

Dr. Robert R. Greene Sands' Assessing Special Operations Forces Language, Region, and Culture Needs uses his vast experience and knowledge of this subject and draws from the existing Department of Defense Defense Language Transformation Roadmap (DLRT), recent lessons learned, and historical beginnings to outline the importance to the U.S. military, especially the Special Operations Forces (SOF) community. The past decade of counterinsurgency operations has challenged the U.S. military personnel in their ability to carry out a variety of missions involving culturally complex situations and interactions. Success in such operations often depends on difficult linguistic and interpersonal skill-based competencies and abilities. Dr. Sands emphasizes the utility of language skills, along with regional and cultural knowledge and cross-cultural competence, in engaging populations across sometimes uncompromising cultural divides. This monograph provides key lessons learned as U.S. Special Operations Command determines the way ahead for LRC education and training to better prepare the future SOF operator to meet the challenges of operating in complex environments and meet the command's priority to continue to build relationships.

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JSOU Report 16-8 Assessing Special Operations Forces Language, Region, and Culture Needs Sands

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Assessing Special Operations Forces Language, Region, and Culture Needs Leveraging Digital and LRC Learning to Reroute the "Roadmap" from Human Terrain to Human Domain

> Robert R. Greene Sands JSOU Report 16-8



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Assessing Special Operations Forces Language, Region, and Culture Needs

Leveraging Digital and LRC Learning to Reroute the "Roadmap" from Human Terrain to Human Domain

Robert R. Greene Sands, Ph.D.

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On the cover. A United States Special Forces Soldier greets a village elder in Shinkay district, Zabul province, Afghanistan, before conducting a Shura 20 April 2010. Source: U.S. Army Photo by Sergeant Debra Richardson.

Back cover. A Special Forces company commander meets with village elders and members of the 1st Kandak, 209th Afghan National Army Corps, 10 April 2007 to discuss military operations in the Sangin District area at an undisclosed forward operating base in Helmand province, Afghanistan. Source: U.S. Army photo by Specialist Daniel Love.

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Foreword

Dr. Robert R. Greene Sands' Assessing Special Operations Forces Language, Region, and Culture Needs uses his vast experience and knowledge of this subject and draws from the existing Department of Defense Defense Language Transformation Roadmap (DLRT), recent lessons learned, and historical beginnings to outline the importance to the U.S. military, especially the Special Operations Forces (SOF) community. The past decade of counterinsurgency operations has challenged the U.S. military personnel in their ability to carry out a variety of missions involving culturally complex situations and interactions. Success in such operations often depends on difficult linguistic and interpersonal skill-based competencies and abilities. Dr. Sands emphasizes the utility of language skills, along with regional and cultural knowledge and cross-cultural competence, in engaging populations across sometimes uncompromising cultural divides.

Aside from those in a few specialist fields, U.S. military personnel were not trained to any adequate level in language and culture knowledge, skills, and abilities at the start of Operation Enduring Freedom and Operation Iraqi Freedom. In the intervening years, the Department of Defense has made uneven strides in promoting the usefulness of language, region, and culture (LRC) knowledge and skills for the remainder of the force.

Dr. Sands' monograph suggests that a reconceptualization of language and culture learning methods is necessary for United States Special Operations Command to effectively meet the challenge of looming budgetary reprioritizations to language and culture programs, while also promoting innovative blended and distance learning opportunities. He advocates a learning tool and approach that better serves SOF operational capacities and prepares them for their leading role in transnational 'gray zone' operations, where they must deal with a wide variety of ethnic, religious, and cultural groups that transcend geographical boundaries. The author further contends that SOF must be prepared to function in a language and cultural landscape that is highly fluid and dynamic, requiring preparation that goes beyond singular language training and static culture-specific education. He also proposes development of a LRC capability in which language proficiency is only one factor; equally important are learning events that broaden crosscultural competence and culture-general understanding.

Finally, Dr. Sands argues that how these components are brought together and sequenced in learning programs is important, and perhaps more important than their consideration as integral components of LRC capabilities. He contends a stovepiped approach to language and culture study results in an inefficiency of effort and resources. This study also suggests the merging of language and culture into singular learning events increases the learner's proficiency and competence in both. Dr. Sands calls for the institutionalization of such synergistic education and training programs, with curriculum, delivery, and assessment methods that are operationally relevant to the learner to maximize the return on the investment of time.

This monograph provides key lessons learned as U.S. Special Operations Command determines the way ahead for LRC education and training to better prepare the future SOF operator to meet the challenges of operating in complex environments and meet the command's priority to continue to build relationships.

> Kenneth H. Poole, Ed.D. Director, Center for Special Operations Studies and Research

About the Author

Robert R. Greene Sands, Ph.D., is the Director and Senior Fellow of the Institute for the Study of Culture and Language (ISCL) at Norwich University, and President of RGSands, LLC, a full-service culture and language learning provider. Sands teaches in Norwich University's College of

Graduate and Continuing Studies and is the founder and editor of the ISCL's online *Journal of Culture*, *Language and International Security*. From 2008 to 2011, Dr. Sands was Culture Chair and Assistant Professor of Anthropology at the Air Force Culture and Language Center and Air University at Maxwell Air Force Base, Alabama. He was also Director of the Minerva Initiative for Energy and Environmental Security during his tenure at Air University. Dr. Sands has supported the Defense Intelligence Agency and



the U.S. Army, among other organizations, in the development of culture and cross-cultural competence programs across the Department of Defense. He is an accomplished speaker and has presented to organizations such as the Interagency Language Roundtable, U.S. Africa Command, 17th Air Force, the U.S. Air Force Expeditionary Center, the Joint Chaplains College, U.S. Special Operations Command, the JAG School, Advanced Air Mobility Operations School, Joint Military Attaché School, Joint Foreign Area Officer Phase One course, Defense and National Intelligence professionals, among others.

For the last three years, Dr. Sands has worked with Joint Base Lewis/ McChord Language and Culture Center in the development of an innovative program in promoting a synergistic language, region, and culture learning program for operational soldiers. He recently developed the first-ever culture-general and cross-cultural competence massive open online distance learning course, *Operational Culture: Thinking Differently about Behavior in the Human Domain*.

Dr. Sands is the author of seven books and numerous chapters and articles on topics such as cross-cultural competence, environmental security, building partnerships and sustainability, sport and culture, ethnographic theory, and the cognitive origins of religion. His seventh book (co-authored with Dr. Allison Greene-Sands) is *Cross-Cultural Competence for a 21st Century Military: Culture, the Flipside of COIN* (2014, Lexington Books). Dr. Sands holds a BA from Illinois State University, an MA from Iowa State University, and a Ph.D. from University of Illinois, all in anthropology.

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I would also like to thank my wife, Dr. Allison Greene-Sands, who has been a trusted colleague and source of inspiration for my work in researching, developing, and delivering language and culture learning for Department of Defense populations over the last eight years. It is not every day that spouses can share passion and scholarship in hopefully making a difference in the lives and careers of those in the Department of Defense who serve in cross-culturally complex missions around the globe.

Introduction

Wars in Iraq and Afghanistan have proven, acknowledged in the last century by Special Operations Forces (SOF), the utility of language, region, and culture (LRC) skills and knowledge, and cross-cultural competence for operations and missions. The evidence for this can be found in a variety of forms, anecdotes, lessons learned, narratives, interviews, and other means. Any deployed military personnel can attest to the importance of language proficiency and aspects of culture, including interactional skills, knowledge sets, and cross-cultural competencies. However, in an organization that runs on metrics, the return on investment and training time is still hard to quantify and then press for continued growth and development of such programs. LRC lies at a crossroad; its continued utility to the mission is dependent on the institutionalization of education and training (learning) programs, and the continued research and innovation into curriculum delivery and assessment.

The last decade of counterinsurgency (COIN)¹ strained the capabilities of U.S. military personnel to carry out a variety of missions that included building infrastructure, providing security while training security personnel, and growing the span of control of a central government to the provinces and villages. To be successful at this range of operations involved linguistic and interpersonal skill-based competencies and abilities that even an experienced traveler under much different and less trying conditions would find difficult to engage, let alone master. Even more necessary to the missions was local knowledge that if not understood hid the patterns of behavior necessary to engage across cultural divides that were often severe. The Department of Defense (DOD) and its personnel, save for specialized populations such as military linguists, foreign area officers (FAOs), and SOF, for example, were not trained to any adequate level of language and culture knowledge, skills, and abilities (KSAs) at the start of Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF). In the intervening years, the Office of the Secretary of Defense (OSD)² has made uneven strides in promoting the usefulness of LRC for the remainder of the force. A few publications recount the history of language, region, and culture efforts in the DOD and lessons learned have become cobbles that line a road making a bumpy, uneven ride.³

At this point in time, that cobbled road has reached an intersection with the past and the future, and if history has any relevance, there is a distinct possibility that language and culture knowledge and skills will progress back to the future, as assets and programs find dusty shelves.⁴

This monograph will suggest that offering a consolidated LRC learning approach will promote a learning synergy, an efficiency of curriculum development and cost-effectiveness. Recent and ongoing LRC programs also find innovation in learning development, delivery, and assessment promotes a more meaningful learning experience that supports application beyond the learning event. Current LRC learning efforts across the DOD are a superficial consolidation, far from mining efficiencies that make more sense from a learning perspective. More commonly, LRC is used to just house separate programs for funding and resources-sharing. That is certainly a viable reason, but not one that affects learning programs directly.

Chapter 1 highlights the continued need for LRC in the DOD. Currently, the DOD LRC program, for better or worse, is still wedded to assumptions and risks as well as the programs augmented and developed under the guidance issued through the *Defense Language Transformation Roadmap* (DLTR). Thus, OSD Services and commands labor unevenly to meet a much expanded array of missions needing LRC. For SOF, the traditional missions that involved security force assistance (SFA) and foreign internal defense (FID) seen in past efforts, such as Vietnam,⁵ were reduced in COIN, but are now featured as critical to future DOD missions.

The 2014 Quadrennial Defense Review (QDR) poses three 'pillars' of U.S. national security: protect the homeland, build security globally, and project power.⁶ Woven throughout this QDR is the importance of LRC as enablers for building partnership capacity (BPC), which includes training militaries to help fight their own or neighbors' insurgences and terrorists groups and will be critical to how the DOD will approach global security and future conflicts. All Services engage in BPC activities, but training foreign troops to fight insurgency or promote insurgency has been the staple of SOF missions since their inception. In the climate of disappearing conventional missions and a growing need for asymmetrical efforts requiring smaller numbers and special training and skills, SOF become critical. The U.S. Army unveiled its regionally aligned forces (RAF) concept in 2013, certainly as a means to support BPC missions and augment or perhaps supplant efforts by SOF.⁷

Chapter 2 chronicles the history of language learning in the DOD and considers the legacy and continued influence of LRC transformation in response to and after 9/11. Professional linguists, prior to 9/11, primarily supported intelligence activities. Confronted with a world that resisted traditional cold war perspectives, the OSD mounted a plan of guidance and goals for advancing traditional language programs and incorporating a suite of region and culture KSAs in training and education programs. The publication and rollout and the intervening years of the DLTR⁸ featured inconsistent understanding and application of its guidance. Language assessment, clearly defined concepts for region and culture, and an overarching strategy with measures of DOD success, were all found to be problematic by several government reports and difficult to enact by the individual Services. This was especially true for organizations like SOF who were dependent on meaning-ful LRC programs to meet their more complicated mission in OIF and OEF.⁹

Chapter 3 takes a specific look at language proficiency and regional expertise-the initial LRC knowledge and skills that lay at the heart of the DLTR. This report suggests that the concepts that refer to LRC are poorly defined by OSD, lack consensus as to their meaning, and because of that often hide or disguise utility to learning and application. Presently, language, regional expertise, and culture (LREC) refers to a collection of KSAs that, in the case of language, are agreed upon by those involved in developing policy, doctrine, and strategy. There is no agreed upon conceptualization of regional expertise. The concept of culture has been co-opted to fit a variety of needs and intent, and as such, clear and theoretically sound definitions are lacking in OSD policy and doctrine, and OSD and Services' strategy, while having no common reference across the Services.¹⁰ In addition, region and culture were opportunistically added to traditional language programs, and that practice continues today, while only region and culture learning are provided to non-linguist populations. Either option is not optimal, with the latter usually occurring in 'training' events which minimizes the comprehension and the application of concepts introduced outside the training environment. For these reasons, this study will refer to LREC as an OSD construct that carries with it certain suppositions and may not apply to all situations or Services involving LRC.

Chapter 4 explores the notion of the human domain as the interactional space where LRC directly affects mission success. Suggested in this chapter are perspectives and approaches for understanding and interpreting social

and cultural behavior in the human domain, which requires more than a language proficiency and regional understanding. The human domain intersects the more traditional domains engaged by the U.S. military: air, space, sea, and land (joined recently with cyberspace) and introduces the notion that human behavior and interaction may or may not align with natural or physical boundaries or borders. The perspective of space is important to this regard and can act to constrain understanding.

Chapter 5 will feature a discussion of organizational needs met by a SOF LRC program. As discussed earlier, the human domain presents different challenges to be met in part by LRC. A great deal of understanding others' behavior, as well as one's own behavior in novel situations, is met through understanding patterns of behavior that are common across human culture groups. This is both a cognitive and generalist approach and should seed the LRC approach. From this assumption, the goals of an LRC program should render the appropriate KSAs to be developed across the three components. Sets of learning goals and objectives will be identified, and a robust discussion of LRC assessment program for LRC more suited to a synergized and generalist approach being advocated.

Language learning programs follow a traditional approach, which features a reliance on classroom/face-to-face instruction and the expert omniscience of the instructor to carry expertise across the LRC field. Finding an instructor as an expert across all three LRC fields is rare. Without tending to the other fields not covered, the program carries the risk of providing incorrect or biased information to the student, even though a curriculum may be developed that provides the knowledge and skills to be passed to students. Learning is a process that can rarely be fully scripted without the knowledge and expertise of the instructor being used in ad hoc and opportunistic situations. This deficiency of expertise was highlighted by the recent retraction of the U.S. Army's recently published doctrine Cultural Awareness due to bias, plagiarism, and reliance on incorrect information.¹¹

Chapter 6 covers the role of disruptive technology in developing e-learning and distance learning programs. Much of U.S. Government and DOD workforce training is delivered as e-learning and through a learning management system (LMS). A brief history of e-learning and distance learning is provided to set the context for considering a remote learning system for a program like SOF LRC. Over the last decade, ironically lining up with the growth of LRC programs in the DOD, distance learning has been affected by disruptive technology, featuring open-access and online learning programs. A disruptive technology is one that displaces an established technology and shakes up the industry, or a groundbreaking product that creates a completely new industry.¹² Massive online open courses (MOOCs) are the most compelling and representative disruptors. The unique nature of LRC instruction and learning, if synergized, can greatly profit from disruptive technology.

Chapter 7 explores the delivery of LRC and the role of incorporating learning management technology into learning. Essentially, this chapter will suggest that an effective use of this technology can centralize learning and instructional delivery. LMS software technology and the ability to connect that with a robust database has advanced in leaps and bounds. Most business and government workforce training occurs through an LMS. On the other hand, the use of LMSs in higher education have also followed a similar path of development—one system is for training, the other for learning; one system is for managing the learning process, the other system is ripe for disruption through open-sourced/online learning. For LRC learning, disruption could be a benefit, even a game changer. LMS technology should become the centralizing 'forcing' function of instruction and its extraordinary reach of capability should organize all student activities, feature all assignments, evaluate all student work, provide an interactive chat/blog function for the student to diary as well as interact with students and instructor, and provide management course statistics to the instructor. In conjunction with an active LMS, the traditional means of 'teaching' a language and/or culture course can be revamped to take advantage of multiple instructors with different expertise within the language and culture field. Essentially, the LMS becomes the classroom and centralizes the use of instructors. Finally, and perhaps the capability that can allow language and culture instruction to gain instructional effectiveness while promoting efficiency of learning management, is the capability for blended and distance learning, allowing students to expand geographically from the residential classroom. The final section presents a case study of a successful LRC program and course at Joint Base Lewis/McChord. The author has been one of the primary architects of that program for the last three years.¹³

Chapter 8 reviews the study and posits the potentiality of a more useful LRC program for United States Special Operations Command (USSOCOM).

Tradition of language pedagogy in the DOD, the DLTR, and the intractability to move away from existing programs in LRC will be well documented throughout this study as agents that still retain influence in LRC learning programs. This final chapter will suggest that novel and innovative approaches to LRC learning need to be considered as missions involve greater LRC complexity, and LRC learning programs fall victim to budgetary consequences and the rhythm of security involvement worldwide.¹⁴

1. The More Change, the More Things Stay the Same: Language and Culture for the Department of Defense

... on any given day USSOF are working with our allies around the world, helping build indigenous special operations capacity so that our partners can effectively deal with the threat of violent extremist groups, insurgents, and narco-terrorists—themselves. Indeed, SOF focuses intently on building partner capacity and security force assistance so that local and regional threats do not become global and thus more costly—both in blood and treasure.¹⁵

It's hard enough working in a dangerous, uncomfortable place far from home and family. It's tough enough hearing constant criticism from politicians and journalists. But the job can look terminally thankless if you cannot even understand the people you're trying to save.¹⁶

In a 2011 publication in this monograph series, retired Brigadier General Russell Howard made the assertion that cultural insight and language were "important knowledge sets" for military personnel while proceeding to claim that although language and culture competencies were seen as requirements for conventional forces, they were especially significant to Special Forces soldiers.¹⁷ There is no short list of leaders, external experts, or advocates who advance the same position that understanding the cultures of others and self and communicating successfully across oftentimes deep cultural and behavioral divides is a critical enabler for mission success. These voices have been heard this time around since 2006, and a larger DOD audience was told culture was a force multiplier and speaking the languages of those peoples critical to COIN was important and just as telling as the rallying cry from Army leaders to troops to "win the hearts and minds."¹⁸

The OSD and Services have grappled with the application of LRC enablers over the last decade. Some of the issues considered include what languages to concentrate on and teach and how to instruct them, and what elements of

culture and region are important. Even more generally, the question of what is culture and region, and how to get this information and skill development to the forces was problematic. Prior to 9/11, these capabilities were never considered critical, let alone beneficial to the conventional forces, although for special populations, LRC have always been critical for mission success. For example, Special Forces (SF) Green Berets had a legacy of utilizing language and culture for their traditional mission sets well before 9/11. In Vietnam, the success of Green Berets in asymmetrical operations depended on critical language and culture knowledge and interactional skills. Many Green Berets learned Vietnamese and French, and lived with and trained the Montagnard to fight the North Vietnamese.¹⁹

Recently, newer voices advocating the importance of language and culture for SOF have been promoted. Christopher Lamb, National Defense University, argued, "SOF needs to rebuild the language and cultural skills that have declined over the past decade with the majority of its efforts being focused on Iraq and Afghanistan."²⁰ During the most active period of COIN, "85 percent of all Special Forces soldiers were deployed to Iraq and Afghanistan."²¹

The importance of LRC in COIN is found in anecdote and narrative. Quantifying the effects of language and culture in a metric or report, other than how many students are being taught, number of languages, and language proficiency, etc., remains elusive. A changing mission is already in process. For the U.S. Army, RAF²² will promote a more intimate relationship between soldiers, cross-cultural interactions, and missions.

Even after the drawdown in Afghanistan, on any given day the Army will typically have at least 100,000 soldiers forward deployed ... through constant engagement and assessing the effectiveness of activities on the ground among humans, will be well positioned to continue to evolve direct and indirect options for the use of the military instrument for policymakers.²³

The SOF mission is already changing due to realigned DOD strategy. This expansion of mission back to more traditional mission sets involves an increase in mission kinds and frequency, as well as an increase in geographic locations. This recasting for SOF actually echoes the sustained involvement in Vietnam as described by President John F. Kennedy in a commencement speech at West Point at the start of deeper involvement of U.S. troops in Vietnam: "[t]hat this is another type of war, new in its intensity, ancient in its origins – war by guerillas, subversives, insurgents, assassins, war by ambush instead of by combat, by infiltration, instead of aggression, seeking victory by eroding and exhausting the enemy instead of engaging him."²⁴

The 2014 QDR casts SOF in the counterterrorism role but expands its mission "to sustain persistent, networked, distributed operations to defeat al Qaida, counter other emerging transnational threats, counter WMD, build the capacity of our partners, and support conventional operations."²⁵ There will be a move:

toward greater emphasis on building partnership capacity, especially in fragile states, while retaining robust capability for direct action, including intelligence, persistent surveillance, precision strike, and Special Operations Forces ... We will sustain efforts to strengthen key alliances and partnerships, placing more focus on deepening existing cooperation as well as building new and innovative partnerships.²⁶

Necessary to BPC is to train and educate SOF in LRC. "[US]SOCOM is channeling more troops into language and culture training that will make them effective in Africa, Asia, and Latin America ... You can't build [that] partner capacity well unless you speak their language, unless you understand their culture, and unless you have gained their trust."²⁷

A 2013 New York Times column reported that then USSOCOM Commander Admiral William McRaven's goal was to "recast the command from its popular image of commandos killing or capturing terrorists, and expand a force capable of carrying out a range of missions short of combat – including training foreign militaries to counter terrorists, drug traffickers and insurgents, gathering intelligence and assessing pending risk, and advising embassies on securities."²⁸

Admiral McRaven's testimonies to Congress in 2012, and then in 2014, reflected USSOCOM's growing importance of post-COIN involvement in security missions. In his 2014 testimony to the Senate Armed Services Committee, he said, "Our strategy is further informed by the current Defense Strategic Guidance, which directs the Joint Force of the future to be agile, flexible, ready, and use innovative, low-cost, and small footprint approaches."²⁹

Joint Publication 3-05, Special Operations, provides an extensive list and explanation of the core SOF missions:

the special operations core activities are: direct action, special reconnaissance, countering weapons of mass destruction, counterterrorism, unconventional warfare (UW), foreign internal defense, security force assistance, hostage rescue and recovery, counterinsurgency, foreign humanitarian assistance, military information support operations, and civil affairs operations.³⁰

Woven throughout these core missions are some shared commonalities when it comes to mission variables:

They are often conducted in hostile, denied, or politically and/or diplomatically sensitive environments, and are characterized by one or more of the following: time-sensitivity, clandestine or covert nature, low visibility, work with or through indigenous forces, greater requirements for regional orientation and cultural expertise, and a higher degree of risk.³¹

As the DOD reconfigures itself to meet a much different international and transnational landscape, two types of SOF missions have been characterized in theory and practice. Linda Robinson, author of *One Hundred Victories: Special Ops and the Future of American Warfare*,³² casts these missions as direct and indirect. Direct missions are exemplified by the Osama bin Laden raid, but also included at the height of the Afghanistan War, as much as:

14 night raids and when needed and action deemed too risky or politically charged, drone strikes were called in. This kind and frequency of direct mission in counterinsurgency is untenable for even near-term support. Although raids and drone strikes are necessary to disrupt dire and imminent threats to the U.S., special operations leaders readily admit that they should not be the central pillar of U.S. military strategy. In fact, raids and drone strikes are tactics that are rarely decisive and often incur significant political and diplomatic costs for the U.S.³³

Indirect missions, however, contrast with direct missions and feature "working with and through non-U.S. partners to accomplish security objectives, often in unorthodox ways."³⁴ Indirect missions, Robinson claims, offer lasting benefits, a smaller footprint, and cost a fraction of conventional warfare. Then-Brigadier General Edward Reeder, commander of U.S. Army Special Forces Command (Airborne), wrote that John F. Kennedy recognized the connection between human and mission: "Kennedy understood the focus had to be on the population with the primary goal of working together with host nation partners to combat violent, extremist organizations and home grown insurgents with unique local solutions."³⁵

Indirect missions feature an array of roles and responsibilities that can often duplicate or augment those displayed by organizations such as United States Agency for International Development, Department of State, and others.

Special Operations forces forge relationships that can last for decades with a diverse collection of groups: training, advising, and operating alongside other countries' militaries, police forces, tribes, militas, or other informal groups. They also conduct civil-affairs operations that provide medical, veterinary, or agricultural assistance to civilians, improving the standing of local governments and gaining access to and a greater understanding of local conditions and populations.³⁶

Finally, the pace of threat complicates the already complex nature of the cross-cultural interactions encountered by SOF and expressed behavior that exists submerged or even hidden below the level of state actors. "A flu virus in Macao can become an epidemic in Miami. Technology and globalization have made our countries and our communities interdependent and interconnected. And today's threats have become so complex, fast-moving, and cross-cutting that no one nation could ever hope to solve them alone."³⁷

This chapter has explored the thesis of 'back to the future' as SOF returns to their legacy of indirect missions and the traditions that made them the Swiss Army Knife of COIN. A decade of COIN has excised some of that legacy, certainly atrophying the LRC KSAs that were critical prior to 9/11. However the world and all its actors—i.e., nation-states as well as the growing legitimacy and danger of actors who exist below, across, or through nationstates—is a different world than the war and conflict that birthed SOF. In addition, LRC competencies that enable success in the contemporary SOF mission have the benefit of more than 50 years of research and application since Vietnam. Development and sustainment of skill-based competencies, like cross-cultural competence, have a greater visibility. How we think and analyze problems and arrive at solutions in a security environment has greater clarity.³⁸

Languages of culture groups have become more important than that of some or many state actors. These changes over time implicate the critical need for continued emphasis on LRC, but they also emphasize the understanding that there needs to be a different approach to LRC, from re-conceptualization of what constitutes LRC, re-imagining content, and incorporating the advances in learning technology. In some ways, LRC efforts have been held hostage by OSD and DOD organizations because of the natural pace of institutional change, as well as to the priority of effort given to development and adaptation of policy, and more importantly, strategy. Yet, LRC efforts have also been captive to the lack of resident expertise in LRC used in formulating the signature DLTR and the residual effects the DLTR—some positive, some not so positive—had and continues to have on LRC efforts across and within Services and commands.

