar to faculty subject matter experts) reviewed and validated mappings:** UMAP trainers and curriculum designers validated or declined the mappings, checking for quality in military training experiences and noting any certifications needed to complete the industry training.

UWUA said the detail in military training exhibits made it easy for curriculum designers and trainers to understand the quality of learning that service members bring from seemingly disparate fields (e.g., food service, human resources).

## Moving Forward

UMAP is an exemplary training program that provides credits, credentials, and employment for service members. To further expand the systematic application of military learning to its training programs, UWUA Power for America should consider the benefits of offering course waivers to service members. Such waivers, offered by colleges based on students' prior military training, could reduce redundant learning, create more opportunities for field experience, and shorten the training program. Clearly, granting credits and course waivers upon entry would necessitate changes in the program – perhaps multiple cohorts with different program lengths based on credits awarded for prior military learning. This adjustment also has implications for how program resources are distributed among the college and UWUA.

Granting credit for service members' prior experience and skills allows them to pursue degrees and certificates beyond those that UMAP offers. It also could provide a clearer pathway for service members who want to earn bachelor's or master's degrees. Additionally, enrollment in the UMAP program is currently limited by the number of jobs that employer partners will guarantee for completers. Exploring strategies to increase that number – by adding new partnerships or expanding existing ones – could help the UMAP program scale even further.



## Lessons for Scale and Systematization

Three key lessons emerged from these cases regarding critical and non-negotiable aspects of mapping military-to-civilian learning – regardless of the type of organization or institution engaging in the work.

**First, it is critical to establish faculty ownership in the mapping process by engaging subject matter experts (SMEs) to review military competencies for occupational specialties.** This essential early step builds trust and rapport among SMEs that occupy different professional spaces in the military or in civilian postsecondary institutions and training organizations. On the civilian side, faculty ownership of the mapping process creates the evidence base and quality assurance needed to systematize awarding credit for prior learning to service members. Another lesson from MCAI is that many faculty members at colleges and universities are also veterans. These individuals are a critical resource because they can translate military jargon and have credibility with both civilian and military peers. Gaining faculty ownership and leadership in mapping military competencies to civilian courses and programs is an essential building block for systematizing the process and shifting the onus of awarding credit for prior learning from individual service members to the system, institution, or organization.

**Second, a supportive policy environment should allow for and incentivize systematic processes over ad hoc practices.** At scale, this policy environment would be set at the system-level so all institutions in a state would operationalize the awarding of credit for military learning using common processes, such as the Military Articulation Portal in Kansas. A governing or coordinating body can build ownership for mapping military competencies to civilian programs among state policymakers and among the state’s community colleges and universities. System offices can leverage their infrastructure and capacity to support the work – using designated staff, convening subject matter experts, and developing systemwide tools that standardize the number of credits awarded by occupational specialty. System offices can also bring financial resources to the table and can influence and coordinate state policy to maximize the awarding of credit for service members’ prior learning.

**Third, executive-level leadership and support is needed to create expectations for scale and systemization, and to ensure accountability for its implementation.** Executive leadership is especially important at the institutional level because colleges and universities are where system-level policies and accreditation rules are ultimately interpreted. It is only through campus-level leadership that the practice of recognizing military experience and awarding civilian credit ultimately becomes systematized and scaled. Without it, the process remains ad hoc and individualized. For the UMAP training program, leaders at the union, community college, and employer agreed that service members in seemingly disparate military occupations (including food service, personnel and administration, and warehousing/logistics) had the skills and competencies necessary to complete college-level coursework and finish rigorous customized training for employment in the gas industry.



## Recommendations

The cases, lessons, and recommendations outlined in this Scaling Guide can help postsecondary institutions and training organizations recognize the military skills and experiences service members bring with them and award them the credit they deserve.

To scale and systematize the mapping of military-to-civilian learning, it is important to

- Establish and execute this work as a system-level, state priority.
- Prioritize mapping of programs that lead to high-demand jobs and from occupational areas with majorities of low-income and minoritized service members.
- Build towards systemization through automated processes.

