"The End State of Language Capability for the U.S. Department of Defense: The Country's First 'Globalized' Workforce"

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Richard D. Brecht
Executive Director
University of Maryland
Center for Advanced Study of Language

Executive Summary

The “end state” of language and culture capability in the DoD is a “globalized total workforce” built and maintained by enhanced recruitment, more targeted training, rigorous warehousing, and effective management. This organic capacity is buttressed by force multipliers consisting of outsourced, localized, and reach-back resources accessed anywhere and anytime through a networked resource access system.

Such an end state must be comprehensive, cohesive and collaborative, as it cannot depend on DoD efforts and resources alone. The programmed support of other government departments as well as the academic, business, and heritage sectors must be brought to bear in an efficient and effective manner.

Summary Conclusions and Recommendations

- The end state is a “globalized total force,” with defined organic capabilities supported by force multipliers based on outsourcing, localization, and reach-back.

- The core to this capability, the Defense Language Transformation Roadmap (DLTR), must be completed and its funding and programs maintained or enhanced.

- Successful recruitment depends ultimately on vastly improved language education at the K-12 level, and the DoD should continue to support and serve as the “bully pulpit” for improvement in the nation’s schools, colleges, and universities.

- A national coordination point for language, similar to the Office for Science and Technology Policy, should be created in the White House and charged to provide guidance in integrating the national architecture upon which this end state depends.

- A network-based language and culture resource access system should be developed that is capable of locating and providing needed language and cultural resources anytime and

anywhere, leveraging the extensive USG investments in language and culture as well the resources of academe, industry, and the nation's heritage communities.

- A concentrated effort should be made in the areas of African and Asian languages and cultures.

- Finally, a short term solution should be a priority, specifically the creation of the. network-based language and culture resource access system

Introduction

In the Defense Language Transformation Roadmap (DLTR), the Department of Defense (DoD) has laid out an unprecedented, comprehensive plan to meet the language needs of the nation's military and has made impressive progress in implementing that plan. Two questions, however, remain: What is the appropriate "end state" for a DoD language and cultural awareness capability? What are the next steps after the DLTR to get us there?

An End State Scenario

In 2021, a severe draught in northern Niger is taking the lives of thousands of men, women, and children. The United Nations and the African Union have agreed to provide humanitarian assistance. The U.S., through AFRICOM, has contributed, among other resources, an infantry battalion, which is responsible for crowd control at food distribution centers in an area where a radical insurrectionist element operates. Tempers flare, and troops and local populations are endangered. Language tasks arise and are met with the following capabilities:

- Organic language capabilities: As part of their training, all troops of assigned to the Northern Region of the AFRICOM mission area are aware of the language and culture issues they will face in the field. Many have basic phrases in the principal languages of Niger, while others can perform at the 2-level in the two African "core" languages (out of the fifteen "core" languages of Africa) spoken in the Northern Region: Fulfulda and Hausa, as well as in French (the official language of Niger) and in Arabic. Thus, there is successful communication between American and community leaders, while people on the street are addressed using Voice Response Translators (VRTs) programmed on-site via satellite in the above languages for crowd control.
- Outsourced capabilities: Operating in conjunction with the African Union's African Standby Force, Northern Region, U.S. commanders can assume that villages, whose populations speak the other principal languages of Niger, Djerma, Kanuri, and Tamajaq, will be handled by the ASF. The battalion's communications management specialist, by the way, has been assigned to provide on-going training to units at the battalion, company, and platoon levels.

- Reach-back: Given the history of past ethnic conflict in the area, the commander reaches back in the pre-deployment stage into the African Title VI center at the University of Illinois at Urbana-Champaign for the latest information on tribal and cultural issues pertaining to Niger and surrounding countries. Meanwhile, on site a prisoner is speaking an unrecognizable dialect of Arabic, and the interrogator goes on-line to access the Arabic Variation Identification Aid (AVIA) developed by the University of Maryland Center for Advanced Study of Language. Having identified the Arabic variant as Shuwa Arabic and aware that this capability is not organic and localization is unreliable, the interrogator accesses the Army Language Line Services, which provides telephonic interpretation during questioning. Also, many local populace interviews must be conducted in Hausa, and so assistance is sought from National Language Service Corps, which has dispatched a set of fluent speakers for the mission. The text for the battery of information and rescues leaflets in all 12 of Niger's languages has been provided by the African Languages National Resource Center at the University of Wisconsin, Madison.
- Localization: Intelligence units of the Niger military provide valuable information to company and platoon leaders. French and Arabic are vital to this channel of information. Officers in these units are skilled in communications management and feel comfortable that they are getting the information they need.

