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ABSTRACT

This study addressed how to maintain "use or lose" language skills among Department of Defense linguists. The study, which involved over 300 linguists at 61 installations worldwide, supported the Air Force strategy of global engagement by regularly providing pedagogically sound language maintenance materials in small doses and encouraging linguists to maintain skills by building interactive, supportive communities of professionals. Participants were enrolled in 2 e-mail distribution lists: an announce list, which pushed a Russian "vitamin" lesson each day for 10 consecutive days, and a discuss list, where linguists commented on lessons, discussed relevant issues, and built ongoing relationships with others. The study demonstrated the feasibility of the lesson delivery system and the potential of networking linguists into an online community via a listserv. The all-inclusive, concise lesson format was user friendly and extremely useful for language maintenance. The discuss list was a useful forum for community building as linguists expressed views and opinions on issues relevant to the group and received feedback. Of those subjects who completed the end of study survey, 96 percent agreed or strongly agreed this was an effective method of language maintenance. (Contains 41 references.) (SM)

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Language Maintenance At a Distance: The Daily Russian "Vitamin"

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April 2001

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ABSTRACT

This two-week pilot study addressed one of the DoD's most difficult training problems: how to maintain "use or lose" language skills among its linguists. The study, which involved over 300 linguists at 61 installations worldwide, was designed to support the Air Force strategy of "Global Engagement" by regularly providing pedagogically sound language maintenance materials in small doses, and encouraging linguists to maintain skills by building an interactive, supportive community of professionals. Participants were enrolled in two email distribution lists: an Announce list, which pushed a Russian "vitamin" lesson to linguists each day for ten consecutive business days, and the Discuss list, where linguists were encouraged to comment on lessons, discuss relevant issues, and build on-going relationships with other participants. Using existing technology, the study demonstrated the feasibility of the lesson delivery system and the potential of networking linguists into an online community via a listserv. Initial recruitment of participants was problematic due to the lack of an Air Force-wide database of linguist. Those that did participate were highly enthusiastic throughout the project. The all-inclusive, concise lesson format was found to be user-friendly and extremely useful for language maintenance. The Discuss list proved to be a useful forum for community building as linguists took advantage of the opportunity to express views and opinions on issues relevant to the group and to receive feedback. Of those subjects that completed the end of study survey, 96% indicated they agreed or strongly agreed this was an effective method of language maintenance. The article closes with recommendations on developing and conducting distance-learning courses of this type for military audiences.

Introduction

Distance Learning (DL), defined as "any formal approach to learning in which a majority of the instruction occurs while the educator and learner are at a distance from one another," (Verduin & Clark, 1991) has grown explosively in the past several years. While DL has long been conducted using paper-based correspondence courses, tele-courses, and other means, the advent of the Internet and it's widespread usage has made it possible to reach virtually any audience anywhere in near real-time. According to a recent Gallup Poll, 54% of Americans reported using the Internet from home, school, or work on a regular basis. Of those, fully 90% use the Internet for email, while 95% use it to find information. (Gallup Poll, 2000) Clearly, access to the technology for Internet or email-based DL is now widespread. Academia and industry have taken note and are developing training materials to be delivered to these new markets at break-neck speed.

In the armed forces, the ever-growing complexity of technology requires longer and more difficult training. Exacerbated by dwindling resources, the increased training demands have forced decision makers to look for better and more cost efficient methods to maintain required skill levels. Diminished resources along with increased operations tempo limit the time that critical personnel can be removed from their assignments to obtain necessary training. Consequently, the possibilities of saving time and money via DL have become more important to the military community as well.

This is the second of two studies undertaken by the authors in an attempt to discover the best uses of newly available technology to solve one of DoD's most difficult training problems–how to develop and maintain language skills. These skills are needed to support the Air Force mission of "Global Engagement" which mandates 10% of Air Force officers be proficient at the 2/2 skill level (reading/listening) in a foreign language. (Air Force Foreign Area Officer Program Home Page, 1999) (See appendix A for an explanation of the 0-3 proficiency rating scale as tested using the Defense Language Proficiency Test–DLPT).

In the previous DL study conducted with a limited group of Russian military linguists, the authors found that technology-enhanced language training would be more effective if language maintenance and language development were conducted separately. Initial development of language skills requires a significantly larger investment of time and energy by the learner than the maintenance of skills already acquired. (Supinski, Sutherland, & Valentine, 1999) The current study focuses on the latter issue–language maintenance–conducted by pushing via email

short, self-contained pedagogically-sound lessons to linguists on a daily basis. The intent was to facilitate maintenance by providing regular exposure to authentic materials in manageable packages.

This study also addressed motivation to adhere to a maintenance effort. Motivation to continue with a DL program is improved if linguists have opportunities and activities to foster collaboration and socialization thereby becoming a vibrant online community of likeminded learners. (Champagne & Wisher, 2000; Oxford, Park-Oh, Ito, & Sumrall, 1993; Preece, 2000) Consequently, this study used a listserv to establish an online learning community that would provide an effective and motivating learning environment.

Background

Since President Clinton issued Executive Order 1311 in 1999, which mandated that the Department of Defense (DoD) find ways to use technology to improve training and educational opportunities for Federal employees in collaboration with academia and industry, Washington has been active in pursuing the application of technological advances for educational purposes (Clinton, 1999). In July 2000, The President's Task Force on Federal Training Technology responded to the mandate with the following statement: "The Federal Government will need to evolve with the Internet age and move aggressively toward using learning technology to provide 'anytime' and 'anyplace' training opportunities to its workforce." (President's Task Force on Federal Training Technology, 2000)

Similarly, the US Congress formed the bipartisan Web-based Education Commission, which delivered its report in December 2000: "The Power of the Internet for Learning: Moving from Promise to Practice." Chaired by Senator Bob Kerrey, this Commission issued a call for action to make powerful new Internet resources, especially broadband access, widely and equitably available for all learners; provide continuous and relevant training and support for educators and administrators at all levels; build a new research framework of how people learn in the Internet Age; develop high quality online educational content that meets the highest standards of educational excellence...." (US Congress Web-based Education Commission, 2000)

Due to its cost-effectiveness, the Commission expects a shift to the use of web-based training, estimating dramatic growth in the e-learning market from its current level of $3.6 billion to nearly $25 billion by 2003. Furthermore, the report contains information on a major initiative of the U.S. Army to educate soldiers through a $600 million effort called the Army University Access Online. By issuing laptops to provide soldiers

with access to DL opportunities, Secretary of the Army Louis Caldera believes that this program will help recruiting, will improve retention, and will help produce better educated soldiers prepared for the missions and battlefields of tomorrow. (US Congress Web-based Education Commission, 2000)

With the rush to make courses available online, many ineffective materials and courses have been generated. In fact, *Wired* magazine reports students who sign up for online courses seldom graduate, with some online courses suffering dropout rates as high as 80 percent. (Delio, 2001) However, the following three examples–one from academia and two business enterprises–demonstrate plainly that online courses can be successful when constructed thoughtfully using sound pedagogical principles.

Englishtown. An outstanding example of online foreign language instruction with very low attrition rates is Englishtown with approximately 90 percent of students completing its courses. (Littell, 2001; Vande Vrede, 2001) Englishtown is reportedly the world's largest online language school and offers 100% web-based English language training to individuals and companies worldwide. Using a combination of self-study and synchronous, teacher-led discussion, students enjoy great flexibility in their English language training.

The website, www.englishtown.com, is both an online school and a virtual community for students of English around the world. From the homepage, students can complete courseware or visit the community section, which includes real-time chat rooms pertaining to a variety of topics. A Pen Pal service offers members the opportunity to correspond in English, meet new friends and practice writing skills.