The primary goal of this work to scale and systematize the mapping of military-to-civilian learning should be to shift from requiring service members to individually demonstrate their learning to automatically awarding credits or waivers for high-quality military experiences.

On the next page are three recommendations for state postsecondary systems, institutions of higher education, and training organizations towards accomplishing this goal.

**01 Organizations should invest in developing the necessary infrastructure for systematically awarding credit for prior military learning.** Creating an online, digital resource that automates awarding credit for military learning shifts the onus from the student and alleviates the burden on institutions or training organizations. Technology solutions such as Kansas' Military Articulation Portal and SOLID's proof-of-concept tool, LCAT, make it easier to award credit and allow organizations and institutions to recognize credit that has already been validated by faculty subject matter experts. This infrastructure helps increase the scaling of mapped programs. If the military mapping process begins with the goal and vision for this infrastructure, systematization can occur more seamlessly, and service members will benefit by having clear knowledge of what credit they will receive.

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**02 Organizations should clarify policy requirements and remove policy barriers at the state and local levels.** Organizations will encounter accreditation, PLA, academic approval, and industry policies as they seek to map military-to-civilian learning. Understanding these policies in advance can help those engaged in mapping to better understand the policy and regulatory environment they must navigate. Examining these policies in advance also offers opportunities to remove policy barriers that create inequities, such as caps on credit for prior learning and military transcript evaluation fees. One way for systems to facilitate the mapping of military-to-civilian learning is to create statewide policies that affect all programs in an institution or organization and that includes processes that are systematized. Clarifying and removing policy barriers will help organizations award more credit for military learning so that service members need not justify or advocate for the credit they deserve.

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**03 Organizations should leverage military and faculty subject matter experts strategically by leveraging resources that detail military learning to expedite the mapping process.** It is critical for subject matter experts, especially military-affiliated staff and faculty hired by the organization, to be engaged in validating military-to-civilian learning as they provide legitimacy and credibility to the process. Leveraging resources such as military occupation and training manuals and training syllabi, ACE National and Military Guides, and competency and task statements can help organizations more efficiently align military and civilian learning. A challenge for this effort is that many of these resources are not publicly available. For the MCAI project, they were curated by and provided to grantees by SOLID. It is essential that postsecondary institutions and training organizations can access these materials to scale and systematize mapping of military-to-civilian learning. When military and faculty subject matter experts are engaged to validate military-to-civilian learning in a collaborative and efficient process, more credits can be awarded to service members.

## Resources Used by Grantees for Mapping

- **Military Competencies and Tasks (Skills & Abilities) Statements developed by SOLID LLC**  
For more information, contact SOLID <https://solidinfodesign.com/contact/>
- **Military Occupation and Training Manuals and Training Syllabi, curated by SOLID LLC and through grantee contacts with military training schools**  
For more information, contact SOLID <https://solidinfodesign.com/contact/>
- **The ACE Military Guide (for higher education grantees)**  
<https://www.acenet.edu/Programs-Services/Pages/Credit-Transcripts/Military-Guide-Online.aspx>
- **The ACE National Guide (for industry training partners)**  
<https://www.acenet.edu/National-Guide/Pages/default.aspx>

## Additional Reading

- **Best Practices for Recognition of Military Training and Experience for Occupational Credentials**  
<https://solidinfodesign.com/best-practices-for-recognition-of-military-training/>
- **Informing Improved Recognition of Military Learning**  
<https://www.air.org/project/informing-improved-recognition-military-learning>
- **National Veteran Education Success Tracker: A Report on the Academic Success of Student Veterans Using the Post-9/11 GI Bill**  
<https://www.luminafoundation.org/files/resources/veteran-success-tracker.pdf>
- **Recognition of Learning Across Military and Corporate Settings: How ACE Blends Standard Processes, Disciplinary Expertise, and Context to Ensure Quality**  
<https://www.wiche.edu/key-initiatives/recognition-of-learning/synthesis-brief/>
- **Recognizing Prior Learning in the 21st Century: A Synthesis Brief**  
<https://www.wiche.edu/key-initiatives/recognition-of-learning/synthesis-brief/>
- **The Future of Credentialing of Servicemembers and Veterans: Leveraging Partners, Policies, and Resources**  
<https://www.legion.org/sites/legion.org/files/legion/publications/35VEE0221-The-Military-Credentialing-Advancement-Initiative-Report.pdf>
- **The State of Credentialing of Service Members and Veterans: Challenges, Successes, and Opportunities**  
[https://www.legion.org/sites/legion.org/files/legion/publications/25VEE0517%20The%20State%20of%20Credentialing\\_0.pdf](https://www.legion.org/sites/legion.org/files/legion/publications/25VEE0517%20The%20State%20of%20Credentialing_0.pdf)