Humans have always played a role in war. In the new battlefield, frontlines run through neighborhoods and urban enclaves, rules of engagement have become more asymmetrical, and humans have become far more relevant to the mission. The increased relevance of humans has been captured as its own domain—the human domain.

2. Foundations for Existing Department of Defense Language, Regional Expertise, and Culture Capabilities—Defense Language Transformation Roadmap

From the get-go, we were told that we had to "respect the local culture." This took the form of endless classes on how not to look at the women, not to use your left hand, and never show the soles of your feet to anyone. It was all of the little courtesies you'd need to know if you were traveling to Iraq or Afghanistan as a tourist.³⁹

Most language learning in the U.S. military and supporting organizations up until 9/11 was done to support intelligence missions, while aspects of region (international relations or regional studies) were derived from senior professional military education (PME) as well as civilian academic institutions. Knowledge and skills related to culture, until recently, were not considered part of policy, strategy, doctrine, or learning programs. This chapter will briefly explore the history of LRC in the DOD and provide a more standard conceptualization of the concepts of language, region, and culture, as utilized currently by DOD. It will also suggest that current conceptualizations lead to the inability to synchronize LRC efforts across the DOD LRC enterprise. Finally, the history of the use (or non-use) of LRC in the DOD continues to influence how these concepts are approached in doctrine, strategy, and most importantly, in the development of learning programs.

Language use, utility, and cost strongly influenced and continue to influence the expression of region and culture into policy, strategy, and learning in DOD Services and organizations. Language assessment and outcomes have also impacted the inclusion of region and culture KSAs into DOD curricula. In other words, existing LRC programs provided to non-intelligence/ non-professional linguist populations still retain many of the elements of traditional DOD language programs, such as assessment, curriculum development, and instruction, all reinforcing classroom delivery. In addition, the language instructor, often a heritage or native speaker, has been assumed

to be the omniscient knowledge source in not just language, but also region and culture knowledge and skills, if region and culture were instructed at all. As faux pas and lessons learned in the field support, this reliance fails to consider changes to the elements of language and culture in their respective locales, not to mention significant differences in adjacent regions in the target language and culture—across time for each as well. Unless the instructors receive training on region and culture, to include cross-cultural awareness and competence, they are likely to fall short of appropriately preparing their students for such variations requiring adaptation and flexibility within a not-so-static languacultural context.

This chapter will begin with a brief history of language learning in the DOD. Most impetus for current language training beyond Defense Language Institute (DLI) can be traced to 9/11 where location and languages, expected and unexpected COIN missions, and eventually the duration of COIN put emphasis on language use that was far different than traditional language use and learning, such as during the Cold War. The 2005 DLTR signified the institutionalization of a more pedestrian approach to mostly language learning and some regional (and not at first cultural) instruction in the DOD. As much as the DLTR provided essential programmatic guidelines for language, the minimization of region and culture as key components has hampered their legitimacy in learning programs, such as for SOF, even a decade later. Currently, the DOD LRC enterprise and policy lacks standardization of concepts at a policy level, features LRC programs that differ dramatically across the Services, and has no real LRC assessment program beyond language. The absence of policy focus that effectively promoted the importance of region and culture in such a foundational treatment document that charted out direction and pace of the first multimillion dollar LRC enterprise has been difficult to overcome in the intervening years.

Set within this complex and diverse enterprise, organizations like USSOCOM must situate, develop, and sustain their LRC learning program. Adding to this complexity, USSOCOM must also consider the different LRC requirements and unique approaches of the individual Services when designing or creating learning programs for personnel. In the end, this chapter will suggest that OSD guidance on LRC is incomplete and conflicting, while inconsistent nomenclature adds to the difficulty of aligning effort, organizations, and learning development methodologies.

A Brief History of Foreign Language Instruction in the Department of Defense 40

Language instruction prior to 9/11 was mostly provided to military linguists assigned to intelligence tasks at two locations: the Defense Language Institute, Foreign Language Center (DLIFLC), Monterey, California; and DLI, Washington, DC. The mission of DLI has always been teaching and developing cryptologic-linguists for work in intelligence-related missions. Thus, its primary objective was skill instruction in listening and reading modalities. DLI supplied the Cold War language needs where Russian constituted the largest program and Chinese, Korean, and German were the other strategic languages taught.

The Vietnam War featured language use that was centered on gathering intelligence through listening and reading, specifically intelligence related to North Vietnam and Chinese troop movements. Due to asymmetrical and unconventional operations by SF and the need to communicate with South Vietnamese forces, language utility also required speaking the language. During the Vietnam War, SF were taught to speak at least one language, although language proficiency or level of language instruction was not always measured using the Defense Language Proficiency Test (DLPT).

9/11

On the brink of 9/11, language instruction for the most part centered on traditional learning programs, while development of region and culture as knowledge and skill sets were not formally considered in instruction or assessment. However, the narrow focus of intelligence in support of national security also impacted the diversity of languages taught at DLIFLC and elsewhere. Nathaniel Frank wrote in his book *Unfriendly Fire*:

The shortage of language specialists in the intelligence and military forces has been hobbling national defense since the days of the Cold War. But between the fall of the Berlin Wall and the fall of the World Trade Center, only a few voices in the wind had noted the growing threat of Arab terrorists to American security, and the culture of the armed forces and the intelligence agencies had only just begun to budge from a fixation on Russian language as the essential skill for keeping the country safe from its enemies.⁴¹

The terrorist attacks on 9/11 changed the calculus of foreign language instruction not just in the DOD, but across academia and other professional language training programs. OSD was unprepared in meeting the language needs that arose with an increased interest in the Middle East and other Arabic-speaking countries. The pool of Russian speakers that had been sustained in response to Sputnik through three decades of support from the National Defense Education Act was not matched by the need for existing Arabic speakers from the Muslim world. Three years after 9/11, DLIFLC was serving the military need for language need in Arabic languages, while the nonmilitary need for Arabic languages was vastly deficient in programs and students produced.⁴² This paucity of both Arabic linguists and language speakers certainly impacted the department's capacity for traditional linguists, but also hampered the critical efforts of providing instructors and interpreters after the 2003 invasion.

In the Shadow of the Defense Transformational Language Roadmap

By late 2002, then-Under Secretary of Defense for Personnel and Readiness David Chu asked the military departments to review requirements for current manning needs for language professionals, to include interpreters, translators, crypto-linguists, interrogators, and area specialists, spanning enlisted, officer, and civilian personnel.⁴³ A study done in 2003 by the deputy undersecretary for plans aggregated five language lines of effort across the DOD to include: 1) language management across the combatant commands; 2) management of FAOs within the Services; 3) further or actual development of foreign language and regional knowledge in the officer corps; 4) management of language personnel; and 5) agreement of a requirements determination process for assessing language needs.⁴⁴

A 2004 action began aligning positions with responsibilities, but there was a perceived lack of pace of formalizing a defense language program, much of it stemming from lack of direction, importance, and even bias placed on it by the administration at the time. In a 2004 *New York Times* op-ed on education, Samuel Freedman wrote,

Neoconservatives inside and outside government have assailed Middle East studies departments—the likely recipients of any increased federal money for advanced study of Arabic and related languages—for alleged bias against the United States and Israel. It is expensive and time-consuming to conduct security checks of Arab immigrants interested in serving as linguists.⁴⁵

Wrote Fred Kaplan in Slate in 2005:

In the three and a half years after the Japanese bombed Pearl Harbor in 1941, the United States built a massive arsenal, equipped an equally massive fighting force, and declared victory in a worldwide war over imperial Japan and Nazi Germany. In the three and a half years after the Soviets launched the Sputnik satellite in 1957, the U.S. government funded dozens—if not hundreds—of Russian-language and Russian-studies departments not just within the military but in high schools and colleges all across America. Now, three and a half years after Islamic fundamentalists flew airplanes into the World Trade Center and the Pentagon, the Department of Defense is three months away from publishing an official "instruction" providing "guidance for language program management."⁴⁶

Freedman quoted Democratic Representative Rush Holt who said, "There doesn't seem to be anywhere in our government a strategic view about how you get a new flow of linguists. It's all based on the assumption there's a pool of linguists already out there. And that's a fallacious assumption."⁴⁷

Through August 2004, the work continued on the development of the DLTR to include assumptions, the situation at the time, the critical outcomes of such a roadmap, and more general recommendations.⁴⁸ By 31 August, the foundations were solidified and approved, and the DLTR was published in January 2005.⁴⁹

The DLTR, Its Influence and Fallout

The DLTR was a complicated endeavor undertaken in a period of national urgency covering the time leading up to the invasion of Iraq and the initial action in Afghanistan.⁵⁰ Four major goals made up the arc of the roadmap taking the DOD from very part-time language development to a full-time LRC endeavor: 1) create foundational language and regional area expertise; 2) create the capacity to surge; 3) establish a cadre of language professionals at the interagency language roundtable (ILR) level 3/3/3; 4) establish a

process to track the accession, separation, and promotion rates of language professionals and FAOs.⁵¹ Said Chu:

much of the Pentagon's approach to language skills dates to the Cold War. The emphasis then was on training translators for intelligence work, mostly focused on the old Soviet Union. Now, the challenge goes well beyond sustaining a small cadre of professional linguists, extending to large numbers of combat forces and requiring knowledge of such languages as Arabic and Chinese.⁵²

Language had always been a skill set narrowly focused to intelligence and specialized populations. Region was provided through PME and was focused in many cases on international relations and state actors. The acceptance of language and region as potential mission enablers and critical to warfighters in the Global War on Terror was a hard sell to a total force never trained in either. The three-year effort leading up to the publication of the DLTR forced the DOD to consider the role of language and region (and although not mentioned or laid out, culture) in a world that was very different than when the language program matured. This was explicit in the assumptions that framed the need for the DLTR. For example, it was considered highly likely that future adversaries would speak languages not considered at that time as important or even taught. Such future conflicts would also introduce a set of new coalition partners also speaking the same, similar, or entirely different languages; and an increasing U.S. global footprint, and many missions that come with it, could occur anywhere and with little time to prepare.⁵³

The Washington Post faulted the DOD for "doing poorly in retaining troops with language experience or training in regional areas ... defense officials have done little to determine what language talent exists in the force, saying such talent is unknown and untapped."⁵⁴ In essence, a global expeditionary force needed an expeditionary LRC program. The DLTR explicitly made clear that LRC capability, and even more important, LRC capacity, was deficient for an ever-changing international landscape now more muddied and populated by non-state actors speaking unintelligible languages and motivated by unknown behavior. Other perspectives at the time of publication addressed how to fit language and regional capabilities into the military training cycle. A RAND study observed, "the Roadmap ... lays out plans to increase foreign language ability and foreign area officers, others

need them as well ... extra time spent in educational or training assignment to gain language ability means either less time spent in other assignments or fewer assignments."55 For a brief document, the ambitious DLTR orchestrated some sweeping changes in the way the DOD executed language program management and instruction, but it also brought attention, limited as it was, to region and culture as critical pieces of an overall program. Language for professional linguists produced programs with distinct features such as facilities, curriculum development and delivery, instruction and instructors, and assessment; all and more were tailored for a specific population and mission. Early operations in Afghanistan and later Iraq revealed a paucity of programs or attention to non-professional linguist LRC training. The DLTR highlights the lack of capability and capacity stating that, "language skills are insufficient to meet the requirements of the changed security environment. The technological revolution of the 1990s requires much greater language capability than the stereotyped activities."56 Identifying the pressing need of language and region for the Global War on Terror was certainly critical, but not transformative. Moving a department beyond where language was a peripheral mission, and region even less acknowledged as critical for a few select populations, to a new era where LRC were considered core, or enabling skills for warfighting would be the organizational transformation of the DLTR.

DLTR Deployment

It is safe to say that the scope and effort of the DLTR affected organizations and programs across the Services and the DOD as a whole. Each major goal in the DLTR had numerous tasks that affected policy, doctrine, strategy, and operations. The DLTR featured major thrusts, building language and regional expertise into the force and moving from a narrow focus of professional linguists to a force with some kind of LRC capability in numbers and capacity to support expeditionary deployments. The DLTR also created a professional cadre of language professionals at a high proficiency, and moved to create a capability to track the careers of language professionals and FAOs. The LRC enterprise envisioned by the DLTR created levels of new or revised policy, development of new and revised requirements to motivate plans and programs, enhanced learning programs to seed LRC throughout the Services' training and education pathways, studies to identify existing

language and region capabilities, and finally, a robust effort to shore up existing language professional programs in terms of personnel and languages.

Of the four thrusts, building language and regional expertise into the total force proved to be the most difficult and building regional expertise was the most pressing. Building region and culture into the force involved an effort not conceptualized, staffed, or developed in the DOD prior to the publication of the DLTR. This effort involved developing 'culture' centers in each of the Services and efforts to integrate region and culture information into learning programs, both training (just in time or pre-deployment) and PME. Learning products supporting development of regional expertise became a small cottage industry, although there was much more 'culture' involved in the products, including smart cards and books, field guides, live actor video, video simulation, and 'games' that were to appeal to the varied learning styles and ages that existed across the learners' spectrum receiving training and education.57 It was obvious that the Services and other organizations did not have the resident expertise on region (and as conceded later culture) and thus, positions/billets opened up and where these were not enough, contracts (and contractors) to augment learning programs were solicited, while product development fell to contracts as well.

The DLTR was an ambitious endeavor and the founding document that would lay the framework for language and region efforts for years to come. Even a decade later, the DLTR continues to affect language, region, and culture programs across the DOD.

The Aftermath—10 years on

A decade of Counterinsurgency (COIN) and Counter-Terrorism (CT) operations have highlighted our military's shortcomings in employing and understanding foreign languages, the people who speak them, and various types of knowledge derived from language communities. The Department of Defense ... by 2005 had directed the Services to treat language capabilities as a core warfighting skill akin to marksmanship ... Six years have elapsed, though, and the Services have failed to produce doctrine, organizations, or practices that can be considered transformative. Instead, they have applied Band-Aid approaches by contracting out language and related capabilities, while not reforming the way the fielded forces train for or

employ language and related skills in any significant way. Given emphatic calls from senior leaders such as the Secretary of Defense, Chairman of the Joint Chiefs of Staff, and Chief of Staff of the Army, it is hard to understand why the Army has made such little progress.⁵⁸

The intervening decade since the publication of the DLTR has seen extensive commentary from inside and outside the DOD on its merits, implementation, and successes. There have been testimonies by senior leaders within Personnel and Readiness and the Defense Language Office to different Congressional committees. The Office of the Secretary of Defense and DOD language program has been the focus of two Government Accountability Office (GAO) studies and a Congressional study, generally revealing "the continuing gaps in capability of the Force."⁵⁹ By June 2010, and including an interim 2009 report that provided recommendations, the GAO found the pace and centralization of language and region efforts to be inconsistent and lacking OSD oversight in the development of a strategy, as well as in collecting needed information to identify capability gaps and assess risk.⁶⁰

Specifically, the GAO found a lack of comprehensive strategy by OSD to guide its transformation efforts.⁶¹ Included in this identified lack of strategy was also the inability to measure many of the DLTR tasks that were linked to funding requests. "In the absence of a comprehensive plan, GAO concluded it would be difficult for DOD to guide the Military Services as they develop their strategies and related training programs, and ensure these efforts were consistent with DOD-wide goals."⁶² What was needed was a plan with measureable performance goals and objectives while also developing a method for identifying language and regional proficiency requirements for all communities and all proficiency levels.

The DLTR sought to establish a language and regional expertise program, with little focus on identifying or conceptualizing region, or other facets of region, now identified as 'cultural capabilities.' In policy and elsewhere, only language is consistent in definition or application. Department of Defense Instruction (DODI) 5160.70, *Management of DOD Language and Regional Proficiencies Capabilities*, which has not been updated since 2007, provides regional proficiency guidelines and defines regional expertise, but due to the definitions used, lacks assessment potential or guidance for learning development. At the time of the conclusion of this manuscript, the DODI does not address culture at all, leaving little or no policy guidance.

The DLTR placed emphasis on language assessment, but failed to address the need for region (and later culture) assessment. The DLPT, now in version 5 in many of the languages, is used for most language programs across the DOD and in related organizations such as the intelligence community. It is apropos for the community of military language professionals, such as FAOs, but has proven to be a difficult measure to use for assessing nonprofessionals, such as language enabled conventional forces and SOF, where proficiency is on the low end of the scale. The DLPT from the outset was the primary language assessment. The implications will be discussed later.

In one subtask, the DLTR advocated the need to develop assessment measures for the non-linguistic skills. Due to a lack of clear conceptualization of regional expertise and culture, efforts to develop assessment protocols have been mostly unsuccessful. However, there have been a few assessment protocols developed recently that approach either an LRC-wide assessment or assessments of regional expertise and aspects of culture, such as culturegeneral or culture-specific knowledge and cross-cultural competence. It was not soon after the publication that regional expertise was joined by varying concepts of 'culture' and the larger construct of LREC formed.

Traditional language learning in the DOD and at DLIFLC have shaped how language (and peripherally region and culture) have been taught in programs for language professionals. Residential or classroom instruction has narrowly focused mostly on face-to-face instructor/student interaction. However, learning technology in higher education and professional training outside of the DOD has been adapted for traditional and nontraditional students. Learning styles, budgets, battle rhythms, and advanced technology can remake traditional schoolhouses into blended and virtual schoolhouses that feature flexible learning programs with courses and products accommodating variables not typically considered in a traditional residential learning program.

In organizations that have identified language requirements, established language proficiency levels and dedicated learning time, the application of culture to that curriculum has relied on language instruction as the means to provide cultural learning. Furthermore, 'culture' has been identified mostly as the application of culture-specific topics that rely primarily on the experience of the instructor in a cultural group that speaks that language. In this application, culture does not include introducing and promoting culture-general and cross-cultural competence as a means to provide skills to
mitigate cultural biases, engage perspective taking and sense making, as well as impart knowledge of critical culture-general domains and systems. These domains include ideology, kinship and alliance, exchange and reciprocity, culture change and mobilization, gender, cross-cultural differences in law, conflict resolution, and others necessary to understanding foreign cultural behavior across cultural groups found in the human domain.

Summary

There are a number of factors yet to be resolved from the DLTR that constrain organizations such as USSOCOM in their LRC programs that impact program effectiveness. Those factors, both legacy and organizational, will briefly be identified and further discussed in the next chapter on LRC terminology. In the absence of standardized guidance or detailed strategy, the Services have since developed their own LREC strategies that identify requirements and include guidance on meeting those requirements. Nonetheless, without a coordinated approach, the Services, and other commands such as USSOCOM, are lacking an inter-organizational alignment. One concerning issue is there are contrasting definitions for LRC components and their application to existing requirements that fail to address LRC needs of organizations and populations. Without a clear understanding of concepts and/or requirements, the development of sound learning goals and objectives, and a validated assessment program with useful metrics that translate into program effectiveness, a sustainable LRC program will continue to elude.

3. Language, Regional Expertise, and Culture: Concepts, Meaning, and Utility

The DLTR was to be used as a means for establishing DOD requirements, budget considerations, and the follow-on strategies that would be necessary to ensure readiness. However, the lack of clear consensus within the DLTR on conceptualization of LRC knowledge and skills was to prove an obstacle to later consensus of terminology and mission that would eventually affect the development of a unified DOD-wide strategy. This chapter will suggest that there continues to be a lack of consensus within the DOD on the meaning and application of constructs within LRC. Terminology and concepts used in policy and strategy documents lack a theoretical rigor which undermines their utility to Services at tactical and operational levels.

For example, A 2012 RAND/MITRE study found a lack of common understanding around LREC concepts, seven years from DLTR publication, and advocated:

There is currently confusion about the term LREC ... Developing a common vocabulary could be accomplished through discussions and agreements at management meetings and through providing the terminology via a DLO [Defense Language Office] website that can be accessed by key stakeholders in the LREC world. These stakeholders include not only DOD and service-level representatives of the Defense Language Action Panel (DLAP) but also researchers who are conducting studies related to LREC.⁶³

Secondarily, the lack of consensus continues to spawn a 'cottage industry' of defining terms and concepts related to region and culture in the Services and other organizations, such as USSOCOM. This has provided a conceptual landscape that resists any kind of standardization of intent and requirements and makes it difficult to align meaning, learning development, and assessment across the DOD. In terms of equating LRC to readiness, without common acceptance of concepts, the questions designed to elicit data that can align to readiness are unable to be based on sound and definable concepts. As suggested earlier, GAO reports have stressed this programmatic need, as have independent studies. A decade from DLTR publication, this

proof of the link between LRC and readiness has yet to be empirically established. This is especially critical when different populations, such as SOF or FAOs, with varying missions rely on concepts that should have been vetted and defined by those possessing subject theory, application, and experience.

An acronym like LREC presupposes some integration across the components to meet requirements informed by needs assessments. This has not been the case. This chapter will also explore why that has not occurred. The author and Pieter DeVisser⁶⁴ suggested the acronym LREC has also become a programmatic means to corral related but also divergent KSAs, programs, billets, and budgets—"acronymizing" the complexity of the individual elements in order to make it more palatable, more like a single consumable that can simply be "purchased off the shelf."⁶⁵ DeCamp, et al. observed a similar use of LREC and a lack of clarity in its meaning in that, "there is currently confusion about the term LREC, which is sometimes used to mean all of language, regional expertise, and culture and sometimes used to mean courses satisfying a military directive."⁶⁶

In 2008 and 2009, interdisciplinary efforts came together to define sets of cross-cultural skill-based competencies useful to the goals of the DLTR, and the Service culture centers collectively promoted the development of culture-specific products and pre-deployment training. In later documents and individual Service language and culture strategies, the complexity of terminology deepened with the additional realization of the need to consider perspectives in anthropology and other cultural studies such as cultural geography in addition to the more established approaches of international relations.

In brief, (1) there is an uneven and/or lack of standardization across and within DOD for LRC elements; (2) there is no consensus on functional definitions of language/dialect and culture (specific and/or regional, general, operational) to develop curricula; (3) there is no consistent HQ-level articulation of operational requirements to guide instructional design; and (4) funding for LRC lacks an overarching DOD strategy and plan with no articulation and/or coordination of departmental and Service efforts.⁶⁷

Finally, this chapter will set the stage for the remainder of this study's review of USSOCOM's own LRC program. Soon after the DLTR was published, as evidenced in early attempts at developing Service LREC strategies, stakeholders grappled with not just the kind of LREC that was needed by populations within the Service and thus developed through learning, but as well with the amount of that learning. How much language and region (and culture), in terms of concepts and depth, were conventional forces to receive, especially before leaving for the deployments? SOF, however, comprise a unique population that historically considered LRC an important component of their training and preparation. If any DOD population were a candidate for and would accrue benefits from a holistic treatment of LRC, SOF would be it. Nonetheless, this also created additional difficulty, as USSOCOM had to distill effective learning that considered LRC together. Although rich in tradition of inserting language into their preparation, SOF encountered the same, and some different, obstacles and barriers as did the larger Services with their learning programs.

LRC/LREC Policy at the OSD Level—What Does It Say?

As late as 2010, the House Committee on Armed Services report, *Building Language Skills and Cultural Competencies in the Military: Bridging the Gap*, and the 2008 and 2009 GAO Reports on the DLTR found OSD lacking a policy and strategy to unify language and culture efforts.⁶⁸ There were only two policy statements, one published in 2005 (and reissued in 2010) and the second in 2007, in lieu of a DOD-wide strategy to provide guidance on LRC for the DOD for the first five years following the publication of the DLTR. The first was the Department of Defense Directive (DODD) 5160.41E, which covered the Defense Language Program and the Defense Language Steering Committee. Its intent is to maintain existing management of the traditional language programs at DLI and DLI-affiliated sites in the DOD. As of September 2015, this policy was republished.

The second, DODI 5160.70, was important to laying a framework for LRC. The DODI provided actionable concepts that could guide the development of learning goals and assessment and the best grasp of what region and culture were with regard to the LRC enterprise to the DOD. Pertinent to LRC, the DODI provided regional proficiency guidelines and the concept of regional expertise. Of significant omission was the lack of development of the concept of culture as an integral component of LRC.