This combination of appropriate organic language capabilities together with the force multipliers, provide the capabilities needed in future scenarios like this.

The Problem

The problem of defining and reaching an appropriate end state is particularly "wicked," given the fact that the 2006 *Quadrennial Defense Review Report* envisions a future dominated by "uncertainty" and "unpredictability" and focuses on "capabilities and agility" more than specific threats from specific countries." Particularly challenging is the fact that the language needs of the Department are real and critical, but at the same time they appear to be so daunting that immediate and practical work-arounds seem more attractive than anything that is proposed under the guise of a long-term solution. With troops moving around the world on short-term (1 or 2-year) deployments, with hundreds (if not thousands) of languages in play, and with many funding priorities competing, a comprehensive end state of a language competent and culturally aware total workforce simply looks out of reach.

That having been said, the focus of this testimony is to attempt to lay out an attainable end state of required language and cultural awareness capabilities, along with the challenges that threaten it and the opportunities that it promises. My underlying assumptions are:

- First, that the existing Defense Language Transformation Roadmap is the most sophisticated language plan this nation has ever seen and lays the foundation for building the first ever language and culture-competent "globalized work force" based in the United States.
- Second, the investment this roadmap has required must be protected and the job must be finished, in spite of some significant challenges that can impede progress and threaten attainment of the end state.
- Third, in spite of the magnitude of the problem, a practical end state can be reached. However, this task will not be accomplished simply, easily and quickly, as it will depend on a comprehensive, cohesive, and collaborative total language system.
- Fourth, short term practical steps can be taken that offer immediate return on investment and, perhaps more importantly, demonstrate that the language problem is not intractable and that long-term solutions are possible.

The End State: A "Globalized DoD Workforce"

The lessons learned over the past two decades have made clear that language and cultural knowledge must be a force-wide capability. Accordingly, the end state we seek is a "globalized workforce" in which every unit and every individual will have the ability to deal on an appropriate level with allies as well as enemies anywhere in the world. This globalized workforce comprises: all military and civilian personnel with adequate communications management skills; a sub-set of this total force with language skills at all levels and in all relevant occupations; a cadre of language specialists capable of performing at the highest levels; and, a set of force multipliers available on demand. Targeting "capabilities and agility" to meet "uncertainty" and "unpredictability" assumes that all levels of the workforce have the globalized mindset, the prerequisite knowledge of what this means, and a language and culture resource arsenal available on demand.

A. Communications Management Skills. The Defense Language Transformation Roadmap has as one of its goals that "…the total force understands and values the tactical, operational, and strategic asset inherent in regional expertise and language." Not only must "…the total force understand and value…," but it must be able to *use* the "…tactical, operational, and strategic asset…." Whether or not the personnel on the ground themselves have language skills or adequate cultural knowledge, training must ensure that all personnel have basic "communications management," which means that they have some basic knowledge of when human and/or technology-based language capabilities are needed and what value they bring, what resources are available and where they can be obtained, and whether the language and culture resources put against the problem are sufficient. Essentially, members of a globalized workforce are armed with the ability to pose and answer the questions: Do we need language skills and culture capabilities? What specifically do we need? Will technology suffice, or do we need human resources? Where and how soon can we get the necessary resources? Are they working?

The communications management training that is called for here, to the best of my knowledge, is not available. Cultural briefings, sensitivity training, and short, intensive language courses and

programs, while certainly required, are not sufficient to equip the total force to deal with the range of language and culture issues they will face in the field. *However, before such training can be developed and implemented, a picture of all language capabilities available to a unit must be drawn and an access network must be developed that is capable of deploying the appropriate resources on demand.*

B. Organic Language and Culture Skills

Strategic planning of the Department of Defense as well as the White House, Intelligence Community, the Department of Homeland Security, and other relevant entities, will determine the language readiness map defining: the languages, the levels of proficiency and performance (from basic to sophisticated), the skills and tasks required, the number of language and culturally-competent personnel; and, the mix of human and technological assets.