Parlo. A second effective online business enterprise is www.parlo.com, which delivers very short daily email lessons to subscribers for each of five languages. Their lessons are similar to the "vitamin" described in this paper, but much shorter and at a significantly lower skill level. Although there is little empirical data on retention due to the site's newness, it was recently named one of the Best 100 Sites for 2001 by Yahoo Internet Life online magazine. (Parlo, 2001)

GOLDEN. An example from academia of successful online instruction without attrition is offered by the German Online: Distance Education Network (GOLDEN) located at http://golden.unl.edu. Students enrolled in GOLDEN can earn graduate course credit and pursue and MA online through the University of Nebraska-Lincoln. Remarkably, the GOLDEN program has never lost a student. The Co-Director of GOLDEN, Dr. Ali

Moeller attributes the success in retention to several factors. Chickering and Ehrman's seven guidelines for outstanding undergraduate teaching and effective distance learning (to be discussed later in this section) were used as a basis/context for designing the courses. Moreover, online participants are able to respond without the interruption of their more vociferous colleagues and have more time to reflect and organize their ideas, which can result in deeper learning. (Colomb & Simutis, 1996) Students can participate on demand and most importantly the responses generated are available in perpetuity. Students can review what was said, evaluate everyone's comments, synthesize ideas, and then respond. (Bailey & Cotlar, 1994) Finally, Moeller (2001) believes that student responses evidence much deeper learning in terms of Bloom's Cognitive Taxonomy. (Bloom & Krathwohl, 1956)

An online community also plays a key role in the success of GOLDEN. According to Moeller (2001), the nature of the "community" is largely formed by the feedback provided the participants. In the "conference room," participants read one another's responses and the instructors ask questions that push the participants to dig deeper, to probe further into thinking about teaching and learning. Furthermore, the participants work in groups to contribute to problem solving tasks online. Finally, participants frequently take multiple courses together, getting to know one another. They also make it a point to meet face-to-face at professional conferences (e.g., the American Council on the Teaching of Foreign Languages).(Moeller, 2001)

Seven Principles

To establish a basis for bringing technology and DL to higher education, Chickering and Ehrmann described the most cost-effective and appropriate ways to use computers and telecommunication technology to advance the "Seven Principles for Good Practice in Undergraduate Education" as follows:

1. Good Practice Encourages Contacts Between Students and Faculty
2. Good Practice Develops Reciprocity and Cooperation Among Students
3. Good Practice Uses Active Learning Techniques
4. Good Practice Gives Prompt Feedback
5. Good Practice Emphasizes Time on Task
6. Good Practice Communicates High Expectations
7. Good Practice Respects Diverse Talents and Ways of Learning (Chickering & Ehrman, 1987)

The current study addressed these principles using two key components--short, self-contained lessons and an online learning community. The short format of the lessons supports principle five by encouraging maximum focused effort on the task. Research on attention span and recall has indicated that the first five minutes of a lesson are the most likely to be recalled, followed by a slightly lower, but consistent level of recall during the next ten minutes. (Burns, 1985) Therefore, the short format is ideal for gaining maximum recall benefits with the shortest possible time investment by busy learners. Prompt feedback (principle 4) was provided through DLPT-style questions and answers, transcriptions, and translations with which the learner could immediately check comprehension. A variety of tools were provided in each lesson, enabling the linguist to tailor the lesson to fit individual learning styles and proficiency levels (principle 7).

Principles 1-3, 6 and 7 were supported by a moderated listserv, used to establish an online learning community. The moderator actively contacted participants, and encouraged them to work together. Being part of a professional community of linguists, including native speakers, generated high expectations for linguists of all proficiency levels. Linguists were encouraged to learn actively by completing a comprehension task, (i.e., reading a text, listening to an authentic news broadcast), answering questions, then cooperating and sharing with other participants to verify answers or ask questions.

Methodology

The objectives of this study were to examine the feasibility of supporting Russian language maintenance by providing daily exposure to the language with lessons sent via email to the linguists and by forming an email-based learning community. Following is a description of the methodology used.

Subjects

The intent of the researchers was to contact every Russian linguist in the USAF to involve them in this research. However, identifying them and subsequently locating them and determining their email addresses proved much more difficult than anticipated. This effort was initially undertaken by the researchers, with additional help provided by other resources in their department. However, due to the time intensive nature of the task, a private contractor was hired to locate the subjects and their addresses, and assemble a database with the information.

The search entailed obtaining two databases from the Air Force Personnel Center, all identified linguists (those having self-identified some level of Russian language capability at some point in their careers), and a listing of those that had taken the DLPT in the previous calendar year. Both databases listed names; PAS Codes, which identified to which military personnel flight an individual was assigned; and telephone numbers, which were often just four digit extensions accessible locally. This limited information required in many cases significant effort to make contact, and some of the information was out of date. The primary element required for this study, email addresses, was not included in either database, and such a database does not exist in the USAF. Due to this required effort, the notion of including all USAF linguists was abandoned. Instead, a date was established, and the number of linguists identified by that date was the number included in the study.

The total number of subjects participating varied due to both attrition and individuals requesting to be added after it had begun, and it varied between the two distribution lists. A chronology of the number of participants is in Table 1.

Table 1: Number of Study Participants

Date	Event	Number of Participants
Oct. 2	Original established deadline for locating participants	Announce List–290 Discuss List–290
Oct. 4	Study listserve and two community lists established	Announce List–290 Discuss List–290
Oct. 10	Start of study/Lesson 1	Announce List–307 (added 24, lost 7) Discuss List–304 (added 24, lost 10)
Oct 23	End of Study/Lesson 10	Announce List–304 (added 7, lost 10) Discuss List–299 (added 7, lost 15)

Wide variety existed in the subject pool, therefore a typical profile cannot be established. However, following are facts on the participants which provide a partial description:

The average score of those that reported taking the DLPT was Listening 2.18/Reading 2.32 (plusses were converted to point .5, such as 2+

equaled 2.5, for calculation purposes). The number of subjects reporting DLPT scores was 133. The high was 3/3, and the low was 0+/0.

Subjects were members of the active duty USAF, USAF Reserve, Air National Guard, US Army, US Marine Corp; US Air Force Academy Cadets, AF Reserve Officer Training Corp Cadets, and civilians. Objects were assigned to 61 different installations.

Russian skills were learned at home, the Defense Language Institute, the USAF Academy, and through a wide variety and type of civilian courses.

Software

The ten lessons were developed by a contractor with basic guidance from the researchers. The instructional design for each section was consistent, with a menu on the left side of each screen that remained visible on every page of the lesson. A brief description of each page is in Table 2. (See appendix B for screen prints of the lesson pages.) The length of time required for completing each lesson was designed to be approximately 15 minutes.

The course was developed using Microsoft Front Page. However, in pre-study trial runs, some subjects experienced problems opening pages due to Front Page extensions. As a result, the extensions were removed and the lessons were converted to pure hypertext markup language (HTML) prior to the start of the study.

Table 2: Software Description

Section Title	Section Description
Preparation	This section began with one or two paragraphs of cultural notes, in English, to provide the necessary background for the content. Following was vocabulary, in Russian with English translation, for words that might be new or difficult for the subjects. The number of vocabulary words ranged from 12-75.
Text/Content	The content consisted of either a Russian language written text, a video/audio file, or an audio file. The text-based lessons ranged from 3 to 6 paragraphs in length, and the audio/video based lessons were 30 to 92 seconds in length.
Quiz	Quizzes were comprehension questions with both questions and answers in English (similar to the DLPT). Questions were offered at three levels, with Level 1 being the easiest and level 3 the most difficult. Additionally, some of the quiz sections had fill in the blank questions.

Answers	This page provided the correct letter responses to the quiz questions followed by the appropriate lines of text.
Transcription	For those lessons with audio or video, a complete transcript was provided.
Translation	A complete Russian to English translation was provided of the text or transcript.
More Options	This section posed a question, in English, on the subject discussed in the lessons intended to generate additional discussion among the participants.

Software used for forming the learning community and email distribution was Listserv Lite, developed by LSoft Corporation. This software was selected due to its relatively low cost, flexibility in terms of moderator control of the message traffic, and familiarity to the researchers. The software was installed and resided on a server outside of the military installation where the software was developed due to concerns that the number of users, combined with limited bandwidth of pipelines (T1 lines) exiting the installation, would slow the system down. This was of particular concern with the lessons that contained audio or video content. The technician/contractor operating and maintaining this software was designated the list administrator.

Subjects were provided a Cyrillic font intended to simplify producing and submitting Russian language postings to the discussion list. The font, LR_RUSKI, was chosen as it required no background software to run in Windows and Windows applications, and was free to government users. Additionally, subjects required Real Audio Player in order to view or listen to the audio or video clips. In order to simplify the process of obtaining this product, the web address where a free copy could be obtained was provided. However, several subjects had difficulties with the download and some computer managers were reluctant to allow installation of the software directly from the internet, therefore an older, free version was sent to them via email attachment by the course moderator upon request. This also proved problematic to many of the participants as firewalls and local security procedures precluded downloading of the attachment.