Throughout the evolution of the LREC construct, culture was more or less interwoven into regional proficiency and identified as a part of knowledge gained through achieving regional expertise. Only later did expressing culture include the elements of culture-general/specific, cross-cultural competence, and more specialized skill sets of cross-cultural communications and negotiation. This set of KSAs was labeled "cultural capabilities" by a DLO-sponsored set of working groups in 2009 and 2010 (more on region and culture below) and added to the warrior's toolkit across the Services, appearing in OSD LREC documents later. In lieu of a DOD-identified common core of LRC concepts, each Service and organization approached LRC, especially culture, differently which was also exacerbated by the Services' unique missions and approaches to learning.

In 2011, the DOD published the *Department of Defense Strategic Plan for Language Skills, Regional Expertise and Cultural Capabilities*, 2011–2016.⁶⁹ The publication laid out a five-year plan with three goals to improve and then sustain the capacity of DOD's LRC capabilities, seeking to build "a comprehensive, integrated approach toward increasing and sustaining language skills, regional expertise, and cultural capabilities within the Department of Defense."⁷⁰ The goals featured validation of requirements, building LRC in the Total Force, and developing interoperability and partner building capacity.⁷¹ However, the plan never defined the concepts within its own title. LREC capabilities were treated as a collective unit when discussing how they fit into goals. The follow-on 2014 *Language, Skills, Regional Expertise and Cultural Capabilities: Implementation Plan*⁷² also did not elaborate any further on delineating LRC concepts, save for the mention of cross-cultural competence, but reiterated the three goals and how each was to be implemented across the DOD.

To operationalize LRC/LREC, OSD initiated the capabilities-based requirement identification process (CBRIP) in 2012 by the DOD. A CBRIP is the standardized methodology for geographic combatant commands and functional commands to identify LRC capability and manning requirements to inform force development. In practice, commands identify LRC manning requirements, and conclude with "prioritized capability requirements [that] express the need for LRC, including identification of who, what, when, where, why, and how much in terms of duration and proficiency levels required for task execution. It does not identify sourcing solutions, e.g. number of billets, contractors, or machine language requirements."⁷³

In January 2013, the Joint Chiefs published the Chairman of the Joint Chiefs of Staff Instruction 3126.01A (CJCSI 3126.01A), *Language, Regional Expertise, and Culture Capability Identification, Planning, and Sourcing.*⁷⁴ More as a manning and process document then a strategy or overarching

policy statement, CJCSI 3126.01A became a forcing function to ensure LRC capabilities were identified and integrated into mission and operations as well as codifying the CBRIP and LRC terminology that had previously been lacking in OSD policy. "LREC capabilities apply across the force and should be addressed in a continuum of capability. The continuum begins with the [conventional forces], progresses through surge capability, and culminates with professional level expertise."⁷⁵ This continuum was reflected in a simple proficiency scale of basic, fully proficient, and master.

In describing LRC requirements, CJCSI 3126.01A referred to the types of capabilities as competencies, while the levels of capability referred to proficiency levels. The Instruction featured three overall behavioral dimensions: cross-cultural competence, regional competencies, and leader/influence function, which were broken down into 12 capabilities or competencies.⁷⁶ The CJCSI 3126.01A is the most up to date and complete DOD-wide LRC policy statement and reflects the emphasis on the development of culture and region as primary mission enablers. "To date, the CBRIP has shown it is possible to need regional expertise and/or cultural knowledge without needing language proficiency, but that it is highly unlikely to need language proficiency without also needing regional and/or cultural competence."⁷⁷

The need to spread an LRC program across organizations as large as the Services was more easily accomplished by concentrating on culture and region for all, especially for deploying service members, while parceling out language, and the necessary proficiency to those personnel involved in tasks and billets depending on language use. The 2009 Air Force LRC Strategy (The Flight Plan) envisions the development and application of cross-cultural competence "for all Airmen and robust language skills and regional expertise for targeted Airmen. The end-state sought will: (1) provide Combatant Commanders with Airmen who possess the language and cultural skills and the regional knowledge and experience to enhance joint and coalition warfighting capabilities."78 Goals of The Flight Plan replicate to some extent similar goals of the later OSD Strategy and Implementation Plan in that they determine requirements, ensure strategies and resources stay current, and align their culture, region, and language strategy to DOD and U.S. Air Force strategy.⁷⁹ In addition, the Air Force developed the Language Enabled Airman Program to meet the need for language in a timely manner and for tactical utility.

Recently, the U.S. Army renamed their LRC policy, *Culture, Regional Expertise, and Language* (CREL). The strategy forms initially around aspects of culture and features four stages of learning that focus on cross-cultural competence. At the close of the final stage, a combination of cross-cultural KSAs have been modeled and demonstrated.⁸⁰ U.S. Army Training and Doctrine Command Culture Center Director John Bird writes:

Our Army will likely weight CREL investments toward culture and regional awareness because they have proven to be high payoff and the costs required to generate enduring language capabilities in our Army are simply too great and unsustainable. This is commonly referred to as the big "C" and little "L" approach. In general, expect our Army to focus on [cross-cultural competence] first and regional expertise second, with language a distant third (and at a very basic level) based on regional alignment or operational deployment. Of particular note, the Army will likely continue to rely on Foreign Area Officers and other specialists–such as the Military Intelligence Corps, Special Operations Forces, and other low density specialists as the Army's true regional experts, a pragmatic and cost effective approach.⁸¹

The U.S. Navy Center for Language Regional Expertise and Culture (CLREC) program consists of self-paced cultural awareness and language materials that are accessible to sailors:

Members going forward, whether deploying with a unit, individually, or on PCS orders, have access to self-paced cultural awareness products and language learning materials relevant to the deployment destination or assignment location. Additional training can be tailored to the individual requirements of the unit, individual, and mission.⁸²

On ship, mobile training teams provide more in-depth instruction if the mission warrants it. Depending on operational requirements, training can address regional issues and cultural domains such as religion, customs, manners, etc. This can be supplemented with additional culture products and self-paced language learning material. If there is to be significant crew interaction with a host population beyond liberty contact, as with a global maritime partnership or theater security cooperation mission, CLREC is prepared to arrange a more in-depth language training event (two weeks or more) for select personnel.⁸³

With all the attention paid to developing a program and a process for LRC, little attention was paid to the need to promote theoretically sound LRC components that would inform learning goals and objectives and produce assessment measures that would apply across the DOD. This omission of effort and need with regard to critical elements impaired the ability to create a DOD-wide strategy and program. This next section will explore the LRC components as currently being defined and utilized throughout the DOD. It is important to note that there lacks agreement across the Services at the policy level and within individual Services regarding how the components are defined.

LRC Components

LREC as a compilation of knowledge and skills developed to meet missions that moved outside those engaged in by traditional professional linguists, including operations where knowledge and skills were far different than those needed in intelligence, for example. For mission and time on training, traditional language pedagogy with its duration was not feasible for nonintelligence organizations. Intelligence necessitated listening, reading, and writing. Language proficiency level, languaculture awareness⁸⁴ and use, if even a part of instruction, differed considerably from those 'on the ground' with missions that featured considerable cross-cultural interaction. As language was a cross-cultural mission enabler, it would seem that pairing language with cross-cultural skills in learning development and delivery would only enhance proficiency of language and the non-linguistic interactional skills. This learning potential will be explored later in this report.

Developing and instituting learning programs in language requires analysis, establishment of learning goals and objectives, relevant curriculum, qualified instructors, and understanding of what should be assessed and how that assessment is accomplished. The post-9/11 era ushered in an international landscape that no longer cleaved along nation-state lines, but also included tribes and culture groups speaking languages that fell outside of those traditionally taught by DLI and consisting of vastly different worldviews and belief systems. Languages, especially those spoken by these culture groups, existed in nations with borders and boundaries drawn by colonial

powers no longer present. However, missions in Iraq and Afghanistan, and an increasing diversified international and transnational landscape, meant even intelligence professionals would need regional and cultural knowledge and skills.

Region and Culture

The first four pages of the DLTR featured a variety of terminology reflecting social and behavioral concepts that referred to region and culture, to include:

- Regional area skills;
- Cultural expertise;
- Cultural resources;
- Regional knowledge;
- Foreign area expertise;
- Cultural understanding;
- Cultural awareness; and
- Regional expertise.

In addition, Service-specific policy and strategy statements provide further concepts:

- Regional proficiency;
- Cultural proficiency;
- Cross-cultural competence/cross-cultural communication;
- Cultural capabilities;
- Cultural self-awareness;
- Culture-general; and
- Culture-specific.

This extensive list certainly reflects the difficulty OSD and the Services still have of standardizing region and culture concept and meaning. With the advent of the culture service centers and the hiring of professional social and behavioral scientists, scholarship and rigor were added to the development of region and culture concepts in policy, strategy, and learning programs. As early as 2005, the need for culture (at least anthropology) in the DOD was revisited from its use in earlier wars and conflicts.⁸⁵ By 2006, culture was "a force multiplier" and cast as the missing piece in mission success.⁸⁶ By the same token, region was also cast as a critical ingredient of the DLTR

and identified in the first DODD and DODI statements as an essential part of LREC.

The transformation to an expeditionary mission by non-language professionals demanded cross-cultural interactional skills, abilities, and attitudes that never were a part of traditional language learning. Language programs were still predicated on Cold War adversaries and languages that were to become critical after 9/11 were lightly covered. The Cold War perspective included cross-cultural interactions at government-to-government levels and military-to-military relations. Not considered in professional language programs were languages that were used by a variety of ethnic and tribal groups or knowledge about cultural behavior of these groups that were to become just as or more important than nation-states. This was very clear in Iraq and Afghanistan as colonial-inspired national borders were more important to those external forces than the people that lived within them. This lack of recognition of national borders by those living within them was also seen in West Africa during the Ebola outbreak.⁸⁷

A regional perspective also considered the notion of place. The military has always operated in the domains of air, sea, and land. These domains have always been defined by locations on a map. Nations were always identified in some way by their borders. Governments, militaries, and borders framed how the DOD saw, interacted with, and understood the rest of the world. This was also the case for how U.S. military personnel saw themselves. The reality of OEF and OIF was that the wars were not against governments or alliances formed with existing governments. In fact, both featured a number of ethnic and tribal groups configured in complex sets of relations that dated back generations, even centuries. Being able to work successfully with that cultural complexity demanded more than a regional perspective. Thus, the notion of and approach to culture became an integral component of LRC and prompted OSD and the Services' attempt at understanding just what culture meant and defining its principles and concepts. This author can remember his early lessons and presentations to U.S. Air Force audiences on culture and spending an inordinate amount of the class/presentation defining the concept of culture as it related to its expression in societies. It now seems beneficial to provide the most utilitarian as well as simplest definition to avoid difficulty in framing a 'complete' definition, not practical or useful to 'on the ground' application. "Shared patterns of human behavior" is the simplest. These patterns distill to more or less common domains such as

kinship/family, exchange, religion, and more. Culture then is a collection of general and specific knowledge sets about these patterns of behavior that can be applied to individuals or collections of people to aid in discerning meaning of behavior. Applying these general sets of knowledge to specific locations or groups is referred to as culture-specific while applying nationstate phenomenon to specific locations, geographic areas or to international/ transnational groups is often referred to as region-specific knowledge.

Region and Culture KSAs, Proficiency, Capability, and Competence

Region and culture were certainly far different concepts than language when it came to understanding their KSAs. Translating those concepts to aid in building learning programs that used sound learning goals and objectives and included assessing/measuring what was learned, performed, or exhibited, was difficult. Cultural or regional knowledge can be expressed by two distinct models of behavior: proficiency and competency. A proficiency model is a very distinct and direct manner that defines and measures performance. Proficiency is also a collection of observable behaviors that promulgates what a successful (proficient) individual (given a certain context) produces or acts and the steps the individual must go through to be successful. "Think of proficiency as a picture or snap shot of what success looks like on the job."⁸⁸

Posing a much different perspective, a competency model includes three components: knowledge, skills, and attitudes. For example, a soldier exhibits good listening skills, or can apply the concept of kinship to a Liberian village to better understand social relations. These are examples of competencies. Obviously the more competencies one is exposed to and trained/instructed on, the more situations and interactions in a variety of contexts one is better prepared for. Proficiency is more direct and observed and therefore open to performance as a means to measure. Competence does not necessarily translate into performance; in fact, competence is only a predictor of performance more generally.

Regional proficiency was built on an 0-5 level (not ironically aligned with the ILR/DLPT scores for language). According to DODI 5160.70, regional proficiency is, "an individual's awareness and understanding of the historical, political, cultural (including linguistic and religious), sociological (including demographic), economic, and geographic factors of a foreign country or specific global region."⁸⁹ Simply, regional proficiency is the ability to utilize regional knowledge. Regional expertise, as defined in the DODI, "consists of 40 semester hours of study focusing in but not limited to the political, cultural, sociological, economic, and geographic factors of a foreign country or specific global region through documented previous experience …"⁹⁰ Expertise becomes a way to measure the level of proficiency, although, as will be explored in the next chapter, there are no existing assessments designed to measure someone's regional proficiency, nor is there any validated relationship between proficiency and expertise (not all institutions are equal, nor is the kind or duration of course spelled out or assessed). OSD is in the testing and validation phase of a regional proficiency assessment tool (RPAT)⁹¹ which may yield some measures or assessment scores. RPAT will be further discussed in the next chapter.

Currently, there exists no model that posits the concept of cultural proficiency nor the actual breakdown of levels of proficiency. There is work ongoing at Joint Base Lewis-McChord's Language and Culture Center to develop an LRC assessment.⁹² Part of the assessment is tied to a cultural performance that is pegged to a numerical scale. This program will be highlighted in Chapter 7.

The OSD regional guidelines incorporated proficiency based on experience, training, and education. An attempt was also made to align the proficiency steps with the ILR proficiency guidelines. For example, regional proficiency level 4 provides the following:

Typically, 4 to 7 years in a specialized area, in addition to general experience in a broader subject area. Has a deeper knowledge and understanding of most of the components of a region or country than many or even most natives of the country. Has experience working directly with senior U.S. military officers or directly with senior U.S. country or regional policy officers on programs that significantly affect U.S. policy in a country or region. Routinely writes and delivers substantive briefings on aspects of the region or country. Knowledge comes from a combination of advanced graduate education, seminars, research, teaching, publishing, area studies courses, in-country assignments, travel, mentoring, and specialized professional experience. Cultural knowledge and experience allows

the individual to blend easily in the culture. Almost always has ILR level 3 or higher proficiency in at least one of the languages spoken in the country or region.⁹³

Level One Novice provides the following:

Has some level of proficiency related to a job that has relevance to a country, region, or issue, but has very limited knowledge about the country, region, or issue (e.g., an F-16 mechanic who goes to Norway to work with Norwegian F-16 mechanics but knows very little about Norway). Has a basic survival-level understanding of the culture(s) and may have equally basic communication skills in the predominant language(s).⁹⁴

The KSAs needed to traverse this proficiency maze are spelled out only generally and do not apply across the total force. In level 4, a primary part of the proficiency comes from specific tasks germane to functions more identifiable to attaches, FAOs, or embassy staff, and knowledge "comes from a combination of advanced graduate education, seminars, research, teaching, publishing, area studies courses, in-country assignments, travel, mentoring, and specialized professional experience."⁹⁵ This specificity limits applying the higher proficiency levels to personnel where high levels of LRC are critical but not expressed in that context.

Regional expertise, however, is solely based on knowledge gained from a graduate-level education or 40 semester hours:

study focusing on but not limited to the political, cultural, sociological, economic, and geographic factors of a foreign country or specific global region through an accredited educational institution or equivalent regional expertise gained through documented previous experience as determined by the USD (P&R) or the Secretary of the Military Department concerned.⁹⁶

Regional knowledge and application of that knowledge is about a place and the ability to support the DOD in its dealing with a national or regional government. It was never about understanding the fluid and culturally complex environments that COIN or other counterinsurgencies produced, when governments were failing, nonexistent, or actual enemies of the population(s). In fact, the higher one progresses in proficiency, the more distinct the application to specific population. The necessity for 40 semester college credits as a benchmark to identify regional expertise is just as focused on a particular type of knowledge and is the result of academic programs such as international relations/studies, regional studies, and others. Lack of educationally provided knowledge destines the individual to lower levels of regional proficiency and expertise. In a sense, regional proficiency and expertise are specialized to distinct populations and knowledge based. Much like language professionals and their learning programs, regionalists through proficiency and expertise matched the intent of an advanced level of utility and responsibilities. This is not that surprising given the state of language and, to a lesser extent, regional learning programs that existed prior to the publication of the DLTR.

Culture

Over the course of policy and strategy development, there have been many attempts to define aspects of culture leading to the inability to draft learning goals and objectives, or develop assessments to determine if KSAs are being promoted. This has been compounded by the fact that definitions for regional proficiency and regional expertise already contain elements of what cultural scholars would incorporate into working definitions of culture. When making distinctions between cultural awareness and understanding, the intent may be more or less clear, but when transferring to a learning program, the concepts provide weaker points to learning.

The DLO in 2008 started a section dealing with culture policy, and a deputy director of Culture was placed in charge. Culture had not been an emphasis in the DLTR and was not defined nor considered an important part of regional proficiency and expertise. By the time this office was stood up, the individual Services already had or were in the process of standing up Service culture centers; most of the necessary training at the centers was specific cultural information on individual populations. Products such as smart cards, smart books, field guides, video immersions, simulations, and games were produced to meet the quickly escalating need to understand the populations that were part of the deployment. This author was involved in expeditionary and/or pre-deployment training and helped write field guides and immersive video scripts while at the Air Force Culture and Language Center (AFCLC). For AFCLC, like the Army's Training and Doctrine Command Culture

Center and the Marine's Center for Advanced Operational Culture Learning, much effort was made to provide the essential culture-specific knowledge in different formats. The need to interact with a variety of communities, villages, and tribal groups in both Iraq and Afghanistan also necessitated cross-cultural competence to promote and help facilitate mission success.

Just as region can be construed as a collection of knowledge that can be learned and then applied, cultural knowledge is also a collection of culturegeneral and culture-specific knowledge sets that refer to patterns of behavior that can be then applied to individuals or collections of people to aid in discerning meaning of behavior. Applying these general sets of knowledge to specific locations or groups is referred to as culture-specific. AFCLC based their overall approach to culture on a more generalized consideration, concentrating on developing transferable knowledge and skills that would act as a lattice and prime the understanding of others' behavior by U.S. military individuals. This approach was labeled culture-general. Also included in culture were specialized skills such as cross-cultural communication and negotiations.

Cross-Cultural Competence

In 2008 and 2009, the DLO Culture Policy Office convened several working group meetings featuring a multidisciplinary cadre of Service social and behavioral scientists on promoting culture, but more specifically a culture-general approach utilizing cross-cultural competence. As early as 2007, the case for cross-cultural interactional skills was advanced to enable successful missions involving culturally complex environments.⁹⁷ Defined slightly differently for reasons of intent, Service, and mission, agreement was reached on the skill-based competencies that promote cross-cultural competence. For the purpose of this manuscript, cross-cultural competence is "the ability to navigate in complex interpersonal situations, express or interpret ideas/concepts across cultures, and make sense of foreign social and cultural behavior."98 Key skills involve cultural self-awareness—having cognitive awareness of your world-view and belief/value system and biases that follow, awareness of influence on others, and engaging self-regulation when appropriate.99 The skills also include cultural learning, alternative perspective-taking, and observation/sense-making while additional skills contribute to cross-cultural competence, such as cross-cultural interaction (cross-cultural communications/negotiations) and developing empathy.¹⁰⁰ Work by Army Research Institute (ARI) and other research organizations has looked at deconstructing the actual skills involved to determine how they are expressed in cultural complexity. There is also initial research into the development of cross-cultural competence,¹⁰¹ the incorporation of crosscultural competence into professional assignments and duties, and several publications on the integration of cross-cultural competence into learning programs. Research into cross-cultural competence assessment has not produced viable measures thus far. A comprehensive volume on cross-cultural competence was published in 2014 and explores facets such as learning, policy, experience, and articulation with cross-cultural communications, assessment, diversity, and more, while a survey of cross-cultural competence literature was published by ARI in 2014.¹⁰²

By the publication of the 2011 OSD LREC strategy, the LRC components that related to culture were defined as cultural capabilities and included, "the ability to apply culture-general knowledge, skills, abilities, and attitudes and culture-specific knowledge to achieve mission success in culturally complex environments."¹⁰³ Culture-general aided in the transferability of these skills and knowledge to apply from culture group to culture group. The groups could be a part of any number of larger and more inclusive organizations or associations, extended kinship, ethnic or tribal groups, and formal state or regional governments. "If we try to teach a soldier about a given culture, region or language, they apply frameworks, concepts and theories, coupled with their cultural sensitivity, curiosity and interpersonal skills to other cultures, regions and languages - a very useful metaphor to consider as we move forward."¹⁰⁴

OSD and the Services (for the most part) have selected to develop regional proficiency and cultural capabilities at the expense of language in policy, strategy, and learning development in the conventional forces for a number of reasons. These reasons include the fact that OEF and OIF may have inculcated the critical need for LRC, however as indicated earlier, there are no solid metrics that support the utility of LRC in missions—plenty of anecdotal narrative, but no measures of value. Given that, the cost for funding a region and culture learning program is far less than language. Efficiency of learning for knowledge transfer and skill development is greater than in language and regional proficiency at what has been cast as the more advanced levels. Maintaining regional knowledge and cultural capabilities is far easier than

maintaining a language proficiency and does not require the same time commitment off task to continue development.

Summary

This chapter and Chapter 2 reflect a decade of uneven and inconsistent LRC policy and strategy development by OSD and across the DOD. Transitioning from a professional language program that served the intelligence community and a few specialized DOD populations, to serving the LRC requirements of the total force and not knowing what those requirements were, was problematic. Adding even more to the lack of consensus between OSD and Services was the use of theoretically deficient definitions of some key region and culture terms and concepts. Providing accurate and sound constructs would have provided a foundation for policy as well as being useful to the development of learning goals and objectives.

The next two chapters will explore the uniqueness of SOF and their own LRC transformation. Perhaps SOF, with their operational history and utility of LRC provided by training and/or experience for mission success, have the most reticence, or even operational arrogance to change LRC learning programs and incorporate evolving research and experience of the last decade of LRC efforts in the DOD. SOF have dramatically grown in numbers and importance in the DOD present and future strategy, and continue to play a relevant and critical role in a variety of missions.

4. The Human Domain: The Contemporary Operating Environment

The key to success in applying the indirect approach is persistence. Building partnerships requires the development of meaningful military-to-military relationships. That effort is long-term, and the effects are enduring. This approach not only builds partner nation capacity and regional stability, but it also deters the tacit and active support of sanctuaries that foster and develop future terrorists. Again, the effect is to drain the proverbial swamps—the perceived social injustice, and the persecution and intimidation—that can feed the germs of terrorist activity.¹⁰⁵

The human domain has become a significant construct to USSOCOM, as well as the U.S. Army, as it provides a metaphor to further understanding sociocultural conditions and expectations of operating environments. Counterinsurgencies have proven to be a different kind of war than conventional wars. Asymmetrical and unconventional warfare will confront technologically advanced and large standing forces in places like Iraq and Afghanistan, in Colombia and the Philippines, and at every turn of conflict where victory cannot be total destruction of enemy forces, or where victory may not have much to do with battlefield supremacy. Losing a war, on the other hand, might not even be tied to conflict or being defeated in battle. Defeat may be signaled by the inability to commit and sustain to a long-term, human resource intensive development and partnership building campaign. Providing the personnel to sustain necessary force efforts, but also efforts toward other elements of COIN, infrastructure development, security and other relevant training, promoting centralized governance, and more, is critical. Essential to success is developing working partnerships with not only local and national security forces (usually these forces are ineffective or in state of disrepair), but those culture groups and individuals who inhabit areas of responsibility (AOR), surrounding communities, and provinces.

The meaning, utility, or continuation of the population-centric paradigm featured in COIN certainly focused on the importance of the population as a primary driver of missions. The intended populations involved in a

population-centric approach, whether they were national, local, or tribal, or some of all three, were the critical, intended, and often unintended target. The entrenched insurgency could only be weeded out through working directly with village leaders and communities and providing elements of human security the insurgents could not.

The protracted land war in Vietnam, outside of COIN, offers the greatest relevance of culture groups to military operations. The greatest successes of that war were through the asymmetrical operations that took place with Green Berets and indigenous populations to fight insurgent North Vietnamese forces. The important, and what should have been enduring, lessons taken from Vietnam were not those from the conventional battlefield, but from the understanding of the importance of South Vietnam culture groups and the knowledge and skills necessary to connect with and influence those culture groups caught in the middle of conflict.