Given the global involvement of U.S. military, the inevitable first question that arises is: Which languages and dialects are to be included in the organic capabilities of the Department, given the fact that there are approximately 7,000 languages in the world, with tens of thousands of dialects? The current approach of identifying and projecting "Immediate Investment Languages" and future "Stronghold" languages needs is very reasonable, given the enormity of the task. The question, however, is: How can or should more languages, even dialects, be included in the end state? Clearly, building a workforce competent in hundreds, not to say, thousands of languages is not feasible.

The solution lies in a system with strategically planned, organic language capabilities augmented with outsourcing, localization, and reach-back capabilities. These organic language capabilities have to be carefully constructed against what might be called "language futures," that is, an analysis of which languages and dialects will be in use by which populations in twenty years in regions of the world of inevitable interest. Which are *lingua franca* languages in those regions? Which languages are widespread among relevant sub-populations and sub-regions in the future? If, then, combatant commands can be configured to minimize inter-regional deployments, units assigned to specific areas should have *lingua franca* capabilities, perhaps even down to sub-regions. For example, a recent Cape Town study asserted that, since Africans as a rule are

multilingual and speak two or three languages, there are 15 languages that are spoken by 85% of Africans. If the continent were divided into 5 regions, as the African Union has done, then the number of languages each AFRICOM unit assigned to those regions would have as its organic capability would be manageable.

And how do we build this carefully expanded organic capability? Clearly, the DoD language training programs will remain the primary provider, with the DLIFLC in the lead. However, it is possible that, in the long term, DLIFLC will be able to hone its on-campus mission to higher levels skills in critical languages by drawing from a recruitment pool enriched by better language programs in schools, community colleges and universities as well as in heritage community language schools. (See Appendix B, where a map of the national pipelines in language education and training is sketched out.) In the meantime, the transformation of the DLIFLC to higher level outputs in critical languages, now underway, must be supported to completion. In addition, across the Department language training would be more targeted on job performance with life-cycle training available across the workforce, most likely largely through mobile training teams and on-line courses like those of the SOCOM, with support from technology-enabled learning systems like GLOSS & LangNet. Life-cycle training means that language learning would be an ever-present, career-long endeavor, and management would focus on employing these skills to keep them from atrophying. And finally, once the language skills and professional experience are acquired, they would be "warehoused" in data bases, reserve elements, and the National Language Service Corps, to be available in time of need. All this represents the organic capability of the DoD.

Force Multipliers

However, such an organic capacity has to be supplemented by force multipliers, like the following:

Outsourcing. Clearly, some reliance on contractors for language services across the board will continue, although more organic capabilities are needed. The language abilities of our coalition partners are another important source of rare linguistic and cultural expertise. However, the

quality of these end state outsourced capabilities requires standards and evaluation processes to be developed that ensure the quality of their performance. These standards, at some level, would become part of the communications management training described above.

Localization. The necessity and disadvantages of hiring local populace translators and interpreters are well known to the military. Here again, standards must be brought to bear, as part of the communications management of all personnel deployed abroad. Industry understands localization very well, and the military can learn from firms forced into markets on which they have little experience, not to say expertise. The importance of standards in localization efforts cannot be overestimated. (It is particularly noteworthy that one of the principal industry organizations in this area is the Localization Industry Standards Association (LISA).)

Reach-back: There are USG- sponsored capabilities that cannot be deployed in the field but, given global information transfer in today's world, can be accessed on demand, but only if their availability and usability are known. Such language resources include: the National Language Service Corps (NLSC), the National Virtual Translation Center (NVTC), The Language Flagship (TLF), and, presumably, a government contracted telephonic interpretation services like industry's Language Line Services.

In sum, while outsourced and localized resources can be valuable, the weaknesses are clear. War fighting cannot be outsourced or localized, although large elements of stabilization and reconstruction can. Once again, though, leaving aside cost, the value of such non-organic resources depends upon their quality, which ultimately depends upon standards against which to judge performance.

A word about technology: Human Language Technology (HLT) came into its own when it acknowledged its limitations and targeted its strengths. To this observer, the ability of Human Language Technology (HLT) to match human expertise in processing complex texts is a long way off. Nevertheless, HLT has a definite role to play in the end state; in fact it is critical to it. Processing large volumes of information at relatively low levels sophistication is its strength. In the field it has a role in low level tasks, like traffic control and the like. However, the future

globalized workforce must be armed with the knowledge of what the task is, what the capabilities of the technology are, and how the delta, if it exists, can be filled by human expertise. As mentioned above, this kind of training is a critical component of the universal communications management training called for above.