Course Conduct

Five days prior to the beginning of lesson distribution, all subjects identified were enrolled by placing them on two distribution lists. The Announce list was to be used for distributing the daily lessons, for administrative announcements, for distributing the Cyrillic font and the

Real Audio Player for those that requested it, and any other information pertinent to the entire group. Second was the Discuss list, which was to be used for discussion of lesson content and participant interaction. Two lists were used to allow subjects the option of receiving only the lessons without joining the learning community and receiving its inherent volume of email traffic.

Subjects were notified of their placement on both lists with a message from the list administrator, which included a brief explanation on how the list operated and instructions for disenrolling. At the time of enrollment, the lists were unmoderated; by simply replying to a list generated email, the reply was distributed to everyone on the list. This proved untenable, as numerous subjects, having failed to read or understand the notion that replies would be mailed to everyone, replied to ask administrative questions, thereby flooding the list with messages intended for just the moderator. The result was 7 subjects dropping from both lists prior to the start of the study, and an additional 10 dropping from the Discuss list. The decision was then made to convert both lists to moderated lists; replies were sent just to the moderator, who had approval authority for messages prior to being distributed. This afforded the moderator the ability to address issues intended for individual users, and restrict list-wide messages to only those that applied to all.

Daily lesson distribution began with an introductory message explaining procedures, technology required, discussion etiquette, other administrative information and lesson one (see appendix C for the entire message). Each lesson was identified by a lesson number (1-10) and given a title based on content. The emails were sent each day between 0700 and 0730 Mountain Standard Time, and consisted of the world wide web address where the lessons could be accessed. Each message also contained administrative announcements and personal notes to the participants in an effort to develop cohesiveness and a sense of belonging. The moderator filtered replies to the list, redistributing messages that pertained to the content. He also sent personal emails back to those that were experiencing problems or wished to disenroll. On the day following the 10th lesson, the survey questionnaire was mailed (See appendix D for the entire questionnaire). Reminders to complete the survey were also mailed four days and again at nine days after the last lesson. Following the final reminder, a total of 79 completed surveys were returned.

Results and Discussion

Results and discussion are best separated into the following three categories: technology and procedural issues, language and software issues, and attitudinal issues.

Technology and Procedural Issues

As stated earlier, a primary goal of this study was to test the feasibility of pushing language maintenance materials and guidance to personnel stationed in a variety of locations worldwide on a recurring basis using existing technological capabilities. Generally speaking, the delivery system used, direct delivery of lessons via email, was a resounding success.

Daily Delivery: Research on language learning strategies employed by adult learners indicates that the strategy most often employed by successful learners (i.e. those who report a high self-perception of language proficiency, were taking fourth or fifth year language courses, or systematically received high grades in college language courses) was frequent functional practicing–using the target language for a real communication task of some sort. (Bialystok, 1981; Oxford & Nyikos, 1989) Frequency was achieved by receiving short lessons composed of authentic materials on a daily basis. One survey respondent wrote, "It encouraged me to study–I didn't always have time, but I have studied more in the past 10 days than I have in the past 5 years." Another agreed, "After 18 years of studying Russian, this (the daily vitamin) is the best way to maintain."

Additionally, pushing language maintenance materials to students is an ideal way to encourage regular study because people quite often feel compelled to answer their email. (Kim, 2000) As one linguist wrote, "This is a great concept and leaves no excuses for not at least glancing at a Russian reading every day or two." Functional practice was achieved via the listserv, where students were afforded the opportunity to practice the content of the lessons through further discussion. While most of this discussion was via transliterated Russian, it can still be classified as functional use of the language.

This delivery system also solved a major problem encountered during the researchers' previous study: accessing authentic materials from servers around the world via the Internet. In that study, participants were required to locate radio or television broadcasts as content for assignments. Because of the rapidly changing nature of the Internet and

unreliability of sites located within the target language country, subjects were frequently frustrated by difficulties accessing authentic materials. (Supinski et al., 1999) Additionally, a number of studies have noted the danger of learners becoming overwhelmed by the vastness of the Internet unless provided with a specific goal or task on which to concentrate efforts. (Frizzler, 1995; Riel & Levin, 1990; Warschauer & Whittaker, 1997; Zhao, 1996) By having a daily lesson based entirely on authentic materials and located on a reliable server, the students were not hindered by time wasted searching for inaccessible or out of date sources or overwhelmed by an unfocused search for language maintenance materials. As one student stated, "There is so much available on the Internet that it takes me 10-15 minutes to find something appropriate, and usually longer as I get side-tracked with trivia along the way. I loved receiving it on a silver-platter in my in-box, quick and to the point, no time wasted finding material."

Worldwide Delivery: As previously discussed, the lessons were maintained outside the researchers' institution due to firewalls that restricted access primarily for security purposes. Since several of the subjects used government-owned computers that could only access web sites with .gov or .mil suffixes, these participants opted to use their personal email addresses and accessed the lessons from home. Twenty respondents reported accessing the lessons from both home and work. Several deployed personnel requested the lessons be forwarded to their remote locations. These requests were easily honored by adding the new email addresses to the list, giving learners access to the program while on temporary duty away from their home stations. Clearly, this delivery method facilitates language maintenance anytime, anywhere by alleviating the need to carry heavy, cumbersome study materials (e.g. audio cassettes and players, books, dictionaries, etc.) on deployment. (Valentine, 1999)

During the course of the study, each lesson was sent out at the beginning of the workday Mountain Standard Time. Many subjects expressed a desire to have each lesson waiting in their mailboxes upon arrival to work. Since subjects were stationed around the world in different time zones, this request was impossible to accommodate for all subjects. However, the subjects had the option of completing the lessons whenever convenient, so the variation in time of receipt was not considered a major impediment. The only disadvantage to those not accessing the lessons within a few hours of delivery was in lesson discussions. Those who posted comments or concerns about the lessons later than usual often did not receive responses, as the majority of learners had already moved on to discuss the following lesson.

Another consideration was whether to send each lesson in it's entirety as an attachment or to send a hyperlink to a server housing the lessons. Because of the limited size of most subjects' mailboxes the researchers chose to send only a hyperlink. Subjects were generally happy with this delivery system. No problems were reported downloading the text-based lessons and 85% of respondents reported that the download time for the video lessons was within reason.

Difficulties with Video: Although no one reported problems accessing the web site, there were some challenges with playback of the video lessons. As previously discussed, the Real Audio Player was made available to those that did not have it at the outset of the study. With the aid of on-site computer help desks and the support of the Command Language Program Managers, the software problems were resolved for most users; however, twelve respondents reported still having unresolved playback problems at the end of the study. Such issues underscore the need for participants to have a "personal concierge" available to help with technology-related problems. (Parry & Tu, 2001) In this study, a "personal concierge" would have been a resource person available via email or telephone who could have worked with learners (or their system administrators) with problems playing digital video or with displaying Russian fonts, another significant technical difficulty encountered by participants. Such a resource would create a much more user-friendly environment by assisting in the resolution of technical issues that would cause frustration and impede learning by wasting time better spent on the lesson.

Russian Font Issues: Since the Cyrillic font was imbedded directly in the HTML formatted pages, there were no problems reading Russian from the online lessons. However, only one participant succeeded in sending a message in Cyrillic via the Discuss list that was readable by other subscribers. Unfortunately, there are significant differences in the protocols used by various email software to display non-Roman fonts. Although the researchers tried a variety of solutions throughout the study, no simple, user-friendly method of displaying Cyrillic that could be applied uniformly for all users was discovered. Some participants solved this difficulty to some extent by reverting to the use of transliterated Russian. (For example, "ne potomu chto" for "не потому что.")