The post-Vietnam lessons learned did not include programs to identify LRC or even more general knowledge and skill-based competencies useful in an unconventional war. In fact, national security shifted gears and moved in step with the doctrine of defending Western Europe from a potential Soviet Union invasion along with certainty that a protracted unconventional 'messy' war in a far-off places would not happen again.¹⁰⁶ The fact that this occurred was not out of line with changing security priorities. This was a far more familiar position to be in-conventional warfare with a priority on defense weapons technology. In Vietnam, the human was the reason for conflict, and was essential to stopping conflict. The human was necessary for establishing representative government; the human was an ally, a neutral party, and an enemy. Force was not the only or most effective means to meet end states. The merits of such an engagement strategy were more or less lost to the intervening decades for the DOD and most of its constituent parts. The lessons of Vietnam were long set on the dusty shelves of past reports forgotten by OSD and Services when U.S. forces invaded Iraq in 2003.

Human Terrain

When it became apparent at the onset of COIN that civilian populations would play an integral role in military operations, the concept of the human terrain emerged. The human terrain represented a means to align social and cultural behavior to a more familiar and military perspective, the utility of a concept in part depends on the acceptance of its perspective and fit with the organization and mission. "You have to understand not just the military terrain ... the high ground and low ground. It's about understanding the Human Terrain, really understanding it."¹⁰⁷

Anthropologist Roberto Gonzales, a critic of anthropology in service to the military,¹⁰⁸ uncovered reference to the term in a Congressional report, *Guerrilla Warfare Advocates in the United States*, that posited groups like the Black Panthers might have "superior control of the human terrain."¹⁰⁹ The tie to an internal counterinsurgency linked inextricably to the connection between terrain and COIN. The juxtaposition of the terms human and terrain produces linguistic dissonance to those considered part of the human terrain, reducing their sense of identity and culture to a contested geographic reference point. According to Gonzales, human terrain tends to "objectify and dehumanize people, because it implies that they are geographic space to be conquered."¹¹⁰ Gonzales also refers to it as "a euphemism referring to civilians living in a war zone, or under military occupation."¹¹¹

Human or cultural geography approaches the human terrain from its consideration of being able to tie these human dynamics to a layers on a Geographic Information System (GIS), reflecting a location. Based on this, human terrain is composed of sociocultural components of the population(s) located "... at a specific temporal, geospatial point."¹¹²

One view of the human terrain promotes a layered approach to locating behavior to a location, starting with the natural environment of rivers, mountains, valleys, etc. Then, following with layers based on the built environment, the groupings of humans along political, kinship, and other identity factors; economic organizations and cultural groupings; and finally, actual human behavior based on belief systems and world-views.¹¹³

An operational perspective brought out during OIF was:

to diagram Iraq's cultural landscape - its "human terrain" - in the same way intelligence analysts map out Iraq's cities, roads, and rivers. It's a function that has become increasingly important as the U.S. military has turned its focus to counterinsurgency operations, in which cultural understanding is the key and knowing the human terrain is absolutely essential.¹¹⁴

Human terrain analysis accommodates the social and geospatial sciences. Social scientists help to describe cultural relationships and discern historical trends.

Geospatial scientists help to map the phenomena to determine regions, trends, clusters, and networks. While the interpretation of Human Terrain is entirely dependent upon heuristics, Human Terrain can be represented as computer symbols that can be manipulated. To be Human Terrain it must be tied to a specific geographic location to be mapped. Once a cultural event is linked to a time or place it can then be mapped, regions identified, and descriptions developed.¹¹⁵

From a UW perspective, the terrain is indeed an essential element. Yet, when operationalizing sociocultural components with the intent to connect to locations or positions, adequate fit may be problematic. In other words, are there some behaviors and cultural elements that resist being tied to a GIS layer, or inferred as well with any precision? The attempt at defining human behavior by defining spatial boundaries related to strategy and tactical operations and missions will always be incomplete. If the human domain can be aligned to the more common features of culture, first as an indicator of 'types' of behavior that are useful in knowing about and interacting with during missions or operations, and secondly the context of those behaviors in terms of set and shifting missions (adaptability to changing mission is a hallmark of SOF) the concept of domain becomes more focused on the behaviors and consequences and less on the proximity to military operations. In the end, intimacy with behavior and its meaning in different contexts with those in a location will start to provide an understanding of why the people behave the way they do. It is also important to realize that context parses into specific locations and over time. Additionally, any location will contain a diversity of social and cultural factors that produces similar or different behaviors.

Human Domain

The concept of terrain for any number of reasons offered here has been replaced by the concept of human domain, perhaps a way to capture meaningful behavior without the result of a layer or map coordinate. Early COIN postmortems, speeches, and presentations by a variety of U.S. Government and DOD leaders indicated critical takeaways from the last decade of U.S. involvement in two long wars have more to do with mastering the culturegeneral and culture-specific knowledge and interpersonal skills necessary to navigate in that human-centric space, which for many is veiled in ambiguity and uncertainty. It is an inescapable fact that wars are won, delayed, or avoided in the human space that is not defined by traditional and conventional domains that can be defended, conquered, or overrun. This realization is gaining traction in the consciousness of many following the last decade of war and an accelerating pace of transnational security threats.

In essence, COIN provided a laboratory for working in a very complex cultural environment that featured multiple languages spoken, contained several different ethnic groups and tribes, an Islamic faith that defied understanding based on stereotyped consideration, and other variables. The success of the Taliban in Afghanistan was a marker of the success of their operations—nowhere near technologically advanced as Coalition forces—direct force on force was never going to work. The advantage that proved to engage populations for over a decade was because the Taliban possessed a decisive advantage in what has been and continues to be the relevant domain in 'wars among the people.'

U.S. Army General Raymond Odierno, U.S. Marine Corps General James Amos, and Admiral William McRaven coauthored the 2013 *Strategic Landpower: Winning the Clash of Wills* as a means to chart a future path for U.S. ground forces.¹¹⁶ The human domain was singled out as one of the primary components of the battlespace and one that is growing in significance given the current and future operating environment. The human domain was never fully defined in *Strategic Landpower*, save for the composite physical, social, and cultural environments, but its meaning was certainly alluded to as the core principle of the white paper. Others since have defined the human domain, noting similarities in its conception, including a list of attributes, the acknowledgement of an antiquity, and the emphasis on its occupants.

In "RAF and SOF Integration," an Army publication on the concept of RAF, Scott Kelly and Chad McCougan wrote about doctrine and institutionalizing the concept of the human domain. "The ability to understand peoples, culture, tribal affiliations, customs, religion, and sources of power, is essential to effective military operations. We have learned that over the last two decades."¹¹⁷ A recent effort by the Army to stand-up a seventh warfighting function, engagement, featured Army SOF as its proponent and showcased the importance placed on promoting influence in the human domain. "The idea of engagement is a needed addition in doctrine as it addresses an essential aspect of modern war fighting. Formalizing the construct within doctrine will undergird the human domain and assist both RAF and SOF operations ..."¹¹⁸

SOF and the Human Domain

SOF, although existing in Land, Sea, and Air domains, operates chiefly in the human domain. Resistance which is the core science directly related to the human domain, is the human activity that underpins every core SOF task, including unconventional warfare (UW), counterinsurgency, counterterrorism and foreign internal defense.¹¹⁹

In August 2015, USSOCOM published a future concept paper entitled "Operating in the Human Domain." Putting into a policy document the amalgamation of leadership speeches, commentaries, articles, and other publications, "Operating in the Human Domain" posits a future operational environment (that is already here) of changing rules of engagement, an asymmetrical shift of power away from centralized governments to dispersed smaller groups, a shifting of casts of allies and partners and growing importance of multinational organizations, and the increasing pace and pervasiveness of global media. The overarching SOF mission that considers the human domain, defined as, "people (individuals, groups, and populations) in the environment, including their perceptions, decision-making and behavior"¹²⁰ is special warfare.

Special Warfare is the execution of activities that involve a combination of lethal and non-lethal actions taken by a special trained and educated force that has a deep understanding of culture and foreign languages, proficiency in small unit tactics, and the ability to fight alongside indigenous combat formations in a permissive, uncertain, or hostile environment. Special Warfare is an umbrella term that represents Special Forces conducting combinations of unconventional warfare, foreign internal defense and/or counterinsurgency.¹²¹ Containing elements of a bygone era, the special warfare mission, in part, trained foreign fighters to help overthrow an insurgency. Two elements of special warfare are FID, "a holistic strategy to help a friend, partner, or ally with its internal development of defense programs to defend itself against subversion, lawlessness, insurgency, and terrorism;"¹²² and UW, "activities to support or enable a resistance or an insurgency to coerce, disrupt, overthrow a government or an occupying power through and with an underground auxiliary guerilla force in a denied area."¹²³

More specifically, the human domain plays a key part in traditional and irregular warfare and a disproportionately large role during populationcentric conflicts, which are confrontations in which the perceptions and behavior of relevant populations affect the conduct and outcome of hostilities. Over the last decade, however, SOF played more of a role in surgical strikes, diminishing and diluting necessary knowledge and skills sets critical to operating in the human domain.

With Afghanistan, and then later Iraq, the SOF mission portfolio and resultant capabilities adapted to fit mission needs. Hundreds of SOF operators infiltrated into Afghanistan utilizing existing CIA ties with warlords to connect with Northern Alliance forces just after 9/11. SOF directed and managed "large-scale use of offensive airpower using precision-guided weapons against Taliban forces destroying them both physically and psychologically through sowing fear and panic."¹²⁴

In Iraq, SOF were given their own combat responsibilities and were not attached to other units. After 2003, SOF engaged in combating the rise of the insurgency in Iraqi communities. SOF units would raid places with suspected and known insurgents and collect intelligence at the site. That intelligence, along with intelligence from drones, would be passed quickly back to a central collating point where analysts would assess the information and dispatch further raids, often occurring that same night.¹²⁵ Surgical raids or strikes were no longer dependent on disconnected and opportunistic data and information that was reactive in nature. Under General Stanley McChrystal, raids in Iraq reached a frenzied pace. Gayle Tzemach Lemmon notes that during 2003, it took days to plan raids on terrorist homes and safe houses, but by 2010 it took "mere minutes."¹²⁶ Additionally, in August 2004 USSOCOM oversaw "18 night raids in Iraq over the course of a single month. By August 2006, it was 300."¹²⁷

As the conflict continued, SOF assumed a more long-term training role with the National Army and Police in Iraq and Afghanistan that included advising real time in the field.¹²⁸ However, this role also expanded to building security forces at the local level through tribal engagement and village stability operations.¹²⁹ Training at this level, SOF recruited police officers across Afghanistan for village stability operations and built in COIN and counterterrorism capability at the village level. "Top-down reconstruction strategies may have been appropriate for Germany after World War Two. However, in many of today's failed states—like Afghanistan—where the central government is weak, political institutions are fragmented and tribal associations' strong, bottom-up SOF-lead counterinsurgency may be a better approach."¹³⁰

Contemporary evolving operations are dependent on understanding and then evaluating human behavior within mission parameters. To SOF, the components necessary to comprehend are the social, cultural, physical, informational, and psychological elements influencing actors in the environment.¹³¹ Social elements involve the variety of groups that act to compete and influence behavior and compete for resources: tribes, government groups, social groups, and public groups. Beliefs, customs, and ways of life all influence behavior and comprise the cultural element. Notwithstanding human universals, differences in the cultural element lead to concepts of fear, shame, honor, and family that can differ markedly from one group to another. Physical elements consist of the geology, geography, urbanization, climate, and other natural resources, while the informational element considers the flow of messaging through various forms of media. Finally, the psychological element reflects how individuals or groups perceive, process, and act upon information.

Conceptually, deconstructing the notion of human domain into discrete components may prove to be worthwhile from a programmatic, even introductory approach, but it also constrains the articulation of elements involved in operations. The danger of the human domain concept is that it artificially applies a perspective based on mission and is susceptible to cultural biases. The danger of applying a range of elements within categories of behavior is the same, providing discrete lists of components that discourage the consideration of the connectivity of elements across elements.

The following examples consider kinship, a common behavioral pattern found across human cultures. Like all facets of culture, kinship is a motivating force of behavior in many societies. Kinship acts to influence behavior between and within related groups of people, and not just concerning who is and who is not a relative, but as an influence on other cultural domains such as economy, law and order, gender, and more.

The notion of lineage, a group of related kin who trace their relationships back to a common ancestor, extends horizontally and vertically, across space and through time. In the Middle East, kinship is a primary motivating behavior for much of an individual's life. Kinship orders behavior daily and over time. Lineages are lines of descent that produce larger associations of related members the farther one goes back in time, but also in all likelihood, the more distant from a village or community. Yet, the farther the lineage is by descent (in terms of relatedness) and location to an individual (or initial family), the larger the set of kin and less the interactions. In this type of lineage, one can trace descent back to a common ancestor. The lineage will coalesce in terms of related members, family, sub-clans, clans, and tribes.

Much of life is ordered in terms of kinship and conflict, and is expressed through a fission and fusion principle. Intra-lineage conflict may involve different families, sub-clans, clans, or even tribes (lineage segments). When that occurs, the kinship organizations fission and all related kin that feed into either group and back to families are in conflict (think of Hatfields and McCoys). However, when the lineage is attacked or put at conflict with higher segments within the lineage or groups external to the lineage, kinship segments fuse and face the threat together, delaying the internal conflict until the threat has passed. Determining kinship is incredibly important as roles and responsibilities at each segment of affiliation will dictate behavior.

Kinship identity is based on tracing back in time to a common ancestor, the larger the segment (clan vs. family), the further back this common ancestor existed and most probably the farther afield the lineage stretches. This creates three axes of distance: one related to kin distance, how distant a living relative; a second that could easily relate to the geographical distance separating kin; and a third is a temporal distance, referring to the historical legacy of the lineage (how many generations back does the lineage go). All three of the axes are important to consider in dealing with local behavior, but bounding the location by geography or population centers, as places of conflict or people to influence will disregard the effect of behaviors, such as kinship, on other important behaviors, such as exchange, law/order, health,

and more. The importance of kinship can extend to some of the basic concerns of survival in a conflict zone:

The Soldiers were worried about food distribution depot and how to keep the depot from being infiltrated by Moqtada Al Sadr's Shi'ite militia army, which controls that part of the Iraqi Capital. The chief of security at the depot, however, assured them the warehouse was safe, because his 'organization' protected it from Sadr's influence. The Soldiers were doubtful the warehouse was safe. The chief's independence seemed inexplicable given what they knew about the area - it was a puzzling anomaly in a sea of data pointing in the other direction.¹³²

David Matsuda, one of the initial human terrain system (HTS) social scientists, knew the importance of kinship, not just family to Iraqi soldiers. He started asking questions of first the chief, then others, about their nuclear family, extended family, tribal members, and then affiliations with other tribes. "Later, he was able to chart the relationships on a diagram to show how the chief's tribal hierarchy operated, giving the Soldiers a rare glimpse into the complicated inner workings of Iraqi society."¹³³

Finally, understanding the general constructs of kinship, or other common patterns of meaning, can provide conceptual maps to help orient behavior within the context of an event or action. In the Ebola virus disease outbreak, kinship was critical to tracking the virus, but was also important to stopping the spread of Ebola. The virus was transmitted by touch. Prior to the urban as well as the rural populations understanding this-let alone the cause/attribution or the proper cure given by the appropriate healer-those who died of Ebola were given funerals. Kin came from distances far enough to be in adjacent countries to attend and place hands on the dead before burial. The populations of the three countries affected the most by Ebola-Liberia, Guinea, and Sierra Leone-like so many other African countries, gave the national borders little attention as they were artifacts of a colonial period. The Ebola virus in effect was traveling as much through lineage as it was over distance. Knowing the kinship, not locations, would have brought knowledge of how the disease traveled in the early stages. Closing national borders as a means to quarantine the populations and the virus had little effect; the borders were lightly observed by people who traveled across on a daily basis.¹³⁴ It is apparent also with the collapse or fragmenting of national borders in countries such as Iraq, Libya, and Syria, that culture and ethnic groups may view their boundaries culturally established by kinship or political alliances and not tied to a geopolitical border grafted artificially by a colonial power, or a standing government. How these boundaries are generated and their utility for demarking culture groups is critical information to have, especially when official or more formal boundaries and borders are not accepted or adhered to by segments of the population.

In each example of kinship provided, knowledge and understanding of kinship behaviors and how kinship orders these behaviors provided understanding at the point of need, but also provided enduring lessons for future occurrences. Matsuda implicated the reach and importance of a kinship system and how that kinship system was conceived by the Iraqis while providing a general template to aid in deciphering kinship systems elsewhere. It was not just an anthropology lesson in kinship systems; it was an applied perspective to how such systems operate and the social forces that utilize them. In the examples, behavior may have been localized to an individual or culture group, but the ramifications of behavior are deeply contextualized and layered. When the definition of the human domain includes the sum total of human environments as variables impacting human behavior, the thought of incredible complexity and an impossible task—to understand the human domain—is a significant consideration.

Utilizing kinship and social ties established through fictive kin can be considered part of a more inclusive analytical approach known as social network analysis, "the mapping and measuring of relationships and flows between people, groups, organizations, computers, URLs, and other connected information/knowledge entities. The nodes in the network are the people and groups while the links show relationships or flows between the nodes."135 The power and influence of such cultural behaviors as kinship rights and responsibilities can be very influential in determining behavior of the kinship groups. The United States Military Academy at West Point hosts the multidisciplinary Network Science Center whose mission is to "research and develop significant contributions in the study of network representations of physical, biological, and social phenomena leading to predictive models."136 Princeton social scientists and electrical engineers received a National Science Foundation grant to study networks of terrorists and emergency workers to help understand the way networks are connected and sustained.¹³⁷ No matter the underlying theoretical premise or the approach, analysis of

behavior in and of the human domain depends on the grasp of cultural knowledge. Cultural and regional knowledge and skills are integral to the success of any type of predictive modeling, such as social network analysis. Important for any analysis is validating the on-the-ground cultural information or data while also understanding the past and current cultural behavior of individuals and groups that prove to be a node of part of a network.

This section has provided a conceptual framework utilizing cultural knowledge and cross-cultural/interactional skills to better help in understanding others' behavior and promoting cross-cultural interactions in the human domain. Questions of how the domain is represented or should be represented are problematic, and concerns about the lack of precision of the use of models or metaphors to describe or define the human domain also creates ambiguity in those not prepared for or comfortable with less than an empirical representation. In addition, developing learning for success in the human domain might benefit from developing an ontological approach to the kinds of knowledge and skills necessary. However, a culture-general approach to learning about and working in the human domain already shares a sense of ontologies about culture domains, such as kinship (as evidenced in the above examples), ideology, exchange, and more.

Human Domain Too Complex for Preparation Provided

Culture groups and individuals are the currency of the human domain. Behavior and symbols mark their thoughts and can provide insight into motivation, although difficult to retrieve without language and culture knowledge and skills. The complexity of the human domain deepens as military personnel directly and indirectly strive to influence the path and pace of interactions where "the human domain becomes incredibly layered and dense, where meaning and purpose is difficult to extract and effort and skill necessary for success within the domain difficult to master."¹³⁸

"Operating in the Human Domain" provides a breakdown of necessary knowledge and skills sets, cross-cultural communication, multicultural collaboration and negotiations, language skills, adaptability, environmental awareness and affinity for cultural exploration, and skills to navigate hierarchy of allegiances to obtain support from individuals, groups, and populations in the field.¹³⁹ The critical competencies necessary are indeed impressive. Yet, the cultural complexity that is inherent in the human domain has been suggested by some as being far too complex for the kind and depth of training currently available to SOF, or the experience in missions. SOF "have far less regional and cultural knowledge than they're given credit for ... it's easy to assume that a crash course in the local language and mores combined with some time in country allow people to make more nuanced judgments than they're truly qualified to make."¹⁴⁰

In addition, the past decade of evolving the surgical strike capability has left SOF deficient in critical UW capability. The capacity of corporate knowledge and skills sets important for UW have "atrophied or with the duration of the Wars have never been trained/learned to SOF who entered the force in the last 10 years."¹⁴¹ The mission necessary for SOF's success in Iraq and Afghanistan was one of direct action, and the organizational culture has "come to value direct action" while degrading the skill set and devaluing the UW mission.¹⁴² Even with the shift in operational focus, some see the legacy of SOF being a theme that re-establishes once most of the force is out of the shadow of OEF. "I don't see the role of Special Forces changing tremendously, frankly the idea was well ahead of its time back in the 1960s. Green Berets will continue to focus on Foreign Internal Defense and Unconventional Warfare, but will do so at a deeper level of sophistication with additional training and language capabilities."¹⁴³

UW does not just demand reading the security environment; it involves a working knowledge of how culture works, and more importantly, how it may be impacted by insurgencies, movements, or even COIN "outside intervention in tribal conflicts is absurdly complex and perilous."¹⁴⁴ The point of this argument is easy. It takes anthropologists years of study, fieldwork, more study, and then more fieldwork to become knowledgeable about a village, the interlocking villages around that village, and how villagers respond to a host of external agents. Next is the publication of a peer-reviewed article or two to offer this knowledge and expertise. Their learning never stops each field visit offers perhaps a glimpse, maybe even a jarring experience of culture change. Now translate those years of research and experience to the U.S. military members who served in Afghanistan.

The Afghanistan-Pakistan (AfPak) Hands Program was a collection of military officers and civilian volunteers who learned Urdu, Dari, or Pashto. They also received instruction in an array of regional and cultural knowledge. Andrew Exum, an instructor in the course, wrote, "If these soldiers had been immersed in two years of intensive language training and an additional

four years of education in the people, tribes, history, and cultures of Afghanistan, at the end of those six years, they would still have only a fraction of the local knowledge of an illiterate subsistence farmer native to the region."¹⁴⁵

Is the expectation of knowledge and skills needed to replicate the above and carry a weapon a bridge too far? How do we know the right kind and amount of LRC is sufficient for the evolving mission landscape that features dynamic and shifting alliances of non-state actors, ethnic, and tribal groups?¹⁴⁶ Culture groups that form out of traditional ethnic or tribal groups, as well as any number of terrorist groups to the U.S., may not be considered that to local populations. "Unless we're prepared to spend decades learning the local culture and building trust with the tribal leaders—and even the investment of decades is no sure thing, as most Western colonial powers learned—it may simply be impossible to master the nuances and necessary to transform these societies."¹⁴⁷

Organic SOF LRC capabilities may not be sufficient or even possible given the needs of the human domain. To some, external academic resources are necessary to augment existing LRC capability.

[T]he Human Domain in its broadest sense is too complex a problem set within a given region to be addressed solely by organic SOF resources. The number of SOF operators and enablers available at any given time to the various combatant commands is a finite resource.¹⁴⁸

The Joint Special Operations University represents one such forum engaging external resources. The need to engage experience and perspective that comes from beyond a military lens is keen. With some of the social sciences, including anthropology, highly critical of supporting military operations and HTS, and the most recent allegations of the American Psychological Association supporting instances of torture for the CIA—"it appears American Psychological Association colluded with the CIA to bend the profession's rules of ethics to permit torture"¹⁴⁹—that kind of problematic association may continue to hinder a more fertile scholarly relationship. Despite limited reception of SOF need, "it is inevitable that SOCOM will seek to partner with academic institutions in order to gain access to skill sets and resources that are unavailable within the current force structure. Whether directly or indirectly, SOCOM will have to engage subject matter experts in academia to obtain cultural information, engineering studies, agricultural studies ... etc."¹⁵⁰

The takeaway from this section is that success in present and future SOF operations will probably not be based on the outcome of conflict, but judged by recent results, based far less on decisive or complete outcomes. In many ways, the social and behavioral sciences necessary for preparing, understanding, and acting in these operations present directions of inquiry and learning different than military sciences. One solution to the problem of the lack of social and behavioral capability in the DOD was to import expertise via the HTS and social scientists. The program was quietly ended in 2015 for many reasons, having to do with managing and staffing the program, and the inconclusiveness of the effectiveness of the program (lacking metrics).¹⁵¹ Many voices, mostly inside the DOD, still feel the program is viable and worth revisiting if the program has not already found another benefactor or sponsor.¹⁵² Delivery and method of social and cultural knowledge, then application of it in country via social scientists may not be tenable or desirable, leaving a thorough sustainable learning program the best and perhaps only option. Remaking SOF into social scientists is not a goal, and "Ph.D.s Who Can Win a Barfight"¹⁵³ are not needed. However, providing SOF with critical foundational sets of social and cultural knowledge and interactive skills to better understand a variety of complex environments and groups is an option. To capitalize on the rich and diverse foreign experience and allow learning to occur in the 'natural' laboratory (deployed setting) and then be able to sustain and reinforce continued learning in interventions throughout a career provides capability over the span of a career, and allows organic transmission of such knowledge and skills from experienced operators to those with less experience. Some anthropologists today acquire jobs in business and government without advanced degrees. They take their degree or knowledge set with some experience and apply it to the life of an organization, an effort, or an industry. These applied anthropologists offer some similarity to SOF through the acquisition of foundational knowledge (and skills) and application to the human experience.