In sum, the end state envisioned in the Roadmap, with some elaboration here, can be represented by the chart in Appendix A.

National Capacity Architecture

The construction and maintenance of this end state capability in the DoD depends upon a national architecture that is comprehensive, cohesive, and collaborative. The charts in Appendices A & B represent such an architecture, which presumes collaboration among the sectors constituting the nation's language capacity: academic, federal, heritage, industry, and overseas. They are meant to indicate that any solution to a language need as broad as that faced by the DoD is complex and cannot realistically depend on a total workforce trained in the languages spoken in the approximately 130 countries in which we have troops. Moreover, the basic premise here is that the DoD cannot reach the appropriate end state on its own, as department leadership has frequently asserted and the Defense Language Transformation Roadmap clearly implies. However, I would argue that the end state is indeed reachable, provided that the proposed broad collaboration is integrated into a system and supported as a whole.

Whereas industry in the form of private contractors is recognized as a vital part of the DoD's total workforce, close ties particularly with the academe sector are not yet a generally acknowledged and accepted part of the DoD strategic plan for language. That being said, there is no question that academe is envisioned as an integral part of the most recent QDR, and that vision can be broadened. Putting DoD end state functions of Appendix A against the national human resource pipelines reflected in Appendix B gives the following picture of how the end state might work:

First, The Language Flagship of the NSEP was launched in order to dramatically enhance the pool from which language expertise could be *recruited* into the government. This program directly provides to government entities skilled professionals with certified high level language ability in critical languages. In addition, the intent of this program is to strengthen language education across the country by involving leading language programs that demonstrate how language instruction in the education system can become more effective and by disseminating the model to other institutions. This unprecedented program, along with recruitment from heritage communities, ultimately will enable the DoD's principal language school, the DLIFLC, to focus more of its mission on higher levels and on critical languages and missions.

Second, in the area of *training*, federal funding has enabled the academic sector to collaborate in providing long-term career language enhancement through on-line systems like LangNet and DLI-developed GLOSS, critical language learning materials catalogued in UCLA's Language Materials Project (LMP), and broad access to authentic materials from across the globe through SCOLA.

Third, with regard to *warehousing*, the National Language Service Corps (NSLC), along with reserve elements, can become the nation's primary vehicle for preserving hard-won language skills and making them available on demand in time of need. The NSLC can and should draw upon the best academic language programs in the United States, as documented in CASL's *LinguaVista* system, to maintain and enhance its members' language and culture skills. This same service is available to DoD personnel wishing to enhance language skills on their own or through USG-sponsored programs.

Fourth, in the area of *outsourcing*, various accrediting organizations can be of assistance in establishing standards for selection and performance assessment of contracted interpreters, translators, interrogators, and the like. (See, for example, The Commission on English Language Program Accreditation (CEA) and American Society for Testing and Materials (ASTM).)

Fifth, *reach-back* may be seen to comprise a number of services, including translation, interpretation, cultural behavior advising and training, as well as research on immediate and long-term problems in language training, performance, and assessment. The NLSC, the NVTC, and a military telephonic interpretation service—all staffed by many professors and graduate students—can provide just-in-time on translation and interpretation services. The reach-back capabilities of Human Terrain Teams in the field might be extended to include experts in regions and areas of the world from Title VI National Resource Centers. In research and development, the Title VI National Language Resources and the University of Maryland Center for Advanced Study of Language can be called upon.

Sixth, *localization* can be effective, provided that managers of such efforts are themselves trained in what we are calling communications management so that they can know what skills they are looking for, what options are available, and how well the localized efforts are performing.

Academe as a Core Asset

It should be clear that many of these capabilities depend on the academic sector maintaining expertise, programs, and teachers in languages of all regions of the world. In fact, academe, as opposed to government and industry, is best positioned to extend and maintain expertise in all areas of the world without having to justify its practical application. Indeed, the strength of academe lies in its "knowledge for knowledge sake" approach. However, there are a number of critical considerations that arise here.