## Endnotes

- <sup>i</sup> National Postsecondary Student Aid Survey (NPSAS). (2015-16). <https://nces.ed.gov/pubs2020/2020488rev.pdf>
- <sup>ii</sup> See for example: Goldrick-Rab, S., Kelchen, R., Harris, D., and Benson, J. (2016) Reducing Income Inequality in Higher Education: Experimental Evidence on the Impact of Financial Aid on College Completion. *American Journal of Sociology*, 121(6): 1762-1817; Castleman, B. and Long, B.T. (2012). *Looking Beyond Enrollment: The Causal Effect of Need-Based Grants on College Access, Persistence, and Graduation*. National Center for Postsecondary Research (NCPR); Mundel, David S. (2008). "What do we know about the impact of grants to college students?" In Baum, McPherson, and Steele, Eds. *The Effectiveness of Student Aid Policies: What the Research Tells Us*. The College Board; Chait, R. and Venezia, A. (2009). *Improving Academic Preparation for College: What We Know and How State and Federal Policy Can Help*. Center for American Progress; Adelman, C. (1999). *Answers in the Toolbox*. US Department of Education; Cate, C.A., Lyon, J.S., Schmeling, J., & Bogue, B.Y. (2017). *National Veteran Education Success Tracker: A Report on the Academic Success of Student Veterans Using the Post-9/11 GI Bill*. Student Veterans of America, Washington, D.C.; Boatman, A., Hurwitz, M., Lee, J., and Smith, J. (2018). The Impact of Prior Learning Assessments on College Completion and Financial Outcomes. *The Journal of Human Resources*, 55(4): 1161-1193.; Chingos, M.M. (2018). *What Matters Most for College Completion? Academic Preparedness is a Key Indicator of Success*. American Enterprise Institute, Washington D.C.
- <sup>iii</sup> National Veteran Education Success Tracker: A Report on the Academic Success of Veterans Using the Post-9/11 GI Bill <https://www.luminafoundation.org/files/resources/veteran-success-tracker.pdf>, Accessed March 21, 2022.
- <sup>iv</sup> Calculations by DVP-PRAXIS LTD using PowerStats, March 21, 2022.
- <sup>v</sup> Hill, C. B., Kurzweil, M., Pisacreta, E. D., & Schwartz, E. (2019, January 10). *Enrolling More Veterans at High-Graduation-Rate Colleges and Universities*. <https://doi.org/10.18665/sr.310816>
- <sup>vi</sup> The American Legion (2017). *The State of Credentialing: Challenges, Successes, and Opportunities*. Indianapolis, IN.
- <sup>vii</sup> See for example: Travers, N. L. (2012). What is Next after 40 Years? Part 1: Prior Learning Assessment -- 1970-2011. *Journal of Continuing Higher Education*, 60(1): 43-47.; Duncan, A.G. (2022). *Partners in a New Learning Model: Competency-Based Education and Credit for Prior Learning*. Council for Adult and Experiential Learning and Competency-Based Education Network.
- <sup>viii</sup> e.g., JST, CCAF, DD214
- <sup>ix</sup> ACE Military Guide. <https://www.acenet.edu/Programs-Services/Pages/Credit-Transcripts/Military-Guide-Online.aspx>
- <sup>x</sup> There are also "Warrant Officers," but there are far fewer of them.
- <sup>xi</sup> Data compiled and analyzed by SOLID LLC from the Defense Manpower Data Center
- <sup>xii</sup> Education Commission of the States, Postsecondary State Profile – Kansas (2020). <https://reports.ecs.org/comparisons/view-by-state/60/KS>
- <sup>xiii</sup> Major Military Bases in Kansas: Ft. Riley Army base in Riley, KS; Ft. Leavenworth Army base in Leavenworth, KS; and McConnell Air Force Base; in addition to smaller bases, national guard, and reserve unit bases.