It Is the Human in Human Domain

The culture groups that make up the human domain are difficult to attribute intent, reason, and purpose, let alone influence behavior. Even with the recent efforts in policy and doctrine to cast the 'human' in human domain as an essential component of current and future missions, the conceptualization

of the domain as defined by recent military scholars and authors falls short due to deep-seated cognitive, operational, analytic, and the most profound and least understood cultural biases. SOF operations feature conditions with enduring interactions fraught with "ambiguous conditions in environments where complex social, historical, and economic contexts are as important as purely military factors."

This author identified several reasons the human domain cannot be simply conceived as a space that involves social interactions, or as a list of social or cultural attributes:¹⁵⁴

- a. The domain does not coincide or align neatly with spatial boundaries defined by geopolitical, physical, or environmental variables; one cannot draw absolute and definitive physical boundaries around the human domain. This goes against the grain of traditional military operations. For example, in the recent Ebola virus outbreak, it was obvious that the affected population did not adhere to national borders and other geopolitical parameters prior to or during the outbreak. In fact, when effort was made by the U.S. Agency for International Development and other agencies to enforce the borders as a means to limit spread of the virus, they were largely ineffective. However, stopping at the acknowledgment the borders did not function as response workers would expect them to would have shut off the flow of information of why the borders were ineffective.
- b. The defining variables of the human domain critical to the management of it are social, cultural, and behavioral, and based on constructs such as world-views and underlying cultural lattices of belief systems and values of the actors (including military and/or intelligence personnel). In other words, these underlying cultural systems greatly influence the behavior that is observable in the human domain.
- c. The human domain transcends the traditional and new domains: air, sea, space, land, and now cyber. Behavior found in each can be traced back to the human domain, and the human domain will cross-cut each of the other domains.
- d. Knowledge of the human domain is critical; the kinds of knowledge necessary to understand the parameters of this domain include

sociocultural knowledge domains that feature culture-general and region and culture-specific information.

e. The application of these types of knowledge sets to ascertain meaning of behavior and to interact (work) with pertinent actors in the human domain is tantamount to success and requires mastering thinking strategies and interpersonal skills and abilities not traditionally a part of military operations or learning programs, even language programs.

Comprehending the extent of behavior in the human domain depends on theoretically and applied sociocultural knowledge and skill-based competencies in addition to language. The environment and missions that SOF primarily are involved in are linguistically and culturally complex. It could be said that the use of the human domain is a conceptual repackaging of past operational environments, such as human terrain, especially for SOF. The linguistic and cultural skills and knowledge that were critical during Vietnam and other more recent insurgencies are critical to those needed for today's mission. However, a language and culture learning program to prepare for the human domain must also consider characteristics of that domain that are now just coming to light.
5. SOF LRC Needs, Competencies, Learning Objectives, and Assessments

Last year [2008] we called attention to the importance of language and regional knowledge as essential to strengthening relations and facilitating more effective operations with foreign partners ... We have a long way to go in recognizing and incentivizing such expertise as an operational necessity before we can truly develop and sustain real experts in specific key regions around the world. I call this "Project Lawrence," after T. E. Lawrence of Arabia.¹⁵⁵

Defining and detailing need is critical to establishing necessary KSAs (and competencies) that can be used to build effective learning programs. Critical task functions derived from a needs assessment provide means to define expected behavior, which then can be used to build learning goals and objectives. At the other end, assessment is based on developing a solid understanding of which criteria to use—proficiency, performance, or competence—to build the assessment. What is novel in this process is to build a curriculum and overall learning program that features different subjects/emphases (LRC), distinct and interwoven KSAs, and an assessment program that can produce an effective measure of student learning. In addition, a comprehensive assessment program should provide assessment of the quality and effectiveness of the curriculum/learning program and offer a means to fold student experience back into course development.

This chapter will open with a discussion of the need for current SOF operations. SOF vision and mission demands more than an asymmetrical application of LRC to learning. Next, utilizing the discussion of the DLTR and its legacy on DOD LRC development, and the uneven application of terminology and concepts in policy and strategy, the author will suggest that SOF, like other organizations, have been captive to the lack of consensus on aspects of LRC. In addition, SOF have undergone a transformation in force growth, mission orientation, expected capabilities, expanded autonomy, and budget. These variables influence and enable a reorientation of the existing SOF LRC program. LRC will be defined and explained in terms of KSAs. Finally, the assessment program of such an integrated LRC program will be

explored. This discussion will include existing assessment programs used and their benefit (or lack of benefit) to the existing LRC program. It also will include a survey of current LRC assessment tools in use or in development. To conclude this chapter, an assessment model will be advanced that allows an organization to customize assessment needs while maintaining necessary standardization.

The Language and Culture Qualifying Course¹⁵⁶

Course Number: 2E-F253/011-F95, Clearance: Secret, Course Duration: 24 weeks

Class Size: varies, several Iterations per year, See ATTRS for course dates Prerequisites: Successful completion of the first four phases of the Special Forces Qualification Course (SFQC)

Course Description: Phase 5 of the SFQC focuses on language and culture. During Phase 5, Soldiers receive basic special operations language training in the language assigned to them at the completion of Special Forces assessment and selection. Languages are broken into two categories based on their degree of difficulty.

Category I/II: French, Indonesian-Bahasa, and Spanish

Category III/V: Arabic, Chinese-Mandarin, Czech, Dari, Hungarian, Korean, Pashto, Persian-Farsi, Polish, Russian, Tagalog, Thai, Turkish, and Urdu.

Students receive instruction in three basic language skills: speaking, participatory listening, and reading (limited). The following areas of emphasis are covered during the training: overview of physical and social systems, economics, politics and security, infrastructure and technology information, culture, and regional studies. Language instruction focuses on functional application geared toward mission-related tasks, enhanced rapport building techniques, cultural mitigation strategies, interpreting, and control of interpreter methods. Also during Phase 2, a progressive physical training program is started in order to prepare for Phase 3.

To successfully complete Phase 5, Soldiers must achieve a minimum of 1/1 listening and speaking as measured by the two-skill Oral Proficiency Interview.

The Operational Landscape-LRC

The SOF language training program publication, *ARSOF Next: A Return* to First Principles, ensures SOF operators will "facilitate special warfare activities and optimize the ability to work with and through partner forces and indigenous personnel."¹⁵⁷ The publication promotes LREC capability as a SOF value and language and culturally capable SOF as the first choice for optimal mission accomplishment. Learning ensures all LREC training and education includes region-specific and cultural content as well as understanding people's motivations, beliefs, economics, politics, history, customs, and languages, is necessary to deal effectively with the enemy, allies, and uncommitted civilians.

Needed KSAs

Ambiguity of situation, a variety of culture groups that may have competing agendas, and extended periods of operations result in a need to understand the behaviors of those involved in an insurgency, movements, or counterinsurgency. SOF trained in or supporting special warfare taking place in a cross-culturally rich environment are at least comfortable with being the tip of the spear. In this milieu, LRC enables mission success. The suite of LRC competencies are functional, enduring, provide a platform for further learning to occur while adding to a repository of existing experience through observation and sense making. They work to mitigate conscious and unconscious cultural biases—in short, to think differently about behaviors that are dissimilar so that the similarities can surface to explain and guide future behavior. There must be utilization of cross-cultural interaction skills, to include language, nonverbal, and paralinguistic skills, and a working understanding of the communication and languaculture, through myth and narrative that underpins many of the areas where UW may take place.

Language

LRC learning in conventional forces and professional military linguists consists of distinct LRC learning programs. Any overlap usually reflects an asymmetry on the part of the population. The Marine Corps' Regional, Culture, and Language Familiarization program features low-level language and a more in-depth treatment of region and culture, as do the rest of the Services in different ways. Professional linguists who graduate from DLI matriculate through an intensive language curriculum with a high proficiency level in the language taught. Regional and cultural knowledge, at least through a formalized and assessable curriculum, is not offered.

Initial language learning for ARSOF, most likely initial acquisition training (IAT), occurs during the yearlong qualifying SFQC. Duration of the language program is 24 weeks and is the last phase of the course. The course description:

Phase 5 of the SFQC focuses on language and culture. During Phase 5, Soldiers receive basic special-operations language training in the language assigned to them at the completion of the Special Forces Assessment and Selection. Languages are broken into two categories based on their degree of difficulty. Category (CAT) I/II: French, Indonesian-Bahasa and Spanish. CAT III/IV: Arabic, Chinese-Mandarin, Czech, Dari, Hungarian, Korean, Pashto, Persian-Farsi, Polish, Tagalog, Thai, Turkish and Urdu.¹⁵⁸

Additional information on the course indicates that language instruction covers two primary modalities that are assessed using the oral proficiency interview (OPI), speaking and participatory listening with limited reading. Professional language instruction in the DOD, on the other hand, is geared toward listening and reading. Professional linguists at DLI are assessed using the DLPT, discussed earlier. Instruction in areas of emphasis include overview of physical or social systems; economics, politics, and security; infrastructure and technology information; and culture and regional studies. Language instruction focuses on functional application geared toward mission-related tasks, enhanced rapport building techniques, cultural mitigation studies, interpreting, and control of interpreter methods. "To successfully complete Phase 5, Soldiers must achieve a minimum of 1/1 Listening and Speaking as measured by the two skilled Oral Proficiency Interview."¹⁵⁹

SOF Language Transformation Strategy Assessment

In 2010, USSOCOM published a Special Operations Forces Language and Culture Needs Assessment project. An earlier Special Operations Language Transformation Strategy Needs Assessment project was published in 2004. Presentations at the ILR based on these studies and course development were given by SOF and contractors.¹⁶⁰

The existing Special Forces qualifying language program is six months in duration. The sole proficiency or mastery assessment required is a 1/1 OPI score (although policy may be forthcoming that elevates that to a 1+/1+). The OPI is a brief interview to determine level of mastery, while the DLPT is a multi-day exam. Non-linguistic items covered in the SFQC feature an array of topics with several articulating with the breadth of LRC areas discussed briefly above, however lacking information on learning objectives and goals, the curriculum, breadth of each topic, the interrelationship of topics, and assessment.

Language utility is critical for special warfare activities, as it is for SOF in general. A decade ago, minimal language proficiency to graduate the SFQC was a 1/1/1 measured by the DLPT. More recently, the emphasis on modality changed to speaking and listening still pegged at 1/1. A 2012 USASOC survey indicated that reading and writing were not utilized in operations and missions, and the speaking and listening components should be tested through an oral interview, reducing the language learning and cost of testing.¹⁶¹ Level 1 is the standard minimum for all four SOF components.

USSOCOM LREC strategy reports at 720 hours, 66 percent of John F. Kennedy Special Warfare Center and School students achieved a 1+/0/1+ in all languages, compared with Naval Warfare Special Command students achieving a 98 percent pass rate over minimums while 68 percent exceeded the CAT III and IV target scores. These observations are not contextualized to year however, or if the percentages represent over time.¹⁶²

Level 1 proficiency is about "most survival needs and limited social demands."¹⁶³ Referring to the start of the AfPak Hands Program, one author wrote, "volunteers receive cultural training and 16 weeks of language instruction in Dari, Pashto or Urdu ... and if you have tried to learn those languages, 16 weeks ain't nothing. 16 weeks of Urdu and you're still wondering whether that's a "N" or an "L" and saying "Aap kya hal hai?" with a goofy grin on your face."¹⁶⁴ Outside of SOF-wide surveys and focus groups there have been no 'in-field' studies done on LRC use by SOF operators.

The utility of a low-level proficiency for special warfare is limited, and given the complexity of the operating environment in the human domain, it needs to be determined whether level 1, even 1+, is the proficiency that can provide the critical KSAs for most SOF missions to include UW, insurgency, or even COIN. Given 24 weeks of LRC learning, what can be done to increase the language proficiency in the six months of learning? In addition, sustainment language training should not be considered as maintenance, but enhancement, thus training duration and intensity should reflect that goal.

With the given importance of LRC in recent SOF policy, proficiency level is important, as they are minimums for those in the program and for policymakers. There do not seem to be studies done on the expected duration of language learning to get to the lower levels of the different CAT languages. Expected duration for different levels have been advanced. LTI provided a table of expected learning times for the different CAT languages.¹⁶⁵ Briefly, CAT I and II languages given aptitude variation in an immersive classroom experience with one to four students and at 720 hours produce at the advanced to superior level on the American Council on the Teaching of Foreign Languages proficiency scale. Cat III languages at 720 hours of instruction feature intermediate to superior proficiency and 720 hours of instruction at CAT IV produces an intermediate level of proficiency.

A decade of surgical strikes and supporting two focused wars has degraded SOF language diversity and capacity¹⁶⁶ and the ability to apply cross-cultural competence and regional/cultural knowledge leading to an overuse of interpreters in OEF and OIF and lack of opportunity to develop language capability. The difference between SOF deployed in numbers and percentages is dramatic; 84 percent were deployed to CENTCOM in 2010 compared to just 17 percent in 2000.¹⁶⁷ "Almost inversely proportional to SOF's overwhelming numbers and length of commitment within these two countries [Afghanistan and Iraq] is their presence in other regions of the world."¹⁶⁸ Still four years after this figure, the percentage and number may have only decreased a bit. This concentration has limited the ability of SOF to support more global operations.

Fletcher Schoen argues that the success of SOF also created a surge in SOF personnel and a dilution in capability, which was seen in the lowering of requirements for LRC.¹⁶⁹ Losing linguistic capability certainly enhances the need for cross-cultural competence. Even with an elementary proficiency, cross-cultural, skill-based competencies augment cross-cultural capabilities in a very uncertain environment. Even with good interpreters, mitigating biases, perspective-taking, and the ability to access, process, and apply cultural knowledge can be difficult without some elementary proficiency.

ARSOF strategy includes the continued development of advanced language learning programs for selected SF and selection campaign to recruit into the Q-courses personnel with proficiency already at or above the 1/1 levels to help mitigate the loss of LRC capability.

Advanced Languages: The Special Warfare Education Group continues to develop plans to send selected Soldiers to advanced language training (existing and newly developed options) to facilitate special warfare activities and optimize the ability to work through partner forces and indigenous personnel. The intent remains to achieve a near native language capability in special warfare units. To incentivize language skills, language proficiency is now tied to re-enlistment bonuses.¹⁷⁰

Increase Number of Personnel Entering ARSOF Q-courses with FL Proficiency Above 1/1: Current efforts include target language proficiency identification through the DLAB to focus recruiting on Soldiers who possess a 1/1 or better; for in-service recruiting, screening personnel databases for targeted recruitment, expanding into the U.S. Army Reserve and National Guard for Soldiers who possess a 1/1 or better language capability.¹⁷¹

Regional and Cultural Knowledge

In the last decade, there has been uneven progress in the DOD on succinctly defining terms and concepts that are involved in region and culture.¹⁷² Some of this unevenness can be traced back to the preparation and publication of the DLTR and the lack of scholarly sophistication when dealing with the non-linguistic components of the DLTR. Yet, even if Services and commands were left to their own devices, which many were, it was critical to define concepts that matched theory and were applicable to Service or command operations, missions, and learning development. With the use of LREC, regional expertise and culture, or cultural capabilities, became a collection of knowledge and skills that were applied unevenly in policy, strategy, and learning.

USSOCOM provides a similar treatment to LREC in the SOF Language Training Program. SOF will, "Ensure[s] all LREC training and education

includes region-specific and cultural content. Understanding people's motivations, beliefs, economics, politics, history, and customs, in addition to their languages, is necessary to deal effectively with the enemy, allies, and uncommitted civilians."

The concept of region connects human behavior to a geospatial location and is defined by the physical characteristics of the location, the human imprint on the location, and the reflections of the human/environmental interface at that location. Region and culture-general offer very broad labels to capture an array of components that relate to places and people. Simply, how do culture groups that reside in particular locations or areas see their surroundings, and how do they define their land versus not their land? Regions are related in description, such as in story or myth, and as being physically marked or imprecisely defined by informal and/or transitory boundaries or borders, or jurisdictionally ordered where national borders are clearly defined in law. Region gives way to nation-state and other larger associations such as supranational organizations like the North Atlantic Treaty Organization, European Union, and African Union.

Culture represents the second axis of interest in human behavior that accounts for knowledge of common sets of behaviors that can define a singular collection or group of people. Human behavior is predicated on sets of beliefs and values and is expressed in domains such as kinship, law and order, exchange, governance, and more. This is culture-general knowledge. Culture-specific knowledge is the manifestation of such commonalities to specific culture groups, not necessarily tied to one location. The second aspect of culture concerns the interactional skill-based competencies that promote effective interaction between culture groups or organizations in specific locations or a series of locations.

Region and cultural-general knowledge are sets of universal concepts and principles that apply across space and human culture groups. The intent of this focus is to instill in students the understanding and lattice that applies somewhat evenly to all culture groups at any location. SOF should be concerned about where they go and whom they will interact with on a friendly, neutral, or adversarial basis. However, land and people, even language, will differ in expression, behavior, and dialect, even language or languages. It is imperative that foundations of regional and cultural knowledge and essential skills of cross-cultural competence are provided as they represent transferable knowledge sets—not only that accelerate specific knowledge when presented, but also of entry into unknown places or continuing presence, or influence of external agency or actor. The main disciplines that contribute to this inquiry are anthropology and human/cultural geography.

Region and culture-specific knowledge relate directly to a specific region or country and definite culture groups within a region. This knowledge is acquired through continued learning and reflects the 'flesh' of the region and culture 'skeleton' initially acquired. This learning is not new to the DOD and SOF. As discussed, learning was the primary conduit of quick knowledge sets provided through pre-deployment training and mobile training teams and the array of products and materials produced and distributed throughout OEF and OIF. Some of these products and materials are still being produced and distributed.¹⁷³

The final piece of this LRC triumvirate is the introduction and development of the procedural knowledge and skill-based competencies related to facilitating effective interactions, establishing sustainable relationships with culture groups and making sense of culturally and regionally complex environments. Obviously, language capability is critical. Perhaps more important, especially given low-level language capability, is the understanding, development, and deployment of this set of skills. The frame for this interactive set of skills and for general or specific knowledge acquisition is thinking differently.¹⁷⁴ Thinking differently is supported by cross-cultural competence and its principle competencies: cultural learning, cultural self-awareness, perspective-taking, and observation/sense-making. Cross-cultural competence is "the ability to navigate in complex interpersonal situations, express or interpret ideas/concepts across cultures, and make sense of foreign social and cultural behavior."175 Developing and engaging empathy is important. Also a part of cross-cultural competence are interactional skills such as cross-cultural communications and negotiations, and finally, working with interpreters. At the base of cross-cultural competence skill-based competencies and capabilities is thinking differently, "managing the unintended consequences of human cognition - bias - and its operation when considering those who are culturally different."176 These skill-based competencies can be enhanced with learning and experience.

LRC components should not be developed in isolation. The power of their effect on learning is ultimately their synergy within a coordinated learning program. "[S]uccess at meeting individual [LRC] component and synergistic learning outcomes can result from an integration of concept intent,

curricular content and blended learning processes."¹⁷⁷ More generally, if language proficiency of graduated SOF from the various qualification schools is maintained at level 1 or 1+, and given the continued mission need of FID, for example, it is even more necessary to graduate students with additional region and culture knowledge sets and cross-cultural competence skills that resonate with need to enhance mission success.

An LRC coordinated program does not mean language and a further compendium of region and culture KSAs. An LRC learning event does mean a highly interactive and sequenced curriculum where instructional designers, subject matter experts, and scholars develop relevant learning goals and objectives that connect to usable and meaningful assessment measures. A coordinated and blended LRC program means the development and full utilization of a LMS and the development of a cadre of instructors that facilitate the LRC instruction together.¹⁷⁸ A coordinated program does not mean utilizing a DLPT proficiency score to accurately or even generally approximates the speaker's region and culture capabilities, but developing an assessment program that within the context of the learning event promotes an assessment measure that is specific to an organization, reveals an understanding of capability, even performance across the LRC continuum, and can be tracked from initial acquisition LRC even through interventions.

There have been two recent developments of SOF LRC curriculum/ courses: Naval Special Warfare training and a course in development for Marine Corps Special Operations.¹⁷⁹ Much of the region and culture content in the Navy curriculum was culture specific and produced in the form of 'culture notes.' The MARSOC course still in development will have 10 percent region and culture material in it.¹⁸⁰

Assessment

It is clear that there does not exist any kind of meaningful assessment for regional knowledge and culture-general and culture-specific knowledge or cross-cultural competence in LRC learning at any level or organization. There are certainly ample organizations that could use one, such as SOF and other populations who might deploy or support assignments or exercises, such as humanitarian assistance and disaster relief (HADR), SFA, and UW, etc. Assessment serves several stakeholders: the learner, the organization, the instruction designers, the educators, policymakers, and budget makers.

There are several questions that should be asked and considered when setting up an LRC assessment program. What does it mean to assess capability? For assessing culture, how do you measure gain in a short period of time? When is assessment given, and why? Do assessments come with gap analysis and learning programs? Do they lead to learning goals and objectives, or are they based on learning goals and objectives? Are they guided/self-paced? Are facilitators trained/authorities on subject matter? Are assessments across LRC synchronized?¹⁸¹

Those who are conducting assessments also need to consider what is wanted out of an assessment. Questions to consider: Is it an understanding of one or several capabilities, linked or separate? Is it a biographical sketch or is it something useful to an organization but based on a more generic model, which can also be customizable? Assessment should also consider there is an understanding of what has been learned and can be expressed. And finally, should the assessment be an organizational-wide 'score' with relevance to a focus or mission, but also relevant to other organizations and programs?¹⁸²

This study suggests LRC assessment should reflect the actual learning process and be given within the confines of that learning program/event. LRC assessment should be a measure of what has been learned and not approximated with grades or other more traditional means of assessing. The problem is the need to move beyond a language-centric program because of the limiting nature of the intent and material. If an LRC assessment was feasible, then being able to capture it will allow the necessary metrics to track performance, build concrete learning objectives, and support requirements.

Existing or In-Development LRC Assessments

Currently, there are no existing region and culture assessments. Regional proficiency and expertise, until it is modified or republished by Defense Language and National Security Education Office, offers nowhere near the terminology and concepts that are needed for standardized assessment. Definitions of proficiency levels lack any precision to the construction of learning goals and objectives. There are three existing attempts at creating coordinated LRC assessments to benefit the DOD with various utility.

DLPT/OPI

Language assessment for SOF was changed from the DLPT to the OPI. A low-level DLPT designed to pick up the IAT proficiency of SOF learning

was initiated, but only a few languages were completed by DLI and have not been utilized by LRC learning programs. The DLPT, especially at the lower registers, and the OPI do not adequately assess region and culture knowledge gain or performance. Upon completion of any LRC learning program, the only measure of capability is a DLPT or OPI score. This is problematic to say the least, especially for organizations like SOF where understanding what region and culture KSAs map to what level of performance. This is critical for reasons of immediate utility in operations, but as a means to track LRC capability over time, and as a means to plan LRC interventions.

As seen in the selection of the OPI over the DLPT by SOF, language assessment has seen some indication of correcting for organization need and utility. In brief, the DLPT is a computer-based test, usually multiple-choice with automated grading. It is the standardized procedure that uses the ILR scale for the global assessment of reading and listening only. The DLPT is normed or predicated for military intelligence linguists along global domains of potential operational relevance (politics, society, economy, etc.). The DLPT focuses more on intelligence collection rather than analysis and interpretation. There is no authentic linguistic production in the target language, and it is not communicative in nature. The OPI is a 'live' subjective and communicative assessment of global functional speaking ability. It is a standardized procedure using ILR scale for assessment of global and functional speaking ability. It can be used in academic placement, student assessment, program evaluation, professional certification, hiring, and promotional qualification.

As a fit to organizations like SOF, neither language assessment is truly focused on assessing DOD operational ability in the target language, nor are they set up to include any kind of assessment of region and culture. Capturing low-level language scores and making them relevant is difficult, although an attempt was made to produce very low-level DLPT tests for primary mission languages for SOF; only a few were made. If LRC is to continue to be a defining SOF capability for a force of more than 60,000 members, an organization-based language assessment would seem to be a viable option.

Education-Navy Asia-Pacific (APAC) Hands Program

Not similar to the AfPak Hands Program, save in name, the APAC Hands Program is a Navy initiative to build officers with regional understanding and confidence to inform decision makers.¹⁸³ There is a rigorous graduatelevel certification program designed by Navy LREC and Naval Postgraduate School. 'Proficiency' levels are marked by incremental increases in graduate education and experience gained in select regionally focused billets. The program is staffed with officers who will be acting as resources for commanders on Asia-Pacific matters of concern.

All commands are highly encouraged to identify APAC Hand positions that may require or be enhanced by regional knowledge. Typically, these billets will be found on staffs at the operational or strategic level and will be related to the work required by the incumbent rather than based on a physical location. Coding billets will facilitate opportunities for education en route, which should reduce manning shortfalls and minimize the requirement for on the job training to learn regional dynamics.¹⁸⁴

Selection/Training—ARI Cross-Cultural Competence Assessment Battery

ARI initiated a six-year project to develop a cross-cultural competence assessment battery to ultimately exist as a series of web-based tests.¹⁸⁵ "The overarching objective of this project is the validation and delivery of a battery of cross-cultural competency assessments that could be used by the U.S. Army for future selection and training in roles and assignments that have a cross cultural component." As of now, an assessment mechanism to measure cross-cultural competence in service members does not exist. There are intercultural assessments that have been developed by academic and private industry for non-DOD populations, but as a few surveys of existing assessments relate, most of the data is from self-reports, and validity of the measures may not be accurate or valid.¹⁸⁶ It is through two avenues, better training and/or selection methods, that a Soldier's cross-cultural competence will improve.