The core of this capability to develop and maintain expertise is the *language field*, which can be analyzed as comprising, for any given language or language area, foundational elements (expertise base, research, national organization, strategic planning, national resource centers), infrastructure (teacher training programs, in-country immersion programs, publications outlets, assessment instruments, etc.), as well as exemplary national programs. This field architecture, supported principally on the federal side by Title VI/Fulbright-Hays of the Higher Education Act, is critical to all aspects of the federal language enterprise. This is particularly true given the

fact that language fields as a rule pay attention to a broad range of languages in their area, devoting graduate and undergraduate education to critical linguistic and cultural aspects of the discipline unavailable anywhere else. This field structure is critical to much of the end state architecture described here.

Now that culture is receiving its due in the Department, academic researchers can be very helpful in laying out the parameters that have to be considered and the theory that can guide any practical training, whether it be in the area of cultural sensitivity or on specific cultures. This is particularly important when attempting to consider culture separate from language. Furthermore, regional or area studies, as opposed to culture research, is a major strength of universities, and the National Resource Centers funded by Title VI are the major repositories of this knowledge in the world.

Another consideration is that the integration and collaboration called for here among government and academe depend on a clear vision and a strong will across federal agencies responsible for national security. Language is a national problem, and ultimately the globalized workforce called for here will be reached most easily if and when this country's education system produces "globalized citizens." It is a fact that K-12 language education is a DoD issue in that its globalized workforce ultimate depends on it. To the extent that the DoD can continue to advocate for the broader, strategic, language education needs of the nation, the more its direct requirements will be met most efficiently and effectively.

Summary Conclusions and Recommendations

- The "end state" for the DoD of a "globalized total force" is attainable, but only if viewed as comprising a workforce universally informed about the value of language and culture capabilities and about how to bring appropriate language and culture resources to bear when needed. This basic communications capability is the foundation upon which will be built cadres of personnel skilled in languages at all levels, all supported by a full array of force multipliers including outsourcing, localization, and reach-back.

- Hard won ground must not be lost; the significant investment made by the Department in language and culture must be protected. The DLTR must be fully implemented, and its funding and programs must be maintained as the core to this capability.

- A language and culture resource provider system should be devised that is accessible anytime and anywhere. This system must incorporate all aspects of in-house resources (human or technology), as well as outsourced, localized, and reach back capabilities; and it should include resources across government, academe, and industry. This approach is in line with the "Net-Centricity" vision of the 2006 QDR Report, which is intended to harness "the power of information connectivity" to enable "critical relationships between organizations and people." (p. 58)

- Along with adequate assessment processes and instruments, standards should be developed that would apply across all outsourcing, localization, and reach-back capabilities. Such an effort could leverage the 15 billion dollar language services industry, if these businesses would participate with academe in the development process.

- A concentrated effort should be made in the area of African languages. Just because the task is formidable does not mean that it should not be attacked. An initial step would be a major effort to compile language corpora for targeted areas of the continent, which would enable training and research and development of critical technology tools. Also, being a Russian specialist, I would be remiss not to point out the graying of the field both inside and outside our government. A capacity built over decades is in danger of being seriously weakened, just when Russia is emerging once again as a very important player in the world. Finally, the languages of our friends in Europe and Japan are critical to our security, yet they do not garner the support that currently more pressing languages do.