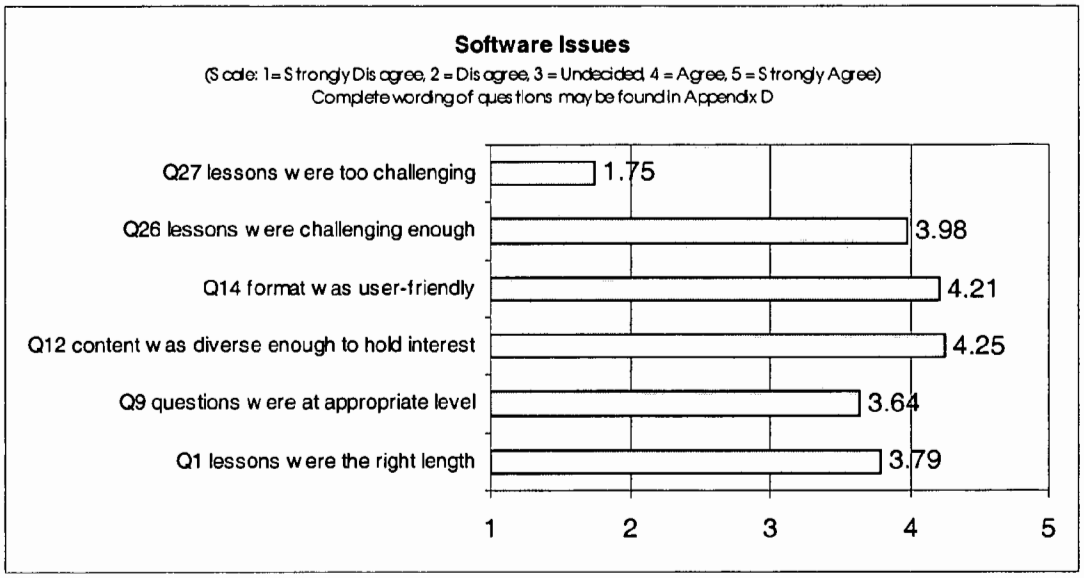
Language and Software Issues

The response from participants regarding the organization and effectiveness of the lessons was overwhelmingly positive. The all-inclusive format was found to be user-friendly and the students appreciated having everything they needed to complete each lesson at the click of a mouse.

Virtually all students reported using all pages of the lesson most of the time, with the exception of the "more options" page, which was rarely accessed. The few who opted not to use the transcription and/or translation pages were typically the most advanced learners (e.g., those with DLPT scores of 3/3; listening/reading).

Lesson Length: As discussed earlier, the lessons were intended to be approximately 15 minutes in length. This estimate proved to be fairly accurate with the majority of linguists spending between 10 and 24 minutes per lesson. At the outset of the lessons, it was recommended that subjects not spend more than 25 minutes on each lesson. Some participants with lower proficiency levels did just that; they stopped working after an established time limit, regardless of how much of the lesson was completed. This most likely contributed to the low attrition rate as frustration was prevented.

Figure 1: Software Issues

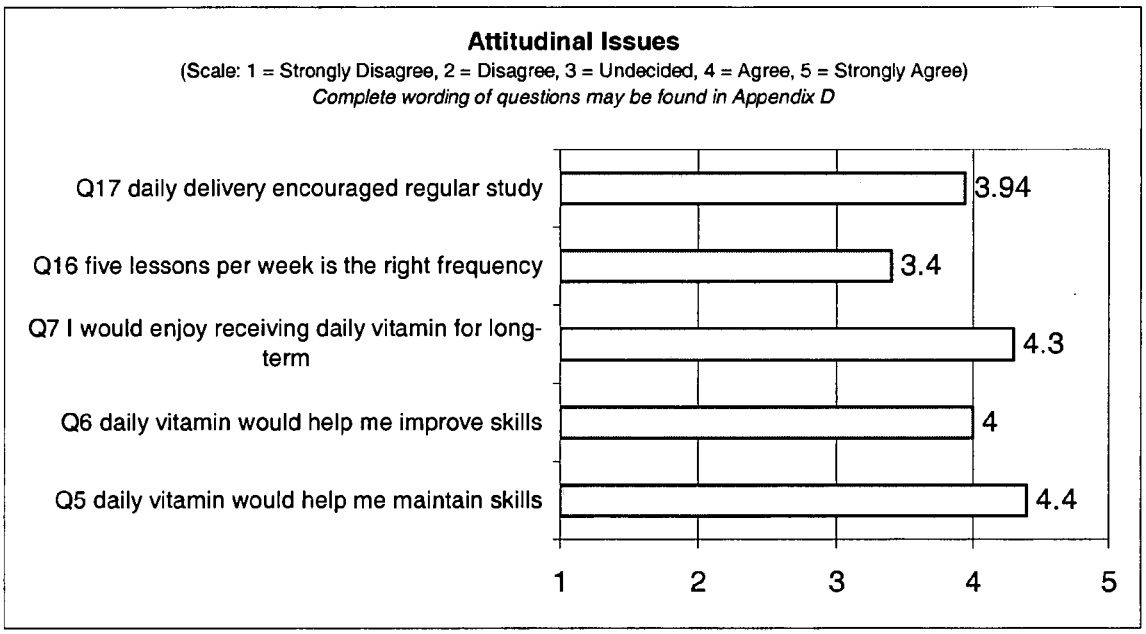


Difficulty of Lessons and DLPT-style Quizzes: A significant challenge when designing materials for linguists with a wide range of skill levels (in this case, from 0+ to 3, including some native speakers) is determining the appropriate difficulty of the materials. Mindful of the primary goal of language maintenance (rather than development) and in order to provide a challenge for the majority of learners, the researchers opted for demanding authentic texts and audio clips originally intended for native speakers of Russian. To appeal to the broadest possible audience, DLPT-style questions at the 1, 2, and 3 proficiency levels were used to adjust the task (while using the same text) to the various skill levels of learners. (Garza, 1996) (For descriptions of reading and listening proficiency levels, see appendix A). Most respondents, including several at lower than 2/2 skill levels, reported that the lessons were challenging enough, but not discouraging, due to the inclusion of transcriptions, translations, and vocabulary help. (See Figure 1). The majority of participants attempted to answer questions at all three skill levels most of the time.

Attitudinal Issues

Because of the short length of this experiment, it would be imprudent to assert that the high motivational levels reported would extend over a longer period. However, the enthusiastic response to these lessons suggests a program of this type could be highly successful over the long-term. Virtually all participants found that lessons delivered in this manner would help them maintain their current language skills. Most believed that completing lessons of this type would lead to improvement. (See Figure 2)

Figure 2: Attitudinal Issues



Online community: As mentioned earlier, both GOLDEN and Englishtown have gone to great lengths to generate online communities of learners with extensive access to one another and to their instructors. Such communities offer powerful support to distance learning by helping eliminate feelings of isolation that contribute to high attrition rates, providing feedback, fostering effective cooperative learning, and incorporating levels of interactivity previously attained only in the classroom. This experiment lasted just two weeks and used only a

moderated listserv to create an online community. Although elements of an active community began to surface, (e.g., some members began to acquire distinct personalities; discussions went beyond the materials involved in lessons, some members began communicating with one another off-line and even set-up several actual face-to-face meetings) efforts to build a successful community were clearly too limited in time and in scope. Consequently, it is very easy to explain why participants were less pleased with the Discuss listserv.

Initially, all 290 participants were enrolled in an Announce List to receive hyperlinks to lessons and a Discuss List to share information about Russian. In spite of the initial confusion discussed earlier with regards to replying to a list and complaints about an onslaught of unimportant emails, the number of participants in the Discuss List increased from 290 at beginning to 299 at the end of study. The increase was caused by participants encouraging fellow Russian learners to take part in the study because of the high quality of the lessons and because of the sharing of valuable information related to Russian.