The first two of four phases concern cross-cultural performance indicators and requirements and a literature review of existing research and assessment. The third phase is the actual assessment development for the test battery, after research and using parts of existing assessments and the development of new assessments.¹⁸⁷ The completion of the first three phases was to end at the end of FY 2015.¹⁸⁸ "This project was started back in 2013 with the goal of addressing some of the major concerns the Army faces regarding the assessment of non-cognitive skills, in general, and culturally relevant skills."¹⁸⁹

The current status of the project is the identification of 13 sociocultural performance indicators in Phase I, some of which may need some revision as they were based heavily in operations in Iraq/Afghanistan and not representative of current and future missions. Researchers need to develop criterion measure for performance indicators—how well one variable or set of variables predicts an outcome based on information from other variables. In Phase III, 16 constructs were identified and approximately 30 assessments were identified or generated for use in the cross-cultural competence assessment system.¹⁹⁰ Phase IV will consist of the refinement and validation of the assessment battery "for use as a selection and training tool by the U.S. Army."¹⁹¹ The ultimate goal is to develop a web-based tool/battery of tests that does not rely on self-reporting for use in training and/or selection. The final Phase IV is due to be completed by 2018.

Human Capital—RPAT

The RPAT is a ground-breaking analytical tool to assess the propensity of DoD personnel to perform duties in 15 regions of the world. It is designed to provide commanders a means to quickly identify personnel in their commands who possess skills relevant to key regions and compare them to identified needs for regional expertise. RPAT goes beyond simple skill attribute tracking by using algorithms to assess individuals' formal education, duty assignments, deployment and stationing history, training, and foreign language skills to derive a regional proficiency rating on a six-point scale from 0+ to 5. The RPAT collects information via a user interface operated by the Defense Manpower Data Center (DMDC). Future plans call for evolving the RPAT into a personnel system data mining tool that will pull its information from personnel data bases, eliminating the need for collecting data via the user interface. RPAT information will reside in the Language Readiness Index in the Defense Readiness Reporting System (DRRS).¹⁹²

The RPAT represents an assessment of individual skills that together offer insight into how background, training, and experience predispose an individual to perform tasks in a specific region. RPAT features as its assessment factors: regionally specific systematic knowledge; regionally specific experiential knowledge; utility of language skills; analytic and critical thinking skills; and nonspecific experiential knowledge. The biographical information critical to mining the individual's history and experience is drawn from an extensive introductory survey taken by the individual. Each survey is individually scored and a composite score generated which is nested within 15 regions. There are degradation rates integrated into variables such as language. Regions are North America, Central Asia, West Africa, Central America, South Asia, Sub-Saharan Africa, South America, Southeast Asia, Middle East North Africa, Western Europe, East Asia, Western Oceana, Eastern Europe, Caribbean, and Eastern Oceana.

RPAT is tied to providing proficiency levels, based on those identified by DODI 5160.70, that "represent an individual's awareness and understanding of the historical, political, cultural (including linguistic and religious), sociological (including demographic), economic, and geographic factors of a foreign country or specific global region."¹⁹³

RPAT has been in production and testing since 2011,¹⁹⁴ indicating the difficulty in creating an assessment that captures LRC across the total force (to now include the civilian population). It is difficult to capture the depth and nuance of varied experience in biographical formulation derived from a survey. Through the five years of design and testing, the algorithm has been adjusted as well as the populations enlisted to participate have changed to include FAOs, SOF, and conventional forces.

Some of the issues may still hamper successful implementation of the RPAT.¹⁹⁵ There has been difficulty in recruiting personnel from pilot groups identifying and recruiting from targeted groups. Initial validation based on populations like FAOs now limits the expanding scope of the RPAT. For use in conventional forces, there is the need to recalculate the algorithm. Difficulties captured during the validation process and the targeted rollout were completing the initial survey was time-consuming as well as the perception of the tabulated regional proficiency rating to the individual and the organization. There was not a realistic accounting of heritage knowledge or language in the algorithm and education was a very critical component that innervated several of the variables. However, the inability of the tool to include incomplete degrees or certifications, training or education in civil schools also affected the tool and the users. Finally, the overall utility to the DOD was questioned.

The other difficulty of the RPAT is the intent for the tool to draw from existing biographical information housed on DOD personnel systems. The need is to be able to populate the tool with existing variables already tracked in these personnel systems and a means and inclination for the individual to capture and update information that would effect, or not effect, a change in the RPAT score. The Defense Manpower Data Center (DMDC) is currently revising/updating the questionnaire/algorithm to ensure consistency with the latest Center for the Advanced Study of Language (CASL) version. Having all of the components of the RPAT common and tracked and updated in DMDC is problematic at best.

DMDC has developed and launched a production version of the Data Collection Module. Through its initial data collection, DMDC has provided necessary personnel data for CASL to test the prototype's validity, sensitivity, and utility. The next version of the RPAT will be informed by analyses of the tool's sensitivity, and new questions will be incorporated. Its criterion validity will be determined by comparing regional proficiency assessments from the RPAT with experts' assessments.¹⁹⁶

Simply, RPAT was developed with a learned and well-traveled/mission experience population in mind, such as FAOs. Education and knowledge about regions/countries were critical to understanding of national governments and militaries. Language was more or less secondary, but those variables that could have applied to culture were much less important than degrees. RPAT's scale was modeled after the regional proficiency scale and with the advanced scores, the education, degrees, and experience became healthy distinguishers of 'expertise.' The RPAT has been unable to deliver a finished tool that spanned the total force, which was one of the initiatives of the DLTR—account for the LRC capability across the DOD. In this author's experience with RPAT, one issue has been 'fitting' the RPAT to specific organizations and their needs. It may be that spanning the total force for LRC proficiency is not to the best interest of the DOD or the organization/Service/ command. Developing an assessment that immediately benefits the commander on LRC needs is more necessary, and making it specific to mission, operations, and force advisable.

Narrowing the LRC Assessment Focus by Opening the Aperture

Assessing LRC proficiency has always been a 'step too far' based on existing research that could apply to region and culture. Language proficiency has existing measures and its application to organizations and missions outside that of professional linguists has been imperfect at best. This can be seen in SOF's adoption of the OPI as the more relevant measure for their need—dropping the requirement to take the DLPT based on application of modalities not critical to their mission success and the need to continue to utilize the DLPT as no other measures exist.

The Haitian earthquake response energized the discussions of the need to quickly identity Haitian French and Creole speakers for deployment. Identifying speakers was important, but pulsing the entire force for this requirement was perhaps unnecessary. Granted language capability was important, so was regional and culture learning and experience. Perhaps in some ways just as important was the ability to match LRC with the composite force that actually would be 'on the ground,' including medical, logistics, security, and others. Pulsing organizations and commands for this information does not require a force-wide tool, but for each organization to know the LRC capability in their ranks and then be able to sift and sort through the capability based on external requests and internal manning capability.

At this time, there is no existing LRC assessment that can be tailored to an organization, or even mission. An assessment can be developed that offers a means to capture LRC capability taken from performance of a LRC learning event, such as IAT for language or language sustainment. As indicated above, building an integrated LRC 'friendly' curriculum, fielding capable instructors, and having supporting LMS (see next chapter) is critical to build this assessment.

Assessment measures within a learning event are divided into two broad categories: direct and indirect. Direct measures concentrate on what students have learned or failed to learn—tied to discrete and expert-generated learning objectives. This information can highlight strengths. Through weaknesses, faculty can explore causes, over which they have control, and develop solutions based on "tangible, visible, self-explanatory, and compelling evidence of exactly what students have and have not learned."¹⁹⁷

Indirect measures "reveal characteristics associated with learning, but imply that learning has occurred ... and evidence consists of proxy signs that students are probably learning."¹⁹⁸ Example of indirect measures are: mid-semester course evaluations; evaluations of course assignments or units; course-level surveys; course evaluations that can be aggregated for the entire department/program; semester-end course evaluations; percent of class time spent in active learning; honors, awards, and scholarships earned by students and alumni; and number of student hours spent on homework. Add-on assessment measure can be supplied by portfolios, surveys, focus groups, a published test such as the National Survey of Student Engagement, language tests, or pre- and post-program standardized tests (not including licensure tests).¹⁹⁹

Programs can implement course-embedded assessments, i.e., use course work assignments, which can be a more efficient use of time and minimize the feeling that outcomes assessment is an additional task. Work that students complete is relevant to the learning goals being assessed; this increases the likelihood that they will put forth their best effort. The coursework is created by faculty, who are experts in their discipline and have an interest in maintaining the standards of their profession in the next generation. Learning objectives are written to capture measurable responses. The results are relevant to faculty, who want to improve student learning.²⁰⁰ In essence, the learning event through course designers, faculty, and agers provides the KSAs necessary for the mission and necessary to build relevant assessment measures. The assessment measures should be able to provide a more or less general 'performance' indicator, directly transferable to scores.

An LRC learning program at Joint Base Lewis-McChord (JBLM) is incorporating an assessment model that spans an extended LRC learning event. A variety of evaluative, language, region/culture-general and specific knowledge, and interactional skills, such as 3C and cross-cultural communication CCC, are tested through the OPI, a knowledge section, and procedural knowledge/essay/scenario-driven 'language in action' sections. There are three separate measures/scores around knowledge and skills:

- Language-performance score (a calculation of OPI with Lange in Action scores);
- Culture-general/specific/cross-cultural competence declarative and procedural knowledge acquisition as an expression of

performance—based on a series of knowledge checks and essays in class and DL; and,

• Cross-cultural communication interaction—procedural knowledge and skill assessment—based on procedural knowledge, situational judgment tests, and language in action.

Measures will range from 0 to 3 (in whole numbers). In IAT, language will consistently grade out at the low end of the 0 to 3 scale. The other two measures will fall along a 1, 2, or 3, or low, moderate, or high scoring. This model of LRC assessment would be a departure from overreliance on language-only ILR ratings. An example scoring:

Language \cong 1S/1L (official OPI results would also be provided) Culture \cong 2 Cross-cultural Interaction \cong 1²⁰¹

At the conclusion of the learning event, the commander immediately knows coming out of this course what the learner knows and is capable of performing across the identified and provided learning objectives based on LRC KSAs. Follow-on language sustainment programs offer learning interventions to enhance and even accelerate LRC capability.

6. Disruptive Technology

The shift to personal digital learning is profound—it's not just the shift from print to digital, it's a shift from cohorts to competency, and from common to customized pathways. It's a shift from flat and sequential to interactive pedagogies and from a short school day to anytime anywhere learning. Add the Common Core adoption and you have a higher bar of real college and career ready expectations. Add multiple providers and the concept of school-as-a-service and you have a new educational landscape.²⁰²

The wave of digital learning presently is crashing on the shore of what remains of traditional residential learning approaches (classroom setting and singular instructor). The wave can carry learner, facilitator/educator, and organization beyond that beach. The trajectory of non-traditional learning approaches to an array of delivery methods and models has matched the pace of accelerating technology in society because these new methods integrate the pace and kind of this technological evolution. Digital learning, "learning facilitated by technology that gives students some element of control over time, place, path, and/or pace,"203 is moving learning out of the confines of walled classrooms. It is guiding learners to the possibilities of what is digitally stored, the power of networking, and the expression of learning output, among other benefits. An evolutionary precursor to digital learning is distance or e-learning, "formalized teaching and learning system specifically designed to be carried out remotely by using electronic communication."204 More to the point, distance education or learning involves a physical distance between instructor and student. Distance programs feature "students ... in a geographical location apart from the institution hosting the program; the final award given is equivalent in standard and content to an award program completed on campus."205 Online learning, "learning with the assistance of the Internet and a personal computer,"206 can be considered a variation of distance learning utilizing the Internet and a computer, but other labels such as e-learning, or electronic learning, are often used interchangeably with online learning.

All of the approaches and labels used over the last decade or so provide a sense of the pace and the scope of change in the learning fields. Change has been rapid and disruptive technology has opened new windows and provided new avenues, even new directions, to learning approaches for students and educators.

Disruption

Take, for example, Massive Open Online Courses (MOOCs), which have become the poster child of innovation in higher education over the last two to three years.²⁰⁷

Just recently, MOOCs took higher education by storm. Perhaps their sevenyear ride may have already peaked, but if it has, the intent, technology, and reach has secured MOOCs as disruptive movements. A disruptive technology is, "one that displaces an established technology and shakes up the industry or a ground-breaking product that creates a completely new industry."²⁰⁸ Clayton Christensen, in his book *The Innovator's Dilemma*, defined disruptive technology as being one of two types of new technology: sustaining or disruptive.²⁰⁹ Sustaining technology relies on small and gradual improvements to a technology while disruptive technology is not fully tested or deployed and often has performance problems because of its limited outreach and audience, and still may be on the left side of proven practical application. Examples of disruptive technologies could be considered the smartphone, Windows, e-mail, laptop computing, the 'cloud' and more. When it comes to higher education, disruption follows a similar evolution:

The reason why you want to disrupt a system is because you think you have something that is better than the status quo. In that sense, almost any system is always ripe for disruption, unless you accept that the status quo is the best thing you can possibly achieve, which you should never think. Anything can be improved. So when it comes to higher education, of course it should be disrupted, which is the same as saying that we should improve it.²¹⁰

Technology and innovation have always pushed learning into realms that were just beyond their use for managing the sustainable. This surge of innovation has also pushed institutions and organizations beyond their tradition, and the learning status quo, with new modes of delivery and innovative and interactive content, and the increase of reach from inside a classroom to the outer bounds of the Internet. MOOCs have been labeled disruptive, not just for the innovation, but for the impact they had on the more staid institutions of higher learning. MOOCs are just the latest disruptors in learning, and just one of many disruptive technologies within the last two decades that have created new directions for industries, but also for their impacts on society.

This chapter will explore the 'disruptions' that have fueled innovations in higher education and professional learning. Technology is at the forefront of this evolution. Not to get lost in the innovation is also a movement to reach distances and populations and provide a more customizable learning outcome. At no time in the past has there been a perfect storm of accessibility to knowledge, platforms, networking, and delivery; and presence of learning systems disruptors. The DOD, but especially SOF LRC learning, should embrace the disruptors that are present in learning programs outside of the DOD and engage elements to promote a higher efficiency of learning and a corresponding decrease in costs and a greater LRC programmatic sustainability.

First, a quick history of distance learning will be presented. Contextualizing the innovations that blanket higher education and professional/ business learning today will provide a sense of trajectory and awareness of future learning pathways. Trends in current distance learning practices as MOOCs are becoming the staple of entire degree programs, if not certificated professional development. An online approach permits a drastic reduction in expense which is passed on to the student. Many innovations in learning take place in corporate/industry where agility and performance drive learning/training programs.

Against this backdrop of online innovation, the DOD's efforts to push distributed learning as a viable learning alternative will be surveyed in a variety of programs. A concluding statement will explore disruptive technology applied to SOF overall learning programs, but more specifically, LRC efforts. The current disruptive learning environment offers much to organizations such as SOF where mission is promoting the necessity for increased learning performance. The next chapter will explore briefly the role of LMS as a disruptive technology. The author has designed and launched a MOOC on culture-general and cross-cultural competence for organizations such as the DOD, and the course will be utilized to provide a backdrop to LMSs.

History

The evolution of learning technology dates back to the 19th century and the advent of correspondence courses. Correspondence via a more efficient postal service provided learners, and soon to include factory workers, a learning avenue not afforded to them earlier due to distance and cost. In the 1800s, students from Australia were already able to take correspondence courses from prestigious universities, such as the London School of Economics, one of the first in the United Kingdom to offer distance education.²¹¹ By 1890, there were more people in the U.S. undertaking correspondence courses than there were students in the undergraduate system.²¹²

The growth of media such as television and radio in the mid-20th century catapulted remote learning to a global educational venture. That period also brought the first wave of learning democracy to places never before reached. Viewers not having formal educational training could watch or listen to courses for free and course designers and instructors could adapt content to the learning audience. This was truly the first foray of formal education into geographically distant locations, but as well into populations culturally distinct and distant from the educators. Access to content, although global, still depended on having access to the right technology in order to participate.²¹³

However, as Juliana Marques relates in her publication, *Short History* of *MOOCs and Distance Learning*, this first generation was still far from reaching massive numbers of students like MOOCs are doing today. The arrival of electronic media popularized radio and television as educational tools in the 20th century. Teachers and learners from all parts of the world took advantage of the new multimedia technology. Those who did not have access to formal learning could watch or listen to classes for free, wherever they were. The content was adapted to reach different types of audiences and even students in remote areas could have knowledge in academic subjects. However, as a tool of learning, the use of electronic media lacked the interaction with professor and other classmates, and overall new possibilities still lacked traditional ingredients in traditional learning. It would be the advent of computers and Marques writes that could provide the electronic infrastructure through networks and online communities that would reshape learning possibilities.

In the middle of this phase of electronic learning, an initiative started in the United Kingdom that pushed learning further in the direction of learning through openness and media. The prescient Open University (est. 1969 - present day) shaped the distance learning landscape. Marques states that:

Open University revitalized distance education because it combined correspondence instruction, supplementary broadcasting and publishing, residential short courses and support services at local and regional levels. Its founders believed communication technologies could be explored to provide high-quality degrees.²¹⁴

Perhaps the most lasting and influential feature of Open University was the 'open' policy that encouraged immediate access of academic knowledge through online courses dramatically increasing global learners.

Digital advancements at the close of the 20th century, especially the individual connection to the Internet, accelerated the pace of disruptive learning innovation, writes Marques. Information was stored and transferred more rapidly and in larger units of data on CDs and new software made the online experience a better environment for instructing. The development of the LMS, and its capability to manage the learning population, while allowing interactivity in either real time or asynchronously, pushed the reach of the classroom and the traditional means to access knowledge. Marques states that, "Even regular pedagogy — formal textbooks and written assignments — were influenced by digital technologies such as Blackboard, leading physical classrooms to integrate knowledge with hardware and software interfaces."²¹⁵

Distance learning has become a staple of for-profit higher education institutions and many not-for-profit institutions are advancing programs, even complete degree programs, for distance-challenged students. For example, Arizona State offers multiple degree programs online to 13,000 students out of 85,000 part- and full-time students. As of 2015, they will be offering a Global Freshman Academy, a series of eight freshmen MOOC courses through the distance learning company EdX (a joint venture between Harvard and MIT) platform.²¹⁶ University of Maryland University College features the same emphasis. Liberty University serves over 70,000 students in their distance learning efforts. Norwich University, a small, four-year military university, offers an online graduate and undergraduate degree programs that cater to military and former military learners.

The first example of a MOOC occurred in 2008 and was launched by two University of Manitoba professors. Their effort "Connectivism and

Connectedness" reached at its height over 2,000 students. Student engagement and interaction on course material took place through different platforms including Facebook groups, Wiki pages, blogs, forums, and other resources.²¹⁷ 'Massive' truly became operationalized when a 2012 free online course, "Introduction to Artificial Intelligence," was offered by two Stanford professors. More than 160,000 students from 190 countries signed up (a fraction completed the entire course—a troubling statistic that has followed MOOCs in their brief meteoric rise) and the professors chose to feature the experience as replicating an introductory class in a traditional setting.²¹⁸

Soon after, two Stanford professors, Sebastian Thrun and Peter Norvig, started their own educational provider, Udacity. Eye-popping enrollment numbers followed for a number of MOOC startups, such as Stanford's Coursera and EdX. Three years later, MOOCs continue to disrupt higher education, and more traditional and elite schools in addition to MIT, Harvard, and Stanford are offering courses. For example, in the Spring semester, 2015, Cornell offered four additional MOOCs, based on the success of their first set in 2014 that drew enrollments of 55,000 students. Courses include the following:

Revitalize neighborhoods and examine the people, places, and practices that restore nature with Civic Ecology: Reclaiming Broken Places ... a course defining social-ecological systems and the relationship of nature to human and community well being.

Networks, taught by [a team of computer scientists to aid students in grasping] how the modern world connects us all. Students will explore game theory, Internet structure, and social contagion, the spread of social power and popularity, and information cascades.

"American Capitalism: A History," ... will cover how the United States has gone from a backwater colony to a global power, revealing enduring lessons about what is possible in capitalism's ongoing development.²¹⁹

The first complete study of MOOCs was published by Harvard in late 2014 and a follow-on study in April of 2015. Findings were surprising and expected.²²⁰ Participation in Harvard and MIT open online courses has grown steadily, while participation in repeated courses has declined and

then stabilized. Over half of the students seek certificates, while the actual rates for those interested in computer science per course mattered more than for social sciences and the humanities. A slight majority of MOOC students are seeking certification, and many participants are teachers. The strong participation by teachers suggests that even participants who are uninterested in certification may still make productive use of MOOCs. Academic areas matter when it comes to participation, certification, and course networks. Participants were drawn to computer science courses in particular, with per-course participation numbers nearly four times higher than in courses in the humanities, sciences, and social sciences. Self-identified teachers were a large segment of the population and also repeat users, but of those who enroll in MOOCs, many already have a degree.²²¹

First, while many MOOC creators and providers have increased access to learning opportunities, those who are accessing MOOCs are disproportionately people who already have college and graduate degrees. The researchers do not necessarily see this as a problem, as academic experience may be a requirement in advanced courses. However, to serve underrepresented and traditionally underserved groups, the data suggest that proactive strategies may be necessary.²²²

MOOCs and Businesses

As MOOCs continue to evolve and grow in numbers, along with the number of students, businesses are finding MOOCs a disruption in workplace learning. Marcel Salathe argues that, "I think the strong demand for vocational training will be a major force for innovation in the short term."²²³ Businesses such as Microsoft, AT&T, and Tenaris are developing MOOCs built for their industry and workforce. Beyond internal use, other businesses such as Bank of America and Qualcomm are curating their courses for use beyond their own workforce. Companies now can:

[D]esign and deliver online learning, where learners become peer reviewers, collaborate with each other, are highly engaged in watching short videos, participate in threaded discussion groups and some arrange local meetups to continue their learning.²²⁴

Online learning was a disruptor in business and higher education well before MOOCs were developed. Portability and accessibility provided the means to take it out of the classroom and as recent successes have indicated, propel learning into a far more 'giving' virtual environment. Certainly, since the economic downturn in 2009, there has been an accelerated focus on agile work practices and more rapid adjustments in company strategy. This change has created opportunities for employees to drive career growth by acquiring and applying new skills in short bursts. Much of this has come through on the job skill development, but individuals and organizations are also adapting more formal training and education approaches so it aligns with the accelerating pace of business.

Udacity, Coursera, and EdX have realized professional development has become a learner-centric and competence-driven experience. The pace of business learning cannot be sedate or peripheral to the needed core competencies. Businesses see learning and development as punctuated bursts of foundational knowledge on marketing, strategy, finance, or negotiations to lay the groundwork for the technical skills that are necessary to engage the business-driven mission. Learning mechanisms can respond to immediate need for usable knowledge and skills or more long-term in constructing formal and necessary broad frames or perspectives that can help orient the learner to the immediacy of contextualization.

By widening the aperture of the potential, the learning event can adapt through the agility of the enterprise to sudden or subtle changes in direction, meeting employee needs or offering the opportunity to new customers or as onboarding for new hires. Curating a suite of accessible learning assets to a workforce or others external becomes a part of the online production.²²⁵ Issues common to industry instituting a distance-learning program, specifically MOOCs, involve insufficient budget or time; technology, especially security concerns; and perhaps the most enduring problem, the lack of knowledge and skills within the human capital or training department to build and facilitate the courses.²²⁶

According to Amy Rouse, director of AT&T University operations training, the company decided to focus on creating their first internal MOOC on the topic of "Business Writing," a course that is also taught in an in-person classroom setting and was selected because of its wide appeal. By choosing an existing class, content development was streamlined, the same instructors could be utilized, and the metrics could be compared to the in-person course. While the in-person version lasted one full day (and required travel), the corporate MOOC took about four to six hours over the course of a few weeks. Rouse notes the results of the MOOC were quite positive—the completion rate was around 80% and learning retention (as measured by a post-class assessment) was high and comparable to that seen in in-person courses.²²⁷

A Synergy of MOOC Intent and Application: Approach, Costs, and Student Diversity

Vocational training is hugely important, and schools can sometimes struggle with that. Things are changing so rapidly, technology is advancing so rapidly, that it can be a real challenge for universities and schools in general to provide enough training. Think about the skills to develop for mobile devices, or the skills to analyze big data sets. These are now highly prized skills, but just five to seven years ago only a few people talked about them. Schools to this day in the U.S. are struggling to find enough teachers to teach coding skills. MOOCs can very efficiently fill this gap. I think the strong demand for vocational training will be a major force for innovation in the short term.²²⁸

MOOCs feature innovations to enhance social interactions between faculty and other faculty, faculty to student, student to student, institution to institution (EdX, Courseara, Udacity), and as of late, higher education and business. But to be sure, MOOCs are ultimately a means to disrupt the manner in which learning occurs. MOOCs are a logical extension of advances in distance and online learning, allowing a variety of learning approaches to be utilized by the organization. Higher education and business learning can appear contrary in approach and method; B.S., MBAs, and other business-oriented degrees feature long-term education in grounding principals and concepts.