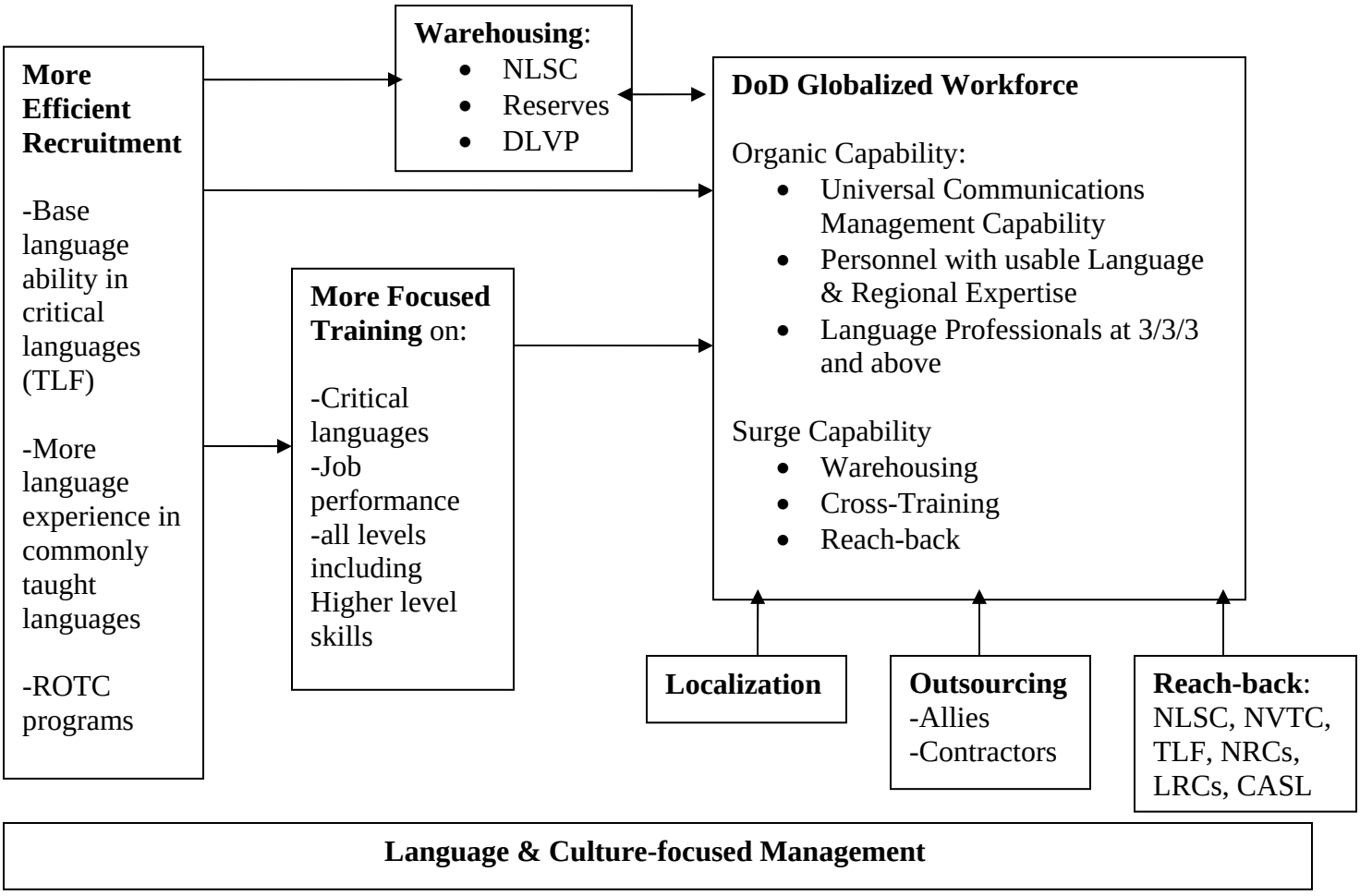
- Efforts should continue and be strengthened to instill appropriate cultural behaviors and understanding in the DoD workforce. Cultural sensitivity is critical as a basis for all cultural training, as there is a danger that very short term training on specific cultures can

cause more harm than good. Communications management entails awareness of the value of cultural knowledge along with the ability to find resources and expertise when needed.