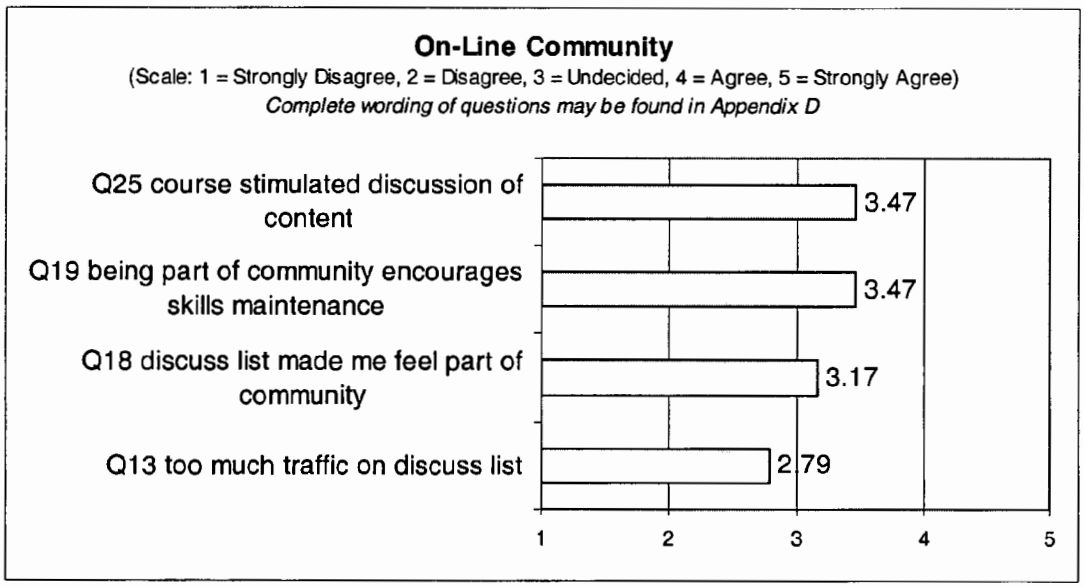
Of the 299 participants enrolled, 66 used the Discuss List to ask questions and to share opinions. The most frequently asked technical questions concerned the use of Cyrillic, Real Player, or email address changes. Technical questions that did not directly pertain to the entire community should have been addressed directly to the researchers or a "personal concierge" (Parry & Tu, 2001) rather than the list. Therefore, the moderator filtered these responses and sent general technical guidance to the community when necessary via the message announcing the next lesson.

In terms of discussing the Russian language and the lessons themselves, the initial comments to the Discuss List dealt with the accuracy of the translations (e.g. the translation "to hope" for "raschityvat") or the accuracy of the transcription of the audio ('I have to disagree with your interpretation of the video. I watched the video a few times and can clearly hear the "ne potomu chto"). Moreover, online personalities began to develop (e.g., a nit picker, one with too much time, native speakers sharing knowledge with school learners). Along with these personalities, "dueling duos" arose as active participants took issue with one another's opinions. Fortunately (and because the list was moderated), none of the discussions got out of hand to become "flame exchanges," as can sometimes occur due to the increased feeling of anonymity afforded by distance and lack of face-to-face interaction. (Korenman & Wyatt, 1996) Exchanges on the Discuss list conformed generally to accepted guidelines for positive social interactions (e.g., foster candor and trust, maintain a constructive tone, maintain an atmosphere of respect). (Preece, 2000; Palloff & Pratt, 1999)

An additional type of contribution appeared after one the researchers (herself a Russian linguist) posed a question involving opinion and inference (i.e., what will happen to negotiations on reducing the number of nuclear war heads, especially if the US continues its pursuit of an anti-ballistic missile system). In addition, she mentioned a Web site, where one could find Russian CD's and music videos. In subsequent comments, other subjects began to express their opinions (e.g., the future of the anti-ballistic missile treaty) as well as divulge other useful Russian related Web sites.

The on-going responses from subjects, enhanced by the pronounced effect of few comments from the researchers, indicates the promise a listserv has to create an online community of Russian learners. (See Figure 3) Factual issues and differences of opinion were readily addressed, concrete online personalities began to crystallize, and subjects expressed their opinions as linguists and professionals in the field.

Figure 3: Online Community Issues



In sum, an analysis of the Discuss List contributions shows a listserv can be used to address technical issues (e.g., using Cyrillic, downloading audio and video files). Moreover, the beginnings of an online community of Russian learners was created in only two weeks that

allowed participants to discuss subtleties of translation and transcription as well as to express their opinions and views on issues of concern relating to Russia. Unfortunately, the short duration and limited scope of this study prevented the creation and evaluation of an online community similar to those evidenced by Englishtown and GOLDEN and described in recent texts. (Kim, 2000; Moeller, 2001; Preece, 2000; Vande Vrede, 2001)

Communication Outside of Discussion List: During the course of the study 11 participants made 21 personal contacts using email addresses provided by the listserv. On a few occasions, participants set up face-to-face meetings with one another, establishing an actual learning community similar to the meetings between GOLDEN students. Without the online community, these Russian linguists would have continued to live in the same city completely unaware of fellow Russian speakers living nearby. This hybrid of virtual and actual communities is proving to be effective in reducing the attrition rates of successful online programs. (Moeller, 2001)

DL Lessons Learned and Recommendations

Despite the short duration of the study, the following recommendations can be made for providing military linguists with technology-based distance training for language maintenance. Once again, the discussion will be categorized by technology and procedural issues, language and software issues, and motivational issues.

Technical/Procedural Recommendations

Frequent functional practice with authentic language (e.g., the daily vitamin) has been found to be an important study habit of successful language learners. (Bialystok, 1981; Oxford et al., 1993) The short length and all-inclusive format of the vitamin lessons made frequent language practice for busy learners manageable, regardless of current skill levels. However, several changes are recommended so all linguists may access technology-based language maintenance materials.

First, a database of linguists should be established and maintained on a long-term basis. The Air Force could assign a permanent email address to each accession upon entry into the military. In the style of a "Yahoo!" or "HotMail" account, military members would keep their addresses throughout the term of military service. Since the address would not change based on duty location, any database created

to service specific groups would be easily maintainable. For example, after a linguist establishes language skills, a permanent email address would be added to an email database and distribution list. Afterwards, the linguist would receive email from the respective distribution list. Information on testing, training, assignments, or related news could be quickly and efficiently distributed to a specific list of military members.

Until permanent email addresses are issued, there should be one central list administrator (e.g., "LingNet," the Defense Language Institute's web site) where linguists can apply to be included or deleted from lists, or change email addresses when necessary. Contact information for this central database must then be widely distributed so linguists will be informed of the resources available to them. The researchers are currently working with the Defense Language Institute and the Air Force Institute for Advanced Distributed Learning to make additional lessons available to all linguists.

Second, digital audio and video clips in future lessons should use Windows Media Player (WMP), the Air Force standard. Using WMP would eliminate problems associated with downloading Real Player software onto government computers.

Third, a hyperlink to an archive page should be regularly included in the emails announcing daily lessons. The archive page would contain a compilation of all lessons presented to the distribution list to date. Students would then have access to one site where they could review past lessons, catch up on lessons missed, or receive extra practice as time permits and requires (e.g., immediately preceding a DLPT).

Fourth, depending on the resources available to produce lessons, lesson frequency may be decreased from five to three lessons per week. While only 25% of respondents requested that the frequency of lessons be decreased to three per week, production costs for so many lessons is high. If the resources are available, however, a "daily vitamin" should be maintained, but instructions to learners should clearly state that if they find participating every day overwhelming, accomplishing fewer is certainly acceptable. This instruction should also be accompanied by the caveat that fewer lessons per week reduce potential benefit and raise the risk of not adhering to the program.

Finally, management of such a program, to include list management, overseeing moderation, insuring lessons are edited for correctness prior to archiving for possible future use, and developing long range plans should be overseen by a single entity. While this entity would oversee the program, it need only act as a coordinator between other agencies or volunteers assigned specific functions and tasks. For example, adequately proficient military reservist linguists could author or maintain lessons. Program participants could also be periodically

solicited to develop or edit lessons. A side-benefit of such a division of labor would be broader awareness of the program, a sense of ownership, and closer touch with the needs of the learner community due to the cooperative approach and broader base of contributors. Volunteer contributors would additionally benefit by repeated use of the language for real communicative tasks.

Language and Software Recommendations

The format and length of lessons was very well received and should remain basically the same. The DLPT-based content (transportation, science, space, natural disasters, politics, etc.) was also well received; however, a number of participants requested some "lighter" topics, such as humor and anecdotes, popular music, human-interest stories, etc. It was impossible to cover such a broad scope of topics in only ten lessons, but these topics should be included as content of future lessons.

Additionally, grammar tips with short exercises should be included on the "more options" page. One of the strategies of good language learners is to recognize that language is both a communicative tool, as well as a set of underlying rules. (Naimon, Frohlich, & Todesco, 1975) Linguists would be systematically reminded of the construction of the language to help maintain facility in productive tasks (e.g., writing or speaking) and help prevent the neglect of accuracy that often accompanies a strictly communicative approach. (Beauvois, 1992)

Attitudinal Recommendations

A key factor in maintaining long-term motivation in students involved in DL programs is fostering a strong sense of community between the learners and/or instructors. (Moeller, 2001; Parry & Tu, 2001) Over the course of time, students will become comfortable in using the Discuss List to keep connected to the linguist community for their specific language; such communities should be particularly important for the less commonly taught languages.