- <sup>xiv</sup> Veterans as a Percent of the Population: Kansas. [https://www.va.gov/vetdata/docs/SpecialReports/State\\_Summaries\\_Kansas.pdf](https://www.va.gov/vetdata/docs/SpecialReports/State_Summaries_Kansas.pdf)
- <sup>xv</sup> Midwestern Higher Education Compact, Multi-state Collaborative on Military Credit. <https://www.mhec.org/policy-research/multi-state-collaborative-military-credit>
- <sup>xvi</sup> Kansas Board of Regents, Military Articulation Portal. <https://military.kansasregents.org>
- <sup>xvii</sup> Kansas Credit for Prior Learning Guidelines [https://www.kansasregents.org/resources/August\\_2021\\_Kansas\\_Credit\\_for\\_Prior\\_Learning\\_Guidelines.pdf](https://www.kansasregents.org/resources/August_2021_Kansas_Credit_for_Prior_Learning_Guidelines.pdf)
- <sup>xviii</sup> Kansas Board of Regents Policy Manual. <https://www.kansasregents.org/resources/Other/BoardPolicyManual.pdf>
- <sup>xix</sup> Higher Learning Commission Assumed Practices: CCRT.B.10.020 B.1.b-d. <https://www.hlcommission.org/Policies/assumed-practices.html?highlight=WyJwcmVvcjIsImx1YXJuaW5nIiwicHJpb3IgbGVhcm5pbmciXQ>  
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- <sup>xx</sup> Southern Associations of Colleges and Schools Commission on Colleges (SACSCOC) Section 10: Policies for awarding credit 10.8. [https://sacscoc.org/app/uploads/2020/01/Patricia-Donat\\_Section-10-Educational-Policies-Procedures-and-Practices-Answer-Key.pdf](https://sacscoc.org/app/uploads/2020/01/Patricia-Donat_Section-10-Educational-Policies-Procedures-and-Practices-Answer-Key.pdf)
- <sup>xxi</sup> Middle States Commission on Higher Education (MSCHE) proposed Transfer of Credit, Prior Learning, Articulations Agreements Policy, Procedures, and Guidelines (2021). <https://msche.app.box.com/s/ecbtzi6zio7qrsnlte4ibbj5ybbv32d>
- <sup>xxii</sup> IWU Military-Specific Degree Programs. <https://www.indwes.edu/military/>
- <sup>xxiii</sup> The Airforce, Army, and Navy all have major bases in Texas for a total of 15. The bases closest to the Houston area are: Ft. Hood Army base Killeen, TX; Randolph Air Force Base, Lackland Air Force Base, and Ft. Sam Housing Army Base near San Antonio; Naval Air Stations Kingsville and Corpus Christi near Corpus Christi. Texas is also well known for large Army base Ft. Bliss on the west side of the state.
- <sup>xxiv</sup> IWU PLA Policy (2021): [https://www.indwes.edu/about/student-consumer-information/assignment-of-academic-credit-at-indiana-wesleyan-university/assignment\\_of\\_academic\\_credit\\_at\\_indiana\\_wesleyan\\_university\\_\\_current.pdf](https://www.indwes.edu/about/student-consumer-information/assignment-of-academic-credit-at-indiana-wesleyan-university/assignment_of_academic_credit_at_indiana_wesleyan_university__current.pdf)
- <sup>xxv</sup> Association for Career and Technical Education, CTE Policy Watch (2021). <https://ctepolicywatch.acteonline.org/2021/11/education-workforce-investments-in-bipartisan-infrastructure-bill.html>
- <sup>xxvi</sup> The White House. (2021). Infrastructure Investment and Jobs Act. <https://www.whitehouse.gov/bipartisan-infrastructure-law/>
- <sup>xxvii</sup> UWUA. <https://uwua.net/join-uwua/>
- <sup>xxviii</sup> Power for America. <https://power4america.org/discover/>
- <sup>xxix</sup> UMAP. <https://uwua.net/umap/>