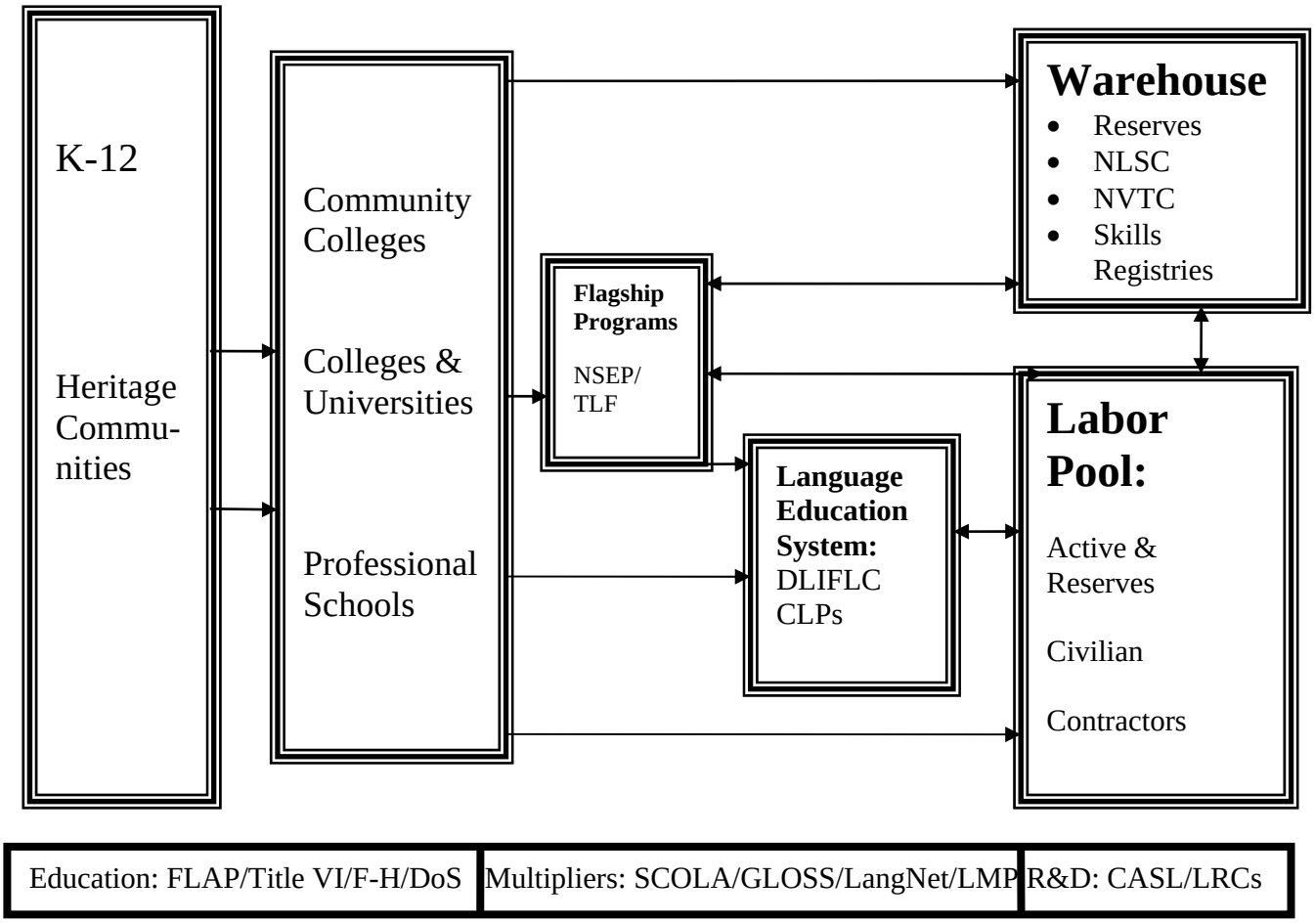
- The comprehensive architecture proposed here requires cohesion and collaboration across agencies and sectors. Ideally, a coordination point for language established in the White House, similar to the Office for Science and Technology Policy, would provide guidance in this direction. Equally importantly, such an office would argue for a national language education policy for the schools, colleges, and universities in this country, thereby providing a longer term solution to what is clearly not just a military problem.

- Finally, a short term result should be a priority. While the end state envisioned here does not involve a total workforce able to speak the languages encountered in global deployments, it does propose a workforce capable of dealing with the communication requirements of their job through access to a range of language capabilities that include human and technological, on- and off-site, and owned and leased, made and bought. A shorter term solution is to build the data base of resources and the delivery system as well as the communications management training components required across the services.

Appendix A: DoD Language Supply Architecture



Appendix B: DoD National Language Capacity Architecture/Pipelines



Abbreviations:

CLPs: Command Language Programs; CASL: University of Maryland Center for Advanced Study of Language; DLIFLC: Defense Language Institute Foreign Language Center; DoS: Department of State; FLAP: Foreign Language Assistance Program; GLOSS: Global Language Online ……; K-12: Kindergarten through twelfth grade; LangNet: The Language Network; LMP: Language Materials Project; NLRCs: National Language Resource Centers; NSEP: National Security Education Program; TLF: The Language Flagship; NLSC: National Language Service Corps; NVTC: National Virtual Translation Center; SCOLA: ……; Title VI/F-H: Title VI of the Higher Education Act, Fulbright-Hays.