The daily vitamin program could encourage using language for real communicative tasks by changing the format of the "more options" page to further stimulate discussion. Discussion of high-interest items would provide incentive to view this page. For example, lessons should include hyperlinks to Web sites specifically targeted for the audience: links to Russian online newspapers and radio stations, links to useful language sites administered by major universities, a link to the Foreign

Area Officer homepage, etc. Short guidelines for specific activities using suggested sites should be included to provide a goal to help focus learner attention. (Warschauer, 1995) The list administrator's email should be provided so that linguists may help keep lessons current and relevant by reporting defunct or out of date sites.

Furthermore, community members should be encouraged to use the list for communication in the target language through discussion of news, lessons, websites, or other items of interest to the group. Real communication in the target language fosters an atmosphere where interest remains high and cooperative learning can flourish, allowing opportunities for learners to cross Vygotsky's "zone of proximal development," the gap between what someone can learn on their own and what they can learn in cooperation with others who are more skilled or experienced. (Vygotsky, 1962) Other positive effects of cooperation between learners include higher achievement, more psychological connection (caring, support, commitment) and health, social competence, and higher self-esteem. (Smith, 1995) Such communication requires a simple solution for displaying Cyrillic.

Learner support is vitally important to the success of any DL program. The instructional effectiveness of a DL program relates directly to the quality of support afforded to help learners interact with the subject matter delivered by the technology. (Moore, 2001) The high levels of student frustration that result from technical difficulties can be alleviated when help (i.e. a "personal concierge") responds promptly, resulting in greater student satisfaction with the course. (Palloff & Pratt, 1999; Piotrow, Khan, Lozare, & Khan, 2000)

Conclusions and Recommendations for Further Research

Clearly, distance learning offers great potential to help solve the challenges of providing on-going training and education to military members worldwide without the expense and hardships caused by moving personnel from operational units.

Table 3: Summary of Recommendations

Area	Recommendation
Technical/Procedural	1) Establish and maintain database of linguists, including email addresses. ■ Establish permanent email addresses for all military members. ■ Designate a central list administrator to maintain the list and widely advertise contact information
	2) Create future audio/video lessons for Windows Media Player, the current AF standard
	3) Maintain an archive page to allow easy access to all previous lessons
	4) Decrease lesson frequency from 5 to 3 per week
	5) Designate a single agency to be list moderator and to coordinate updating of archived lessons ■ Use Reservists to author new lessons ■ Solicit volunteers from Discuss list to update archive
Language/Software	1) Include "lighter" topics regularly (humor, human-interest, pop music, etc.)
	2) Include grammar tips/exercises on "more options" page
Attitudinal	1) Include high-interest items (i.e. Russian Web sites or info on testing/pay) on "more options" page
	2) Encourage use of Discuss list for real communications ■ Foster cooperative learning atmosphere ■ Find solution to send/receive Cyrillic font via email
	3) Provide adequate technical support; a "personal concierge"

The "daily vitamin" delivery method, combined with the support of professional, cooperative-learning communities, could revolutionize the way military education is conducted in the very near future. Suggested follow-on research includes a study of longer duration to test the development of the learning community and learner attitudes over time and should include data regarding before and after program skill levels. Another question to be addressed is the effect of the July through December DLPT testing cycle on learner motivation and usage of the foreign language maintenance program throughout the year.

The results of this study should also be widely applicable to the conduct of DL in disciplines other than foreign language education. Studies should be conducted to determine if the "daily vitamin" format would be equally successful with different subject matter and different audience profiles.

Finally, a distribution list of those within DoD who are currently researching and working with distance education issues should be compiled. A learning community of distance educators sharing expertise and experience should be initiated via the distribution list, allowing each agency to learn from the others and to progress along the road to productive and rewarding DL experiences throughout DoD as quickly and efficiently as possible. (Halloran, 2001)

Truly, distance learning offers a viable solution to many of the training challenges facing the Air Force today. With cooperation and creativity, these new technologies can be quickly and effectively employed to the benefit of both educators and learners.

ACKNOWLEDGMENTS

The authors wish to thank the Foreign Area Office (FAO) for their active support of our research. Colonel Tony Aldwell provided valuable financial assistance. Moreover, MSgt Stephen Taylor was of great assistance in identifying the Russian linguists who participated in the study. He has also established a web site and database for locating and tracking Air Force language learners. The authors look forward to continued and successful future collaborations.

APPENDIX A
Description of Proficiency Levels for Reading and Listening Comprehension

Reading Comprehension

Level 0 (None) No practical understanding of the written language. Understanding is limited to occasional isolated words with essentially no ability to comprehend texts.

Level 0+ (Memorized) Can recognize all the letters in the printed version of an alphabetic system and high frequency elements of a syllable or character system. Able to read some or all of the following: numbers, isolated words and phrases, personal and place names, street signs, office and shop designations. Examples of types of reading passages: weather maps, schedules, programs, menus, numbers, any text in which meaning is conveyed only via lexicon.

Level 1 (Elementary) Can comprehend very simple connected written material in a form equivalent to usual printing or typescript. Examples of types of reading passages: newspaper announcements, sale ads, bulletin board information, invitations, tourist information.

Level 1+ (Elementary) Sufficient comprehension to understand simple discourse in printed form for informative social purposes. Can guess at unfamiliar vocabulary if highly contextualized, but with difficulty in unfamiliar contexts. Examples of text types: see level 1 and level 2.

Level 2 (Limited Working) Sufficient comprehension to read simple authentic written material in a form equivalent to usual printing or typescript on subjects within a familiar context. Examples of text types: factual descriptions, narrative reporting where the author is invisible or neutral, general schema, instructions, directions, materials addressed to less experienced native speakers.

Level 2+ (Limited Working) Sufficient comprehension to understand most factual material in non-technical prose as well as some discussions on concrete topics related to special professional interests. Examples of text types: see level 2 and level 3.

Level 3 (General Professional) Able to read a variety of authentic prose material on unfamiliar subjects within a normal range of speed and with almost complete comprehension.

Listening Comprehension

Level 0 (None) No practical understanding of the spoken language. Understanding is limited to occasional isolated words with essentially no ability to comprehend communication.

Level 0+ (Memorized) Sufficient comprehension to understand a number of memorized utterances in areas of immediate needs. Slight increase in utterance length understood, but must make repeated requests for repetition and requires frequent long pauses between understood phrases. Understands with reasonable accuracy only when this involves short memorized utterances or formulae. Utterances understood are relatively short in length. Misunderstandings arise due to ignoring or inaccurately hearing sounds or word endings (both inflectional and non-inflectional). Distorting the original meaning, can understand only with difficulty even such people as teachers who are used to speaking with non-native speakers. Can understand best those statements where context strongly supports the utterance's meaning. Gets some main ideas.

Level 1 (Elementary) Sufficient comprehension to understand utterances about basic survival needs and minimum courtesy and travel requirements. Can understand simple questions and answers in areas of immediate need or on very familiar topics. Understands simple statements and very simple face-to-face conversations in a standard dialect. These must often be delivered more clearly than normal at a rate slower than normal with frequent repetitions or paraphrase (that is, by a native used to dealing with foreigners). Once learned, these sentences can be varied for similar level vocabulary and grammar and still be understood. In the majority of utterances, misunderstandings arise due to overlooked or misunderstood syntax and other grammatical clues. Comprehension vocabulary inadequate to understand anything but the most elementary needs. Strong interference from the candidate's native language occurs. Little precision in the information understood owing to the tentative state of passive grammar and lack of vocabulary. Comprehension areas include basic needs such as: meals, lodging, transportation, time, and simple directions (including both route instructions and orders from customs officials, police officers, etc.). Understands main ideas.