## Appendix A

### Scalability Considerations for Resources Used by MCAI Grantees

Type of Source	Description	Considerations Regarding Scalability	Sources	Source/Site Owner	URL	Publicly Available	SOLID Extraction/Analysis Required	SOLID Analysis Performed
Occupational Manual	Narrative description of military job duties	• Publicly available but institutions may not be aware of how to find	Navy Enlisted Occupational Classification Standards (NEOCS) Manual Volume 1	Navy Personnel Command	<a href="https://www.mynavyhr.navy.mil/References/NEOCS-Manual/NEOCS-Vol-I/">https://www.mynavyhr.navy.mil/References/NEOCS-Manual/NEOCS-Vol-I/</a>	Yes	Yes	SOLID's expertise was required to extract and manipulate data from each source on the list in order to prepare files for analysis by the grantees. This included activities such as extracting data from pdfs, combining multiple sources for a Service/MOC, mapping civilian work activities to tasks, and developing a methodology for competency statement generation.
		• Degree of detail in occupational manuals varies by Service"	Marine Corps Military Occupational Standards (MOS) Manual	USMC, Training and Education Command Site (TECOM)	<a href="https://www.marines.mil/News/Publications/">https://www.marines.mil/News/Publications/</a>	Yes	Yes	
			Marine Corps Training and Readiness (T&R) Manual	USMC, Training and Education Command Site (TECOM)	<a href="https://www.marines.mil/News/Publications/">https://www.marines.mil/News/Publications/</a>	Select	Yes	
			Air Force Enlisted Classification Directory (AFECD)	U.S. Air Force E-Publishing	<a href="https://www.e-publishing.af.mil/">https://www.e-publishing.af.mil/</a>	Yes	Yes	
			Air Force Career Field Education & Training Plan (CFETP)	U.S. Air Force E-Publishing	<a href="https://www.e-publishing.af.mil/">https://www.e-publishing.af.mil/</a>	Yes	Yes	
			Army Military Occupational Classification & Structure (Pamphlet 611-21)	Department of the Army, Army Publishing Directorate	<a href="https://armypubs.army.mil/Product-Maps/Pub-Form/PAM.aspx">https://armypubs.army.mil/Product-Maps/Pub-Form/PAM.aspx</a>	Yes	Yes	
			Solider Training Publications	Department of the Army, Army Publishing Directorate	<a href="https://armypubs.army.mil/default.aspx">https://armypubs.army.mil/default.aspx</a>	Select	Yes	
Occupational Task File	Database of occupational tasks	Database no longer available	UniFORM Database	Department of Defense, Office of People Analytics (OPA)	Application no longer available	No	Yes	
Occupational Competencies	Derived for MCAI from tasks, skills, and abilities to test value in providing credit for prior learning (CPL)	Not available outside of MCAI	U.S. Navy Commonality Decision Support Tool (CDST)	Navy Manpower and Analysis Center (NAVMAC)	<a href="https://www.cool.osd.mil/navyecdst/index.html#/">https://www.cool.osd.mil/navyecdst/index.html#/</a>	Yes	Yes	
			UniFORM Database	Department of Defense, Office of People Analytics (OPA)	Application no longer available	No	Yes	
			The Occupational Information Network (O*NET)	Department of Labor	<a href="https://www.oneonline.org/">https://www.oneonline.org/</a>	Yes	Yes	