MOOCs can extend time on learning, promote diversity of method, and meaningful assessment. Online, or digital learning, offers a more conducive learning method and approach to non-traditional students. From a 2014 study, over 80 percent of undergraduate students are outside of the 18- to 22-year-old demographic for traditional students and most are residing offcampus. At Georgia Tech, the average student age in the computer science master's online program is 34; the average residential student is 23.²²⁹

MOOCs are a fraction of the cost to both students and institution. Online learning minimizes on-campus physical infrastructure and other brick and mortar costs—human relations, enrollment, records keeping, living needs, and more. Laura Sanborn captures two Wharton Business School professors on MOOC experience, "Based on our experience at the Wharton School, we show that it costs just pennies to register a new student in a MOOC and a few dollars for every student that actually completes the course." In a recent e-mail solicitation from Kahn Academy, they write, that \$30, "can help us provide 720 hours of free education over the next year."²³⁰

Southern New Hampshire University, in a 2008 program, featured traditional learning delivery held at off-site buildings for a 60 percent reduction on tuition costs. Sanborn stretched the concept of non-traditional student and delivery to remark that, "if colleges can offer lower tuition rates for those physical yet off-campus students that don't use the gym, public safety, dining halls, custodial services, what type of tuition could then be offered to digital students who produce absolutely zero wear and tear on buildings, technology, and require minimal staff?"²³¹

Examples where online approaches drastically reduce costs include Georgia Institute of Technology, University of Illinois, and Southern New Hampshire. Georgia Institute of Technology offers a master's degree in computer science, all online, for \$7,000-the cost of the on-campus experience for the degree is \$40,000. The cost of an online undergraduate degree is \$10,000 for a degree at Southern New Hampshire that has been approved by the New England Association of Schools and Colleges, compared to the \$37,800 per year average for a private non-profit, in-person, higher education school.²³² Finally, the University of Illinois offers an Internet Masters of Business (iMBA) program that includes digital coursework. Courses are available free to all on the Coursera platform. At any point in the program, a student may elect to apply to the iMBA program and any of the digital coursework completed will be considered as part of the application package. "Performance in the Specializations will be considered for student admittance, not just test scores and past transcript."233 The entire degree is estimated to be \$20,000 in tuition, compared to \$50,000 to take the degree in-person at this and similar MBA-granting institutions. Granted, \$20,000 isn't free, but all the content is, and the online MBA degree is 60 percent cheaper than the on-campus version.²³⁴ Part of the key to success for new educational initiatives at large, argued Dai Ellis, is to go "radically open source," to not only adapt to linguistic or regional needs, but to encourage others to seize their "university in a box" and use it anywhere. Students can then receive an associate degree through Southern New Hampshire University's College for America, a competency-based program.²³⁵

At the moment, digital education has modeled itself on the classroom of the past. Lectures, quizzes, assessments, often some sort of discussion space parsed out over a course term. Perhaps this is not the ideal model of learning and training.

Early cell phones, with their bread loaf-sized heft, were focused on meeting the mission of the land-line: making a phone call. Thirty years later, the phone has evolved into a mobile device surpassing early home computers. While I use my phone consistently (too much!) throughout every day, the feature I use the least? The making-a-phone-call feature. What could digital education look like in 25 years? A 2014 OCLC white paper believes that "We are tipping toward an educational era of choice over tradition, convenience over perfection, self-service over predefined options." The foundation blocks for new approaches are only now being set into place, and the innovation just begun.²³⁶

The DOD and Disruption: Too Much or Not Enough?

The Department of Defense is America's oldest and largest government agency—tracing its roots back to pre-Revolutionary times. Today, the Department is not only in charge of the military, but it also employs a civilian force of thousands. With over 1.4 million men and women on active duty, and 718,000 civilian personnel, DOD is the nation's largest employer. Another 1.1 million serve in the National Guard and Reserve forces. More than 2 million military retirees and their family members receive benefits.²³⁷

Current and past DOD distance and online learning efforts can be traced back to the development of the Advanced Distributed Learning (ADL) Initiative which was the result of a 1999 Executive Order:

[T]o ensure that DOD and other federal employees take full advantage of technological advances in order to acquire the skills and

learning needed to succeed in an ever-changing workplace. The intent of the Executive Order was to provide flexible training opportunities to employees and to explore how federal training programs, initiatives, and policies can better support lifelong learning through the use of learning technology.²³⁸

ADL is the interface between a changing world and the need to develop learning approaches to make it more understandable and meaningful. Says ADL Director Sae Schatz:

Globalization, social media, ever-increasing computing power, and the proliferation of low-cost advanced technologies have created a level of complexity and rapid change never before seen. Success requires reflection and creativity, the adaptability to notice and react quickly to evolving conditions, and a strategic understanding of the far-reaching effects of actions taken. Learning science and technologies can help foster outcomes such as critical thinking, emotional intelligence, and more efficient and agile pathways to expertise. The methods and tools developed by ADL and our partners in government, industry, and academia are essential to achieving this vision.²³⁹

ADL is the hub of research and development for the DOD promoting the reduction of "e-learning costs to government though interoperability, shareability, and durability of e-learning content."²⁴⁰ More specifically, ADL was designed to identify and promulgate standards for training software purchased by federal agencies and contractors; promote development of technical training standards; and establish guidelines on the use of standards and furnish a means to aid DOD and other federal agencies in the large-scale development, implementation, and assessment of interoperable and reusable learning systems. ADL is currently spearheading next generation interoperability specifications, research and development for a personal assistant for learning, and mobile learning and empirical research into game design to enhance cognitive capabilities.²⁴¹

Originating with ADL was the concept of providing a set of standards and specifications that promulgate a collection of inter-related "content objects, data models and protocols such that objects are sharable across systems that conform to the same model."²⁴² Labeled SCORM (sharable content object reference model), this set of references about e-learning and standardizations

promotes the ability to reuse learning content across LMSs.²⁴³ SCORM is a collection and harmonization of specifications and standards that defines the interrelationship of content objects, data models and protocols such that objects are sharable across systems that conform to the same model. This specification promotes reusability and interoperability of learning content across LMSs.²⁴⁴

With almost half a million employees overseas, at sea, and on land, out of a total of over three million, the DOD faces a complex and remote training need, especially one that involves joint services. This is accomplished through joint training and exercises for combatant commands and features designated joint and combined force headquarters, and coalition partners, through officer and enlisted joint professional military education, and the National Defense University.

Much of the DOD's e-learning efforts are web-based and sit on existing internal systems within the organization's information technology infrastructure. Training efforts can be mandatory, including knowledge checks associated with the content. Most training is self-paced, limiting the variability of learning approaches or styles, while professional military and civilian education can be both residential and e-learning/web-based. Service institutions such as the Command and Staff and War Colleges, Naval Postgraduate School, joint universities such as National Defense University, Defense Acquisition University, Defense Institute of Security Assistance Management, and others offer residential and distance e-learning programs. There are accredited courses and certificate options for DOD military members and civilians available through Federal Emergency Management Agency, Department of Homeland Security, and the Defense Security Service's Center for Development of Security Excellence. Learning programs for many of these institutions focus on security, cybersecurity, and counterterrorism.²⁴⁵ Each Service provides an online repository of learning opportunities: Navy Knowledge Online, MarineNet, Army Knowledge Online, and Air Force Portal. Joint Knowledge Online is the home for "the Department of Defense (DOD) unique and authoritative source for online joint training."246

Language and culture learning efforts across the DOD feature e-learning/ self-paced and distance learning programs. Culture-specific products that may feature self-paced elementary learning are accessible at various sources through websites such as DLI, Joint Language University, and individual Service centers. Language programs such as Global Language Online Support

System (GLOSS) and Rapport offer self-paced audio and reading content for linguistic and cultural learning. GLOSS offers audio lessons in languages and culture for independent learners for improving their foreign language skills. "Reading and listening lessons are based on authentic materials (articles, TV reports, radio broadcasts, etc.) and consist of 4 to 6 activities." Automated feedback is provided following tasks.²⁴⁷ Rapport consists of six to eight hours of assessed training via a knowledge check that "covers military language modules and cultural awareness for history, religion, geography, and basic social exchanges in the target language."²⁴⁸

Joint Language University (JLU) is another web-based language learning program utilized as a U.S. Government language training portal. One of the featured resources of JLU is Transparent Language's CL-150 which is a broad suite of software tools and content for language learners, instructors, and program managers.²⁴⁹ Through JLU, and synchronized across the web and personal devices, CL-150 offers learning content in over 120 languages "for both general proficiency and specialized performance domains of interest to government."²⁵⁰ CL-150 provides language instructors and mentors to manage the learning experience while reporting learning analytics at student, class, instructor, and program levels.²⁵¹

DOD and MOOCs

This is the future of education. I think this is the greatest invention since the public library system. It is the public library system and the internet combined, with guided direction of the world's greatest instructors thrown into the mix. I am convinced that this is how the world will judge future academic institutions and decide where they will send their children to study full-time. It is also quite possibly, how future college students will prepare and choose their degree paths. I expect great things for the future due largely to efforts such as these. For Scott's part, he believes the business model will allow MOOCs to count towards degree and certificate programs at "brick-and-mortar" institutions if they are individually partnered with that institution and upon the successful completion of testing on a fee basis.²⁵²

The DOD is not the most nimble of organizations when it comes to accepting technology in areas away from weaponry advance and more generally programs that directly support the warfighter. Preparing and developing the warfighter in education and training endeavors has only partially acquiesced to DOD's development of disruptive online learning efforts. However, the DOD has recognized the potential of MOOCs as an example of an online delivery system. Naval Air Systems Command (NAVAIR) acknowledged the disruption of MOOCs but also their benefits:

Barely two years young, massive open online courses (MOOCs) have already begun to radically change the way universities teach. The top universities worldwide have begun creating free, Web-enabled courses. NDLP participants are encouraged to participate in these classes using Coursera and covering topics such as organizational analysis, nutrition sciences and terrorism.²⁵³

ADL, at the request of the Chairman of the Joint Chiefs of Staff, researched the feasibility of alternative technology and learning advances with a report due back in Academic Year 2015. MOOCs, and more generally online learning, was folded in that request.

Shane Gallagher, from ADL, provided a presentation in June of 2014 on the feasibility of MOOCs in the DOD and provided a detailed analysis of the utility and portability of an online learning experience.²⁵⁴ Features such as the 'scalability' of start-up, reach, and content were pointed out as positive capabilities. Gallagher found that MOOCs, as a learning application, spanned the joint enterprise and learning communities that were and are usually siloed, and they also provided open access to learning opportunities for allies, partners, and coalition members. From a learning standpoint, MOOCs provide accessibility and sharing of content, the potential to promote richer learning models, and the ability of facilitators to leverage a wide array of resources. Says Professor Ben Bederson, Special Advisor to the Provost on Technology and Educational Transformation, University of Maryland, about MOOCs and creation of a diversity of learning styles, "the potential comes from not only self-paced and self-service learning, but also by making face-to-face learning more effective by enabling more active learning styles."255 To contend with 'massive,' MOOCs allow the formation of peer-based or mentored working groups that provide learning reinforcement and can be used, similarly to business to help transition and re-position workforce, or in the case of DOD, veterans. Finally, from a programmatic perspective, offering MOOCs, especially in the numbers that drive the label 'massive,' offers the ability for any organization, such as the DOD, in need of tracking performance to access data on learning analytics, content and instruction, considering subject preference, and especially assessment.

Gallagher provides a contrary set of variables that create obstacles to the MOOCs' learning utility in the DOD and U.S. Government. Where massive offered reach, massive is suggested to degrade the intimacy of the instructor/student relationship. Assessment may prove to be difficult due to the absence or scaled back role of the instructor. Student investment may be diminished, and motivation and drive to complete the course problematic, given the history of diminishing completion rates of the MOOCs. If the course is required, investment and drive may be moot, or also exhibited in a traditional learning setting. Openness of the content and access to the course may hamper an organization's need for security. Grading models, cheating, and plagiarism are all issues of MOOCs.²⁵⁶

Many in the DOD learning establishment see resistance to distance and even further online learning (MOOCs for example). Resistance to MOOCs, more generally online or distance learning, has always been attributed to the reduction of live face-to-face interaction and the lack of perceived control of the instructor over the learning process. This author has heard many voice opposition due to the one-dimensionality of the many distributed distance learning products. "[M]any say that DL 'is just like all the other PowerPoint trainings we have to do, from force protection, security and operational awareness to Equal Employment Opportunity (EEO) and Sexual Assault Prevention and Response (SAPR)."²⁵⁷

Face-to-face interaction today is not what it was a decade, even two decades ago. Live video, even taped, synchronous, and asynchronous discussions or chat, and other means connect instructors/facilitators and students. "We have to get much, much better at enabling interactions. Collaboration happens, but not nearly enough. In addition, people really do crave human face-to-face interactions. Look at the popularity of video chats, look at the popularity of live events (up 400% despite a collapse in music sales) - we just love genuine human interaction."²⁵⁸ This author found that minimizing face-to-face interaction actually put the emphasis on solid instructional design theory to make the course successful, making that interaction paramount to successful learning. "I think that is a big plus with the populations I teach. I arrogantly used to think my real time gyrations in the classroom were what sunk in learning; not any more. Success in DL requires a well-built course
and that becomes a turn off for classroom instructors who can get by on personality and discussion."²⁵⁹ Faculty may perceive MOOCs as a threat to their employment, or their role as professor. Consolidation of faculty, even subjects taught, could impact them professionally.

In the end, MOOCs, or what may be the next learning disruptor, may depend on technology to enhance or accelerate the 'speed of learning,' allow the openness and diversity of experience of cohorts and provide meaningful assessment. MOOCs and online learning can also transform learning programs and their organizations by offering opportunities for experimentation. "MOOCs have a profound opportunity to impact the way we learn and train, both our service people and our citizens," said Dr. Karen Cooper, Research Scientist Future Workforce Technologies and Strategies, NAVAIR. "Technology is merely an enabler; it is sound instructional design that creates the opportunity for learning to occur. And well-designed MOOCs that effectively leverage technology are creating powerful large-scale, global, open constructs to significantly change how we learn."²⁶⁰

Summary

One encouraging result of the MOOC mania is the rising interest in open online learning, even if in this case innovation has become synonymous with how to scale a single course for many users. The more interesting challenge for an open learning architecture is how to scale agile and distinct environments across and among many courses — or even better, across several institutions and across the web itself. This moves us back toward a network of networks, a foundational principle of the Internet.²⁶¹

Disruption to learning policy, programs, and instruction in the DOD requires more than overcoming current inertia. It requires sustaining progress through skepticism. Specific learning programs such as SOF LRC present unique opportunities to explore disruptive technology and learning models. This author has designed and launched a MOOC entitled "Operationalizing Culture: Thinking Differently about Behavior in the Human Domain" (this course will explore more in depth in the next chapter on Technology and LMS).²⁶² The course is representative of online learning and open access (open to the limits of SOF) providing capability to link beyond geography and over time. Online can also promote a much applied learning focus.

Like any non-traditional student, taking learning and applying it immediately to their situations where they are at doesn't require a physical classroom. But for what and who I teach, for today's military or other deployed agencies, DL allows my students to actually be in country when taking the course – tell me that doesn't open up new levels of real time cross-cultural learning that would make any educator salivate over application – real learning takes place in novel and 'natural settings' outside of the classroom.²⁶³

What this allows from an LRC promotes linking culture-general knowledge constructs to culture-specific knowledge in varying locations students are deployed to for both the individual learner but as well for the remainder of the cohort not there. This is powerful.

Even with access to numbers of students that just a decade ago would have been unfathomable, online learning still pushes traditional features of a 'classroom' and the role of instructor toward innovation. Disruptions have created the agility and remote learning architecture for many different kinds of learning populations, to include formal higher education, and organizations that seek to combine higher learning and professional development.

This newest disruption applies to military learning, but specifically to the DOD. For instance, LRC learning often requires a substantial effort to master foundational knowledge and language skills necessary. Also important is the experience, both personal and others', that is expressed through narrative in the real-time interactions of a cohort. This interaction helps anchor the concepts while language training is best obtained in a highly interactive environment. There are several trends or manifestations of disruptions that have utility for the SOF LRC enterprise. Technology is critical to any kind of contemporary learning endeavor, but more so for blended or distance learning. LMSs, such as Blackboard or Moodle, are critical technological interfaces that have been in existence a few short years. Against the backdrop of fast-moving revolutions such as MOOCs, their presence is now accepted as a necessary piece of the learning infrastructure. The next section will provide a review of LMSs, their function and utility, and considerations for deployment in a traditional learning setting. Technology through an LMS provides a centralizing function for an array of tasks, including collection of biographical data, performance indicators, and learning records. Ultimately, learning models and delivery systems will affect learning programs in very

large organizations, such as the DOD, that are dependent on constantly seeking transformative technology, online learning provides not just disruptive technology, but transformative approaches to learning about a very rapidly changing world, one which technology is just a part of a more human-centric solution.

7. Learning Management Systems: Centralizing Disruption

A remotely piloted aircraft or drone offers a platform of sensing technology and lethal weaponry. Sitting on a tarmac or flying level the drone is an example of the principles of unmanned flight. It takes a pilot and a sensor operator sitting often times 8,000 miles away to engage the technology and send it off on its mission, selecting the kinds of sensor equipment to engage to turn it into a working ISR platform, or to arm a hellfire missile to turn it into a killing machine. Function follows aim, need or exploration.

Thus far, alternative learning approaches, models, and systems have been explored. An LMS facilitates these approaches, including residential instruction, while offering opportunity to create blended instruction. The power of an LMS is indeed in the software's ability to manage functions within a learning event. Yet, the true power and value of an LMS is in the manipulation of its capabilities and the many ways the LMS can be used.

Most current LMSs feature integrated comprehensive software that "supports the development, delivery, assessment, and administration of courses in traditional face-to-face, blended, or online learning environments."²⁶⁴ Digital frameworks manage curriculum, training materials, and evaluation tools.²⁶⁵ LMSs provide web-based "24/7 from anywhere" access to instructor, learning content, and administration; and can be found across higher education, form the foundation for most business workforce training programs, and are found in many DOD learning efforts.

The learning management system (LMS) is a remarkable phenomenon in higher education. On the one hand, the LMS has seen unprecedented adoption rates. Estimates of colleges and universities running an LMS are almost always near 99 percent. Of faculty, 85 percent use an LMS, with 56 percent using it on a daily basis, and 74 percent say it is a useful tool to enhance teaching. Among students, 83 percent use an LMS, and 56 percent say they use it in most or all courses. In an enterprise as highly individualistic as teaching and learning, these are remarkable numbers. No other academic application comes close to such adoption rates.²⁶⁶

What an LMS Brings to Learning

An LMS can be considered a processor and administrator of the learning experience. Not all LMSs are created equal or have the breadth of capability. LMS is a generic label that encompasses different software systems that reflect two main approaches to all kinds of e-learning. These approaches and associated types of LMSs will be discussed in a following section. An LMS can be as simple as a rudimentary wiki developed for students or groupware to share their learning products or experiences and engage in a forum. Just like the many and often interchangeable definitions of alternate learning models; remote, distributed, distant, online, and more; the designation of LMS has been applied to different types based on use and utility. However, the most common utility of an LMS is the ability to administer in some way, simple or complex, a learning event that may involve managing curriculum, training materials, and evaluation tools.

LMSs are a reflection of function and organizational learning need. There are over 600 kinds of LMSs on the market and each is unique in its own way, possessing a feature set to meet the needs of a variety of trainers and educators.²⁶⁷ There has been much written on a variety of questions that can help an organization determine need to implement an LMS, such as what are the assets and 'functions' that are critical, and other variables about learners, facilitators, learning content, and more. There seems to be two initial overarching questions to address when considering the move from a traditional classroom to a variation of e-learning (learning utilizing electronic technologies to access educational curriculum outside of a traditional classroom²⁶⁸) and the contemplation of an LMS. Will the intent of the LMS be for education or training (and thereby used by an institution of higher learning or a corporate entity/business), and secondarily, will the utility of the LMS be to support learning and instruction or will the LMS be to provide inclusive learning as stand-alone content with much student interaction or the use of an instructor?

The history of LMSs starts with its initial application to educational institutions. Businesses found LMSs could help centralize training to an internal workforce and outside clients and customers. With training at the speed of business, advancing technology was critical for success and the more powerful tool to consulting human resources/human capital companies and any organization looking to get a better grasp on the continuing education of its workforce. It is not surprising that businesses have capitalized on the utility of an LMS given its efficiencies, even though initial intent was higher education. It has only been within the last decade that higher learning has discovered the market that features non-traditional learners motivated to acquire degrees and certificates, and also the inability of the traditional university and college experience to shape their educational experience around work, family, and distance. With both higher education and businesses facing evolving learning needs and the transformative agency of the Internet, the intent and form of learning is being disrupted, and the proliferation of LMSs is the result. In essence, "the same technological and market forces are dramatically changing today's classroom as well."²⁶⁹

There are core features or functions that can be found across the LMS landscape. Common component areas include content creation, communication, assessment, and administration.²⁷⁰ Within those four categories, the below more specific features have been distilled from a few publications, but are by no means inclusive or exhaustive of a list.²⁷¹

- Rosters/registration and control: Tracking attendance and for sending invitations to class participants.
- Document management: Upload and manage, including on-demand access of documents containing curricular content.
- Multiple device access: Delivery of course content over web-based interfaces such as desktops, phones, or tablets.
- Distributed instructor and student base: Remote participation by the instructor or pupil allows courseware to feature multiple teachers or experts from across the globe.
- Course calendars: Creation and publication of course schedules, deadlines, and tests.
- Instructor-student/student-student engagement: Interaction between and among facilitators/students, such as instant messaging, email, and discussion forums.
- Tracking/reporting: Tracking of learner data, including progress on a predefined set of training goals and requirements, and tracking of

courses for usage, especially in relation to required deployment of mandated training (for example, compliance training).

- Customization and branding: It is important that your online courses can be identified as your own. Be sure you have the abilities to brand courses with your logo and colors, customize groups and terms of use, create custom certifications of completion, and create custom email notifications.
- Administration: Course administrator and all of the tools and features available; including tracking and reporting, content management, notifications, single sign-on, application program interface, and more.
- Tracking and reporting: Tools guide student progress via prerequisites and learning paths, export user data and create real-time reports, and deliver timed courses and inactivity timeouts. Includes tracking of courses for usage, especially in relation to required deployment of mandated training (for example, compliance training).
- Assessment and testing tools: Most learning management systems have some sort of online exam system with various testing tools. Bonus tools are question pooling, question randomization, required responses, and automated self-grading.
- Compatibility and supported devices: Many LMSs have an HTML 5-based user interface that adapts to different hardware devices; including desktops, laptops, and tablets. Specific platforms that may be supported are PC, Mac, Linux, iOS (iPads/iPhones), Android, Blackberry, and more.
- Course interactivity: Levels of interactivity can vary among LMSs. Interactive features consider HD streaming video, audio, images, SCORM presentations, assignments, and tests.
- User registration: Import students via mass uploads, automate uploads, and/or enable students to self-register quickly.
- SCORM compliance: Critical if developing training/learning in or for government use.