Level 1+ (Elementary) Sufficient comprehension to understand short conversations about all survival needs and limited social demands. Developing flexibility evident in understanding into a range of circumstances beyond immediate survival needs. Shows spontaneity in understanding by speed, although consistency of understanding uneven. Limited vocabulary range necessitates repetition for understanding. Understands more common time forms

and most question forms, some word order patterns, but miscommunication still occurs with more complex patterns. Cannot sustain understanding of coherent structures in longer utterances or in unfamiliar situations. Understanding of descriptions and the giving of precise information is limited. Aware of basic cohesive features, e.g., pronouns, verb inflections, but many are unreliably understood, especially if less immediate in reference. Understanding is largely limited to a series of short, discrete utterances. Still has to ask for utterances to be repeated. Some ability to understand facts.

Level 2 (Limited Working) Sufficient comprehension to understand conversations on routine social demands and limited job requirements. Able to understand face-to-face speech in a standard dialect, delivered at a normal rate with some repetition and rewording, by a native speaker not used to dealing with foreigners, about everyday topics, common personal and family news, well-known current events, and routine office matters through descriptions and narration about current, past, and future events; can follow essential points of discussion or speech at an elementary level on topics in his/her special professional field. Only understands occasional words and phrases of statements made in unfavorable conditions, for example through loudspeakers outdoors. Understands factual content. Native language causes less interference in listening comprehension. Able to understand facts, i.e., the lines but not between or beyond the lines.

Level 2+ (Limited Working) Sufficient comprehension to understand most routine social demands and most conversations on work requirements as well as some discussions on concrete topics related to particular interests and special fields of competence. Often shows remarkable ability and ease of understanding, but under tension or pressure may break down. Candidate may display weakness or deficiency due to inadequate vocabulary base or less than secure knowledge of grammar and syntax. Normally understands general vocabulary with some hesitant understanding of everyday vocabulary still evident. Can sometimes detect emotional overtones. Some ability to understand implications.

Level 3 (General Professional) Able to understand the essentials of all speech in a standard dialect including technical discussions within a special field. Has effective understanding of face-to-face speech, with normal clarity and speed in a standard dialect, on general topics and areas of special interest; understands hypothesizing and supported opinions. Has a broad enough vocabulary that rarely has to ask for paraphrasing or explanation. Can follow accurately the essentials of conversations between educated native speakers, reasonably clear telephone calls, radio broadcasts, news stories similar to wire service reports, oral reports, some oral technical reports and public addresses on non-technical subjects; can understand without difficulty all forms of standard speech

concerning special professional field. Does not understand native speakers if they speak very quickly or use some slang or dialect. Can often detect emotional overtones. Can understand implications.

APPENDIX B

Screen Prints of Russian Daily Language Maintenance Program

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Preparation

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Словарь:

предупреждение - warning	отсутствие - absence
РВСН = ракетные войска стратегичес-	потери - loss
кого назначения - Strategic Rocket Forces	престиж - prestige
намерена - is going to, intends	считать - to consider
сравнять с землей - level to the gorund	весьма - quite
сообщение - message	беспокойство - concern
отправленное - sent	разделять - to share
исходить - to come from	сторона - side
ракетчики - missile troops personnel	переподготовки - redeploying
недовольный - disgruntled	правительство - government
длительный - lengthy	исследования - research
задержка - delay	отслеживать - to monitor
зарплата - payment, salary	появление - appearance
ФБР = федеральное бюро расследова-	ядерный - nuclear
ний - Federal Bureau of Investigation	угроза - threat
связываться - to contact	передислоцировать - to move
грозить - to threaten, to face	РЛС = радио-локационная станция -
исправительная колония - penal colony	radar
ФСБ = федеральная служба безопас-	предположительно - allegedly
ности - Federal Security Service	следить - to follow, to monitor
шутка - joke, prank	пробный - test
опасность - threat	пуск - launch
осуществление - implementation	корабль - ship

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Text

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Это было кошмарное предупреждение: "Козельская дивизия РВСН намерена сравнять с землей несколько европейских городов". Казалось, что сообщение, отправленное по Интернету, исходит от российских ракетчиков, недовольных длительными задержками зарплаты.

ФБР связалось с Кремлем и теперь двум студентам технического колледжа города Калуга, что к югу от Москвы, грозит год исправительной колонии. По словам ФСБ, понятно, что предупреждение было шуткой, однако опасность того, что российские войска могут пойти на осуществление терактов из-за отсутствия зарплаты и потери престижа, на Западе считают весьма реальной; это беспокойство разделяет и российская сторона.

На этой неделе во Владивостоке пройдет конференция, на которой будут обсуждаться вопросы переподготовки российских офицеров. Ее спонсорами являются британское правительство и Международный институт стратегических исследований. ФБР отслеживает появление ядерных угроз в Интернете, а Пентагон передислоцировал гигантскую РЛС из Калифорнии в Норвегию, предположительно, чтобы следить за пробными пусками ракет с российских кораблей.

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Quiz

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Answer the following questions based on the text (each question may or may not have more than one answer):

Level 1

1. The gist of the article is:
   a. disruptive Internet prank messages
   b. possibility of terrorist attack
   c. FBI and Pentagon
   d. Federal Security Service

2. The message was sent by:
   a. personnel of Kozelsk division
   b. FBI
   c. students
   d.officers

3. Who is sponsoring the upcoming conference?
   a. the British Government
   b. the International Institute for Strategic Studies
   c. the Kremlin
   d. both a. and b.

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Answers

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Level 1

1 - B :

2 - C :
ФБР связалось с Кремлем и теперь двум студентам технического колледжа города Калуга, что к югу от Москвы, грозит год исправительной колонии.

3 - D :
... Ее спонсорами являются британское правительство и Международный институт стратегических исследований.

Level 2

1 - D :
Казалось, что сообщение, отправленное по Интернету, исходит от российских ракетчиков

2 - B :
На этой неделе во Владивостоке пройдет конференция, на которой будут обсуж- даться вопросы переподготовки российских офицеров.

3 - :
... двум студентам технического колледжа города Калуга, что к югу от Москвы, грозит год исправительной колонии.

File Edit View Favorites Tools Help

Translation

Home
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It was the nightmare warning: "The Kazelsk Division of the Strategic Rocket Forces intends to level to the ground a number of cities in Europe." Sent by Internet, the message claimed to be from Russian missile troops disgruntled after going for a long time without pay.

The FBI contacted the Kremlin and two students from a technical college in Kaluga, south of Moscow, now face a year in a penal colony. The warning was meant as a prank, Russia's Federal Security Service said, but the risk of Russian troops resorting to terrorism over their loss of pay and prestige is seen in the West as very real and is of concern in Russia too.

The British Government and the International Institute for Strategic Studies are sponsoring a conference in Vladivostok this week on redeploying Russian officers. The FBI is monitoring nuclear threats on the Internet and the Pentagon has moved a giant radar dish from California to Norway, allegedly to monitor test missile launches from Russian ships.

File Edit View Favorites Tools Help

More Options

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As a part of military, what do you think about such risk? What do you think should and can be done to prevent it from happening?

APPENDIX C
Introductory Letter and Instructions

Welcome Russian Linguists!

First I wish to apologize for the extraneous emails you received last week. This will not happen again.

This is the first of 10 lessons you will receive in a study the US Air Force Academy Department of Foreign Languages is conducting on the use of daily Russian lessons delivered via your email. Below is the web address where the lesson is located. Once you have read the administrative notes below, simply click on the address. (Note: Please keep this message for reference purposes either electronically or in hard copy. There are also some notes within the first lesson that explain how to use it.)

Administrative Notes:

1. This is a voluntary research study, but we ask that you stay with this program for the entire 10 work days. Please keep our goals in mind: we want to determine how good the lessons are, how you like receiving them daily, whether you think that they will help you maintain Russian proficiency, and whether you enjoy being part of a learning community. All we ask is that you do some of the lessons, and after lesson 10 you complete our evaluation survey. We have already been funded to provide many more of these lessons, and we want your feedback to make them as useful as possible.

2. The lessons will be in your mailbox each day for use when you are ready for them. We recommend you set aside the 15 (or so) minutes each day it takes to complete the lesson and develop a daily routine. This routine should include closing your door or some other method of insuring the 15 minutes are uninterrupted. The lessons may be a bit difficult for some of you (designed for the 2/2 level and higher); if so, decide how long you wish to work (15-20 minutes) then quit. Remember that you can save the emails and come back to them another time.