*Source: Solutions for Information Design, LLC (SOLID)*

## Appendix A

### Scalability Considerations for Resources Used by MCAI Grantees

Type of Source	Description	Considerations Regarding Scalability	Sources	Source/Site Owner	URL	Publicly Available	SOLID Extraction/Analysis Required	SOLID Analysis Performed
Training Materials	Course learning objectives and other course details	<ul style="list-style-type: none"> <li>•Not readily available – must be provided by individual Services upon request</li> <li>Army has made some materials available more publicly</li> </ul>	Upon Service Request	Military Departments	Request service Army - <a href="https://army-university.edu/registrar/coursecatalog.aspx">https://army-university.edu/registrar/coursecatalog.aspx</a> "	No	No	N/A
American Council on Education (ACE) Evaluation Outcomes	ACE Military Guide provides college credit recommendations for military training and experience	<ul style="list-style-type: none"> <li>• ACE Military Guide is publicly accessible</li> <li>• Not all military training courses or occupational experiences have been evaluated by ACE</li> </ul>	American Council on Education	American Council on Education	<a href="https://www.acenet.edu/Programs-Services/Pages/Credit-Transcripts/Military-Guide-Online.aspx">https://www.acenet.edu/Programs-Services/Pages/Credit-Transcripts/Military-Guide-Online.aspx</a>	Yes	No	N/A
Service Subject Matter Experts	Consulted on military training and experience related to MCAI occupations	Not readily accessible – MCAI grantees leveraged existing contacts during grant	Upon Service Request	Military Departments	Request service	No	No	N/A

*Source: Solutions for Information Design, LLC (SOLID)*

## Appendix B

### Evaluation Design and Approach

The learning evaluation, conducted by DVP-PRAXIS LTD and funded by Ascendium Education Group, engaged with, and provided formative feedback to four pilot sites, including three higher education organizations and one industry training organization. Based on engagement with grantees and a review of existing literature, this Scaling Guide captures best practices in mapping military-to-civilian learning to inform the workforce and education fields on how to enact scaled and systematic processes.

To understand grantee progress toward scaling and systematizing mapping military-to-civilian learning, DVP-PRAXIS developed an evaluation framework to understand how grantees **(1) Articulated and Expanded Military-to-Civilian Pathways**, where organizations enhanced their prior mapping processes to include additional military occupational areas and mapped these occupational areas to additional programs across their organization; and how grantees **(2) Systematized Competency Mapping**, where organizations worked to move from a military occupation-centric design to a competency-based design, allowing the systematic awarding of civilian equivalencies by competency rather than by occupational area, and by moving toward automated awarding of credits for service members based on military learning. This evaluation framework informed data collection around grantees' work – who are leaders in this space – and allowed the evaluation team to identify examples of effective practices as well as common challenges organizations encounter as they map military-to-civilian learning.

Qualitative data collection and analysis occurred between August 2020 and December 2021. The evaluation team conducted virtual interviews with grantees at three times: in October 2020 to gather background information on grantees' prior military-to-civilian work; from December-March 2021 to understand early implementation progress; and in November-December 2021 to learn about the military-to-civilian programs grantees mapped through MCAI. An in-person site visit was also conducted with the training organization in November 2021. Interviews were designed to capture diverse perspectives across the grantee organizations and were limited to those who worked in a "hands-on" way with the MCAI project. For the background interviews, the evaluation team spoke to project managers for each of the grantees (n=13). For the second (n=16) and third (n=18) rounds of interviews, the evaluation team interviewed key project managers, faculty/trainer subject matter experts, and staff who were closely involved in the mapping process. During the site visit, students (n=2) and representatives from partner organizations (n=2) were interviewed in addition to program staff (n=6).

The evaluation team also collected data through two surveys. The first survey captured information on the programs that had been created, the characteristics of these programs (e.g., credential level, credits awarded, stackability), and the resources used to map the program. This survey had a 100% response rate from the training organization (n=1), the individual institutions of higher education (n=2), and the institutions participating with the state system (n=7). The second survey captured information on grantees' common experiences in the mapping process as well as the factors that facilitated and inhibited that process. This survey had 15 responses, including at least one respondent from all grantees.

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