Types of LMSs

There are basically two types of LMSs that feature the above list of functions. The first LMS manages the learning process and is primarily used by business or corporate training programs. Management includes orchestrating the learning process from creation/authoring of content through the delivery of web-based content and tracking of learners and their progress. LMSs provide functionality such as content migration and management, learning object repositories, content re-use and individualized learning via learning objects, asynchronous collaborative learning, testing and certification, and interconnectivity with virtual classroom and learning management system applications.²⁷² In business and government, training security concerns and the proprietary nature of training material LMS are closed circuit platforms (logins, restricted access to classes). The idea of sharing content and reusing products generated during classes does not exist in the world of 'LMSs' (mainstream e-learning).²⁷³

A learning content management system (LCMS) is a variation of an LMS. The most significant difference is that a LCMS can actually create and manage the use and delivery of web-based learning content. LCMSs are more nimble and can aid swift acquisition, delivery, and overall management of knowledge ensnared in the web-based process.²⁷⁴ The LMS is more of a logistical application managing learners, the activities, and mapping the selected competencies of the organization.²⁷⁵

The second system, usually referred to as an LMS, but also as a course management system (CMS), has become indispensable to universities and colleges for traditional classroom learning as well as for blended and online learning. "Course Management Systems (CMS) are software packages that bring together numerous Internet tools and allow them to be accessed via a simple and convenient user interface. Such systems are also referred to as Virtual Learning Environments (VLE) or Learning Management Systems (LMS)."276 Unlike LMSs found in training programs that often do not require instructors or even facilitators, CMSs act to increase the efficacy of a course by providing a frame for instructors and students, and mature software with sets of tools for the instructor. CMSs are designed to assist instructors in constructing their course then managing the learning progress and students. Instructor usability is a primary function. On the other hand, a LMS's primary function is an instructorless stand-alone e-learning capability with little intervention occurring during the learning phase. It is irrelevant to discuss advantages and disadvantages of CMSs over LMSs, since they are designed more for education than for training.²⁷⁷

User registration and authentication, creation of static web pages, file exchange, tests and surveys, student grading, journals, wikis, photo galleries,

and chat rooms are examples of tools found in a CMS. Known to CMS software engineers as modules, "a well-designed CMS will integrate several modules behind a seamless user interface."²⁷⁸ The CMS may also include tools for real-time chat, or asynchronous bulletin board type communications. Supporting distance learning or the more traditional residential courses selects a relatively sophisticated environment to run efficiently.²⁷⁹ A CMS requires installation on a web-based server with integration to an associated database/relational database which must include significant hardware, software, and technical resources. The cost for setting up a CMS requires a rather significant human and financial resource outlay. Due to this, colleges and universities field the most CMSs.²⁸⁰ To those with a mature network architecture, the major cost will be CMS licensing, which can be somewhat daunting. Without infrastructure and budget, many smaller educational institutions may engage the CMS company to install and host the CMS for a fee.²⁸¹

Many educational institutions, unfortunately, have neither the infrastructure nor the budget to install and maintain a CMS. In the absence of a computer network infrastructure, one alternative is web hosting, in which the CMS developer or a commercial Internet service provider will install and maintain the CMS for a charge. However, where budgetary constraints are the main factor precluding the installation of a CMS, there exist free open source CMS packages such as Moodle and Claroline, and individual instructors or departments that can be accessed and the onus of installation and maintenance will typically fall on individual teachers.²⁸²

Finally, there are web-based virtual tools that promote collaborative instructor or group-led learning. Virtual software for business meetings are an example, but for learning use, virtual 'classrooms' often categorized as webinars represent the classroom environment. Limited capability allows synchronous interaction and sharing of materials or content, such as slides, images, etc., per event. This author utilizes webinars to support periodic 'life of the Institute's' meetings of research fellows, as well as 'roundtables' for the one-year research fellows. Connectivity can pose difficulty for all to take part. This author also uses Skype as a means to instruct culture courses to JBLM from Alexandria, Virginia.

SOF Teletraining System (SOFTS) is an online training tool that features language learning in a small online classroom setting. "SOFTS takes advantage of proprietary and commercial off-the-shelf technology to deliver real-time language and culture training to students anywhere in the world, including those who are unable to attend traditional classes at traditional institutions."²⁸³ Classes include language and culture instruction. Requirements include: computer, microphone, webcam, and bandwidth. Bandwidth is key particularly because a lagging voice can be detrimental to the learning process. PowerPoint presentations are usually shown during the class with the instructor talking through the slides. Students have the ability to interact with the slides through a variety of tools that are attached to the program.²⁸⁴

There seems to be a clear cut distinction between types of LMSs, based on the type of organization and what kind of learning they require, a training versus education mission, and the role of the learner. Due to these variables, the content, intent, and application of the learning can be dramatically different. Both LMSs manage the learning experience, one supports a facilitator, the other is fed with stand-alone material, and after being 'programmed' by the instructional designers, is more self-sufficient.

To put it another way, course management is often the main function of an LMS—a secure place to store and launch training to a subset of users. In some respect, you can attribute metrics to a course management system, but that is not a requirement. A CMS also has less need to be SCORM compliant. An LMS on the other hand encompasses course management, but is more robust in that it often implies a subset of learning standards (i.e., SCORM) for reporting purposes, and lately has started to include learning that takes place outside of a computing environment. An LMS can assist in the learning strategy as it relates to improving performance. A CMS is less dynamic, more or less offering a secure database. To put it simply, an LMS can be as big or small as you want it to be, while a CMS will struggle to adapt to be something more than a file repository.²⁸⁵

Training and education find the LMS as a common denominator in the current learning landscape, but a move to more application not at the expense of knowledge is ongoing while making learning immediately usable. Education/learning was always about the foundational components framed by theory, training provided specific skills to accomplish a task, no matter how simple or complex—to do rather than know. The LMS becomes an agent to set the learning priorities. What LMS is used without careful consideration will short-circuit the learning strategy due to available features. To an educational institution, "it is critical [to deliberate] fully before selecting an LMS that is aligned with its educational plan and meets the needs of various stakeholders²⁸⁶ while a business is more intent on identifying core learning and development objectives and aims. More specifically, the question needing answering is which skill sets or information are your learners expecting to take away from your e-learning course or online training event?²⁸⁷

Given the complexity and diversity of the human domain, the current asymmetrical application of LRC components to that complexity by SOF, and the need to promote LRC learning as part of IAT in the qualifying schools and to then be able to sustain LRC at periodic interventions along the trajectory of a career would best be facilitated by utilization of an LMS that could support both stand-alone e-learning and online distant learning. This author was one of the primary architects of an innovative LRC program at JBLM. A LMS has been utilized at JBLM to do just that—synergize instruction across the LRC enterprise featuring multiple LRC instructors for each course and provide the assessments critical to establishing student performance, as a more accurate measure of capability. In effect, the uniqueness of the intent and content of the JBLM program forces the complimentary juxtaposition of LMS/CMS capability. LRC instruction features knowledge and skills that tie to both a learning/knowledge component and a more applied skills development.

There are several webpages and publications that offer quick and much more in-depth exposés about moving traditional training/learning programs to distant and/or online learning programs. The website eLearning Industry offers informative web articles/blogs that provide lists of concerns, issues, and questions to consider: "Tips for Choosing the Best Learning Management System; How To Choose The Best Learning Management System Based On Your Company's Needs; 6 Questions You Need to Answer To Successfully Move your Corporate Training Online; Is Corporate eLearning Really Worth The Investment?, Top 5 Tips to Convert Your Traditional Course into an eLearning Format," and more. There are also individual web articles that cover elements of initiating or continuing an e-learning or distance/online learning program, or selection of an LMS; one need to just search e-learning, LMS, distant/online learning, or even MOOCs to uncover a treasure trove of information. The amount of information on these subjects certainly underscores the wealth of resources available to the learner in an online program, at the same time of underscoring the amount of resources available. Finally, there are certainly more formal, lengthy, and scholarly efforts that relate to the problem at hand, text books, contracted studies, and work done by institutes and research centers.

Although SOF LRC does not represent a formal academic institution, the move to a program that features a distance/online learning fueled by a LMS would encounter a transition period where changing the entire or parts of the traditional learning program would necessitate a complete move or smaller moves to a new LMS. The oftentimes bumpy transition would involve critical stakeholders, such as resource personnel, faculty, and administrators, and the unknown effect on students' learning and perception of the value of this move would all be problematic.

Perhaps one of the key areas of concern with a transition are the stakeholders—not only their buy-in but their active involvement in the transition.

It is critical that a diverse group of people representing different academic and non-academic departments, as well as students, be involved in the decision-making process to ensure buy-in and minimum resistance during the implementation process. Proper project management is also required to ensure a successful implementation. If an institution is seeking to make widespread improvements to an existing LMS, it must also ensure widespread stakeholder involvement and effective project management during this process; such re-alignment is likely to succeed only if the existing LMS has the necessary capabilities.²⁸⁸

However, as C. Wright details, despite the many benefits that can accrue when an LMS is implemented, the selection and implementation processes sometimes fail when there is an overall lack of institutional understanding, adherence to its educational strategy, resourcing for the transition, and training faculty and staff on LMS use, and other areas of concern. The below provide a sense of critical awareness of points of failure if not addressed:²⁸⁹

- leadership, by management, academic leaders, and those who have political influence within the institution;
- commitment to the process through time and resources before evidence of success emerges;
- organization-wide buy-in and appreciation for what an LMS can and cannot do;
- stakeholder involvement in the selection process;

- alignment with the education plan or direction of the institution;
- congruency with how instructors teach—implementing an LMS can itself lead instructors to reconsider their teaching methods;
- recognition of the cultural changes required to achieve success and resistance to changes;
- organizational preparedness during implementation;
- training for instructional designers, instructors, students, and information technology specialists;
- focus on designing quality courses interweaving subjects together;
- student and instructor computer literacy skills;
- student/faculty access to Internet, computers, the web, and/or the LMS;
- user-friendliness of the software;
- funds required for hardware, including servers, network infrastructure, backup storage, backup power supply, air conditioning for the hardware, and computers/digital terminals; and
- due diligence by the LMS selection committee to adequately address the needs and concerns of the potential users, verify the information provided by vendors and external experts, and ensure that the selected LMS can actually perform the tasks requested by users.

JBLM Language and Culture Center (LCC)—A Case Study in LRC LMS Use

JBLM LCC has a robust LRC learning footprint across several organizations and missions. The author, as indicated earlier, has supported the development of LRC efforts at JBLM for three years. His experience there—two ILR plenary presentations (2014, 2015) and a Plenary at the 2015 LEARN—forms the basis for this section. A primary responsibility for the JBLM LCC is the language development for 7th Infantry Division that includes three pillars of LRC support; professional military intelligence (MI) linguists, a language enabled conventional force soldiers' (LES) program, and a cultural orientation and language training program that is comprised of an array of training and products developed as just-in-time support to mission need or as a stand-alone product and materials offered to individuals and units.²⁹⁰

The role, scope, and breadth of JBLM LCC in Army LRC has grown dramatically over the last decade.²⁹¹ The initial pillar of MI linguist training

continues to serve language refresher and sustainment classes for 7th Infantry Division. The LES pillar developed as an organic program at JBLM requested initially by a Stryker commander who realized the implications of not having enough, or any, cultural awareness in his units. This awareness included understanding and communicating with a wide variety of significantly diverse cultures. For his second deployment to Iraq, the commander wanted to "grow some capability in language and culture." Six iterations of the initial LES learning program were offered-four for OIF and two for OEF-for the Stryker brigades and one fires brigade. The ILR results averaged at 0+ level in proficiency. The third pillar of LRC effort is a menu of LRC training, products, and culture and region support to units. These products include AOR and culture briefs, language familiarizations to include crosscultural competence, culture-general and computer science knowledge, CCC, how to use an interpreter, and self-paced materials: Headstart, 200 hour courses, language survival kits, and access to distance learning websites such as Joint Knowledge Online and Joint Language University.²⁹²

The JBLM LCC program runs through a Moodle CMS (or as we will continue to use LMS). It offers instructor-facilitated remote LRC distance learning where the instructor and students from off-post (Hawaii, for example) utilize the JBLM LMS for content/materials, homework, assessment, and enrollment/registration. It provides a blended learning experience to military linguist classes where an onsite instructor provides language instruction in class while utilizing the LMS to offer additional learning sources, homework, and assessment. All exercises and homework is done, assessed, and recorded in the LMS. It provides an outlet for stand-alone products and training that can be accessed by individuals or units upon request or opportunistically. And finally, the LMS was the integrating factor in developing the LES model that is now in use at JBLM. The initial 10-week IAT OIF and OEF course has transitioned into a fully realized LRC event. The functionality of the LMS allowed the flexibility needed to create the current operating model. The LMS is a secure-access platform. Potential users set up an account and access once inside the LMS is determined by JBLM LCC staff, provided by the LMS administrators. As the LMS is a front-end of the system, storage for the numerous classes, support materials such as videos and readings, and other content and products, is only as powerful as the storage capacity supplied by the servers. Those servers sit in the basement of the LCC.

LES and LMS

The current operating LES model evolved out of the AfPak Hands language model with the initial iterations of the 2006 and 2007 course offering at JBLM LCC. KSAs of the initial classes included language maintenance required for soldiers upon conclusion of training (6 hours/week-scenario training, two-week immersion) and dedicated cultural specific training. This became the 'campaign continuity' for all brigade sized units deploying to OIF and OEF. After the program had run for several iterations, issues with the campaign continuity model became apparent. An ILR proficiency of 0+ was too low. ILR level 1 was the lowest 'useful' level for commanders. The number of languages for AfPak did not compare to the large numbers of Pacific Command specific languages. The types and content of culture-specific material covered were not aligned with the mission realities. The need for the LES was to assist in missions with a combative focus as opposed to myriad potential missions, the majority of which are likely to be 'left of bang.'293 The language curriculum was developed using available DLIFLC Basic Course materials, which as discussed earlier, was designed for MI linguists (reading/listening focused).

Current LES Model

I expect commitment to fully hone language skills and embrace an appreciation for cultural nuances of the Armies and citizens of the locations where you will train and engage ... Bottom line—I want to see the same energy unit focused on Kunar or Paktika province in Afghanistan applied to the new regional focus of Java in Indonesia for example.²⁹⁴

Recently, the model was changed dramatically as was the focus of the command at JBLM. Much of the conventional forces need is now based on exercise contingency training missions. LES courses were constructed on mission need. In this case, the impending exercise was used to initiate a cycle of course construction. The questions asked of the units for goals/ objectives of the course included: who you want to train, what will they be doing with the language, and what components of the exercise are likely to involve cross-cultural communication. A real-life scenario is selected to span the 10-week course and from that information, a point of instruction

is developed and then refined through the draft to final process. Once a course has been taught, the point of instruction is reviewed and refined as needed. The model also includes folding the linguistic acquisition in four functional military domains: rapport building, logistical, security, and medical. The current model is based on three years of refinement and has become a 10-week IAT for Pacific Command languages, thus far Korean, Japanese, Tagalog, Thai, and Indonesian.

8. Concluding the Journey

Readiness Issues

Advanced Foreign Language Proficiency Training Systems

The committee believes that foreign language proficiency is an essential component of military readiness that enables U.S. military personnel to provide strategic warning and critical response capability. The committee is concerned that changes in advanced foreign language proficiency training programs may have an impact on the ability of civilian and military personnel at the Department of Defense to support combatant commanders and possibly lead to gaps in readiness. Specifically, the committee is concerned that linguists at the Department of Defense and supporting agencies may be unable to perform their job functions properly if they are unable to access advanced language and cultural training modules, as these personnel are required to interact, speak, and write in multiple dialects and social registers of a given language in order to adequately perform their varied missions.

To better understand any potential shortfalls arising from planned changes in advanced foreign language proficiency training programs, the committee directs the Secretary of Defense to brief the House Committee on Armed Services not later than October 1, 2015, on any capability gaps in advanced foreign language proficiency training within the Department of Defense. The Secretary shall also note any shortfalls that may arise within agencies that support the Department of Defense.²⁹⁵

This has been a rather uneven journey into the critical need to further develop LRC KSAs in the DOD. This is especially true for SOF and the potential of alternative learning strategies and programs that can provide those KSAs in meaningful and sustainable ways. The above summons for the Secretary of Defense to brief Congress on advanced foreign language readiness did not feature elements of the conventional forces. The summons was instead intended for military and civilian linguists who "may be unable to perform their job functions properly if they are unable to access advanced

language and cultural training modules, as these personnel are required to interact, speak, and write in multiple dialects and social registers of a given language in order to adequately perform their varied missions."²⁹⁶ Interest and concern from this Congressional request reveals a step back at the conclusion of OEF and OIF in the importance of LRC for all of DOD, but especially the conventional forces. This request may also signal a different direction in the ongoing development of LRC capability.

This journey has been uneven for several reasons. One, there never has been a resounding agreement across the DOD on the importance of LRC, first in COIN and now as the DOD faces a future where building partnerships can be just as (or even more) important than surgical strikes. The DOD may respond to HADR missions that besides being horrific in impact to local populations, could easily also tip the scales of local, national, or regional stability. Important as well, terrorist groups are carving out territory in lawless or conflict-driven environments. The impact to populations while militant groups are within established nations creates havoc. This is the regionally and culturally complex canvas that greets each day. Samuel Huntington's *Clash of Civilizations* forecasted fault lines not along borders, but ideologies. However, the 21st century is experiencing clash of cultures that exists across recent and historically established borders, age-old ideologies, and the stretch of ancient civilizations.²⁹⁷

This study reiterated the absolute critical need for LRC in this uncertain world. LRC is not just a handy acronym that corrals behaviors in name only. LRC identifies important KSAs, but also reflects the synergy they produce when featured together in learning—a much more nuanced utility of crosscultural and interactional skills and knowledge. Persistent engagement was the way SOF's future was painted; persistence in mission and persistence in growing and sustaining relationships. Michael Vickers, as far back as 2006, said just that: "I think the future of the long war or Global War on Terror will predominantly be persistent operations in countries with which the U.S. is not at war, leveraging locals ... And so the key will be to have a distributed global presence where we are working with lots of locals to suppress this global insurgency down to very low levels."²⁹⁸

To identify an operational focus, the human domain as of late has become one way to acknowledge that missions have changed. What was seen from the last decade of war, humans, both good, bad, and indifferent, were vital to success, whatever that success looked like. More often than not, lethal operations only got you partway there. If mission success was predicated on BPC, HADR, SFA, or FID, then it is the human domain where the hard work needs to be done for the payoff. Losing the military bias toward borders and boundaries opens the aperture of understanding human behavior that is defined not just by location, but by kinship, exchange, identity, and other cultural systems, which oftentimes resists being coordinates. An AOR may still be about geography, but human behavior is best grasped by understanding human culture, and language, and other elements of cross-cultural interaction and communication. LRC learning is perhaps the most knowledge- and skill-based activity a military person will engage in.

The transformation of LRC policy, strategy, and learning after 9/11, imperfect as it was, prompted the first ever DOD-wide approach to codify concepts, propose actions, establish committees and offices, and plant the seeds of LRC learning approaches. Following the 2005 publication of the DLTR, a DOD-wide strategy and implementation plan was slow in development and the Services and even commands were left to their own devices. They established fledgling LRC programs that minimized language except for special populations and concentrated on region and culture. Compared to the costs of extended instruction and sustainment in language, big culture and little language was a much wiser investment to the budget-minded Services, even at the cost of establishing and sustaining Service culture centers. However, SOF, perhaps more than any other population, had the need to provide thousands of operators big language and big culture. The delay in the centralization of guidance and standardization of policy, and the lack of agreement on concepts/terms impacted all DOD organizations, but especially those populations such as SOF. It was suggested that there still is residual effect of the DLTR and decisions made, or not made, on SOF's own LREC strategy.

For the last decade, there has been a swinging door on establishing and coming to consensus on theoretically sound and informed LRC constructs. Work this author and others have done implicates a more applied approach to how the concepts are used in operations and instructed and developed in learning programs. Concepts like regional expertise and regional proficiency were found to lack sufficiency in terms of theory. Furthermore, developing the necessary learning objectives and assessments from these constructs was, and still is, not easy. Efforts exist to find assessments for LRC, some of those are outlined in this chapter. At the heart of the need to standardize LRC terminology was the importance of developing learning goals and objectives accessible to subject matter experts, instructional designers, instructors, and learning program managers.

A deeper dive into SOF operations and the operating environment provided deeper understanding of the LRC demands predicated on missions. Special Operations warfare, as well as UW, is a critical competence and represents the majority of SOF effort and personnel currently and expected into the future. The use of SOF in surgical strikes proved instrumental in mission success in Iraq and Afghanistan. However, the last decade of COIN and the strikes have diluted language proficiency and region and culture knowledge and skill. It is not enough to just regain proficiency in language, but that region and culture as sets of knowledge and skills must be developed well beyond current learning programs. In addition to more robust 'synergized' LRC programs, a theoretically-driven and applicable LRC assessment program is necessary. Existing use of the DLPT or OPI scale may not be the best indicator of language use or utility and the use of either does not assess to any degree of precision or confidence the LRC performance, even capability of the learner.

Disruptive technology and innovation has been transformative on higher education and training programs. Lately, MOOCs have exemplified this disruptive impact on traditional models of learning. SOF LRC learning should consider engaging elements or at least the intent of disruptive technology. Business and government workforce training is mostly self-contained and static e-learning courses that concentrate on developing new skills. The LMS manages the training experience for the learner but minimizes the opportunity for student learning through acquisition of knowledge and information to increase skills and abilities. A case study of JBLM's LRC program was provided as an example of an entire LRC program being run through an LMS, both residential and distant learners.

This study was by no means a definitive look at LRC in DOD and SOF. Nor was it a complete study of distance learning technology. To keep with the theme of the last two chapters, this study was meant as a call to disrupt DOD and SOF LRC policy and learning programs. Throughout this study the theme of 'we can do LRC better' hopefully came across, as well as the examples offered that have done LRC better. LRC, as developed now in the DOD and the Services, is based on need distilled from OEF and OIF. The future of LRC depends on how well that need has been institutionalized in policy, doctrine, and strategy. For better or for worse, that institutionalization has already been accomplished.

However, SOF represents a unique LRC situation from the rest of the DOD. They need LRC almost in equal amounts and the number of potential learners across the SOF landscape numbers well into the thousands. The initial push for LRC after 9/11 led to the DLTR—that was the disruptor. Likewise, SOF could stand on the precipice of potential disruption in terms of their LRC program. The work is being done in disruptive technology and innovation in higher education and industry. New development and evolving technologies and innovations happen at the speed of 'business.' Already, MOOCs and online learning has been overrun by Web 2.0.

The term Web 2.0 refers to new ways of using the web to deliver a more personalized and collaborative online learning experience through information sharing and interoperability. Examples of Web 2.0 are social networking sites (Facebook, Twitter, LinkedIn), video and photo sharing sites (YouTube, Flickr, Instagram, Vimeo, Vine), wikis, blogs, podcasts, RSS feeds, and Delicious. In the eLearning industry, Web 2.0 has revolutionized the way instructors and end-users interact with learning content and each other. In the workplace, the term "tribal knowledge" has taken on a whole new meaning.²⁹⁹

The world of changing technology does not slow for institutionalization, Web 3.0 has already arrived, "third generation of Internet-based services that collectively comprise what might be called 'the intelligent Web' — such as those using semantic web, microformats, natural language search, datamining, machine learning, recommendation agents, and artificial intelligence technologies — which emphasize machine-facilitated understanding of information in order to provide a more productive and intuitive user experience."³⁰⁰ Web 4.0 is just around the corner.

In the end, this study has advanced a re-envisioning of SOF LRC learning through approach and delivery, content and assessment, and outcomes. The concept, operation, and outcomes of war are changing; it seems logical the preparation for what now and will constitute war should also change.

Appendix A: Acronym List

ADL	Advanced Distributed Learning
AFCLC	Air Force Culture and Language Center
AfPak	Afghanistan-Pakistan (Hands Program)
AOR	area of responsibility
APAC	Asia-Pacific (Hands Program)
ARI	Army Research Institute
BPC	building partnership capacity
CASL	Center for the Advanced Study of Language
CAT	category
CBRIP	capabilities-based requirement identification process
CJCSI	Chairman of the Joint Chiefs of Staff instruction
CLREC	Center for Language Regional Expertise and Culture (U.S. Navy)
CMS	course management system
COIN	counterinsurgency
CREL	Culture, Regional Expertise, and Language (U.S. Army LRC policy)
DLI	Defense Language Institute
DLIFLC	Defense Language Institute, Foreign Language Center
DLO	Defense Language Office
DLPT	Defense Language Proficiency Test
DLTR	Defense Language Transformation Roadmap
DMDC	Defense Manpower Data Center

DOD	Department of Defense
DODD	Department of Defense directive
DODI	Department of Defense instruction
FAOs	foreign area officers
FID	foreign internal defense
GAO	Government Accountability Office
GIS	geographic information system
GLOSS	Global Language Online Support System
HADR	humanitarian assistance and disaster relief
HTS	human terrain system
IAT	initial acquisition training
ILR	interagency language roundtable
imba	internet Masters of Business
JBLM	Joint Base Lewis-McChord
JLU	Joint Language University
KSAs	knowledge, skills, and abilities
LCC	Language and Culture Center
LCMS	learning content management system
LES	language enabled soldiers' program
LMS	learning management system
LRC	language, region, and culture
LREC	language, regional expertise, and culture
МІ	military intelligence
MOOCs	massive online open courses

Sands: Assessing SOF LRC Needs

NAVAIR	Naval Air Systems Command
OEF	Operation Enduring Freedom
OIF	Operation Iraqi Freedom
OPI	oral proficiency interview
OSD	Office of the Secretary of Defense
PME	professional military education
QDR	Quadrennial Defense Review
RAF	regionally aligned forces
RPAT	regional proficiency assessment tool
SCORM	sharable content object reference model
SF	Special Forces
SFA	security force assistance
SFQC	Special Forces Qualification Course
SOF	Special Operations Forces
SOFTS	SOF Teletraining System
USSOCOM	United States Special Operations Command
UW	unconventional warfare
VLE	Virtual Learning Environments

Endnotes

- 1. In this study, COIN will refer specifically to operations that occurred in Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF).
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