3. In addition to the lessons, you are part of a "listserv." The purpose is to tie those of us that wish to maintain our Russian into a learning community. The OPTIONS section of each lesson is designed to encourage more discussion of the topic at hand. This may be done in English or Russian, but, since this is intended to improve your Russian skills, Russian is preferred. To facilitate this, if you are using Microsoft Outlook, attached below is a font, LR_Ruski, that you can load and use. Simply save the file, then open start, control panel, fonts, and follow

instructions to install a new font. If you have problems doing this, call or email, and we'll work to solve the problem.

(LR Ruskifont file)

a. There are actually two lists. This is the "Announce" list and is the list that the sends the email that contains the lessons.

DAILY-RUSSIAN-ANNOUNCE-L@LANGUAGES.DATAWEST.NET

This list will also be used to relay important information about the course, technical issues, and to distribute the survey.

b. The second list is the "discuss" list.

DAILY-RUSSIAN-DISCUSS-L@LANGUAGES.DATAWEST.NET

This list is for Russian or English language discussion about a lesson and more informal topics. These emails will automatically be sent to the all the other members (approximately 300) of this group. You can do this by replying to the email which contains the lesson. The email will be held for review. These announcement emails are viewed by me before they go to everyone on the list; I will correct any Russian language content before I send to everyone else on the list–we don't want our language learners getting incorrect Russian!

c. You have been subscribed to both lists. If you wish to receive the email lessons but not the more informal discussion emails, unsubscribe from

DAILY-RUSSIAN-DISCUSS-L@LANGUAGES.DATAWEST.NET

Instructions on how to unsubscribe from a list are included below.

d. If you do send messages to either list, please adhere to "netiquette" as follows:

- Include a subject line for your postings, and "sign" your messages.
- Think before you post, and please, no flaming others publicly.

e. We developed two lists for those who may wish to receive the lessons, but do not want the additional email traffic of discussions. If you must

take yourself off one or both lists, please follow the instructions you received in the email which signed you on. There are also instructions on how to unsubscribe at the bottom of every email sent from both lists. We ask, however, that you send me (Stanley.Supinski@usafa.af.mil) a separate email telling us why for the purposes of our study.

f. In addition to the group "chat" you may also wish to connect with another person on the list "off line" as a pen pal. A listing of who is on the list and their email addresses may be retrieved by sending
http://www.usafa.af.mil/dff/distro/list.htm

g. If you feel you have missed a message, an archive of previous messages can be retrieved by email from the Listserv. Send an email to listserv@languages.datawest.net, in the body of the message include the single word "help" (without the quotes.) You will receive instructions on how to retrieve archived messages. An alternative method for reading previous messages is via a web interface at
http://languages.datawest.net/scripts/wa.exe

4. The audio and video content in the lessons requires the use of real audio. If you do not have it, the program may be downloaded free from their website at

Real Audio Download Link

if that link does not work try:

http://www.realaudio.com

5. Thanks in advance for your participation and for helping us develop a system to maintain your language skills. Please contact either of us if you have any problems or concerns.

Lt Col Stan Supinski	Capt Sue Valentine
DSN 333-8680	DSN 333-3820
Stanley.Supinski@usafa.af.mil	Susan.valentine@usafa.af.mil

6. If you are having any specific technical questions about using the Listserv or the Listserv website please email: listadmin@datawest.net

Lesson 1 is at (just click on the address below):

http://www.usafa.af.mil/dff/distro/lesson1/index.htm

APPENDIX D
End of Course Survey

For the questions with a rating scale, please click on the underline corresponding to your chosen response and type "x". Please add any additional comments that may help clarify or explain your rating below the box.

1. The lessons were about the right length.
SCALE: Strongly Disagree ___, Disagree ___, Undecided ___, Agree ___, Strongly Agree ___.

2. Please tell us approximately how long you spent on each lesson on average.
SCALE: Shorter time ___, 10-15 min. ___, 15-19 min. ___, 20-24 min. ___, 25-30 min. ___, longer time ___.

3. Of the 10 lessons sent out, I worked on _____. (How many? 1-10.)

4. I worked on the lessons the same day as I received them.
SCALE: Never ___, Rarely ___, Sometimes ___, Usually ___, Always ___.

(If you said "never," "rarely," or "sometimes" please tell us whether it was due to time constraints, technical problems, etc...)_____.

5. I feel a daily Russian "vitamin," such as these 10 sample lessons, would definitely help me maintain my skills.
SCALE: Strongly Disagree ___, Disagree ___, Undecided ___, Agree ___, Strongly Agree ___.

6. I feel a daily Russian "vitamin," such as these 10 sample lessons, would definitely help me improve my skills.
SCALE: Strongly Disagree ___, Disagree ___, Undecided ___, Agree ___, Strongly Agree ___.

7. I would enjoy receiving a Russian lesson daily in my email on a long-term basis.
SCALE: Strongly Disagree ___, Disagree ___, Undecided ___, Agree ___, Strongly Agree ___.

8. I would never recommend signing up for this distribution list to my friends or colleagues.
SCALE: Strongly Disagree ___, Disagree ___, Undecided ___, Agree ___,

Strongly Agree ___.
(Please tell us why or why not. Also, please tell us if you did recommend someone else sign up & if so, how many people). _____

9. The questions, for the most part, were appropriate for my language skill level.
SCALE: Strongly Disagree ___, Disagree ___, Undecided ___, Agree ___, Strongly Agree ___.

10. My most recent DLPT scores were: ____ Reading; ____ Listening; (or mark an x here:_____ to indicate you haven't taken the DLPT recently.)

11. I usually completed the questions for level: (check all that apply)
SCALE: Level 1 ___, Level 2 ___, Level 3 ___.

12. The content of the lessons was diverse enough to keep me interested.
SCALE: Strongly Disagree ___, Disagree ___, Undecided ___, Agree ___, Strongly Agree ___.

(Please suggest topics for which you'd like to see lessons in the future:_____)

13. I felt there was too much message traffic on the "discuss" list.
SCALE: Strongly Disagree ___, Disagree ___, Undecided ___, Agree ___, Strongly Agree ___.

14. I felt the lesson format was user-friendly.
SCALE: Strongly Disagree ___, Disagree ___, Undecided ___, Agree ___, Strongly Agree ___.

(Please tell us what you found most/least useful and give us any suggestions about what else you would include.)_____

15. I normally used the following links in the lesson: (check all that apply)
SCALE: Preparation ___, Quiz ___, Answers ___, Transcription ___, Translation ___, More Options ___.

16. Receiving short lessons 5 days per week is about the right amount for me to be able to maintain my Russian skills.
SCALE: Strongly Disagree ___, Disagree ___, Undecided ___, Agree ___, Strongly Agree ___.

(If you disagreed, please tell us how often you would rather receive them)._____

17. Having the lessons sent to me daily encouraged me to study regularly.
SCALE: Strongly Disagree ___, Disagree ___, Undecided ___, Agree ___, Strongly Agree ___.

18. The "discuss" list helped me feel more a part of the Russian linguist "community."
SCALE: Strongly Disagree ___, Disagree ___, Undecided ___, Agree ___, Strongly Agree ___.

(Please tell us whether or not you contacted any members of the list directly, as opposed to responding to the entire list)___ yes; ___no. How often? _____

19. Being a part of a "community" of linguists encourages me to maintain or improve my Russian skills.
SCALE: Strongly Disagree ___, Disagree ___, Undecided ___, Agree ___, Strongly Agree ___.

(Please tell us what would encourage you, if this isn't it)._____

20. I'm using the following operating system:
SCALE: Windows 95 ___, Windows 98 ___, Windows 2000 ___, Other ___.

(If "other, "please tell us which one). _____

21. I usually completed the lessons at the following location:
SCALE: At home ___, At work ___, 1/2 at home-1/2 at work ___, Other ___.

22. The video lessons take too long to download.
SCALE: Strongly Disagree ___, Disagree ___, Undecided ___, Agree ___, Strongly Agree ___.

23. My favorite type of lesson was:
SCALE: Reading ___, Audio/Video ___, Audio only ___.

24. The skill I feel I've most improved as a result of doing these lessons is:
Listening ___, Reading ___, Writing ___, Speaking ___, The lessons didn't help ___.

25. The course effectively stimulated student discussion of the content.
SCALE: Strongly Disagree ___, Disagree ___, Undecided ___, Agree ___, Strongly Agree ___.

26. The lessons were sufficiently challenging to present growth opportunities.
SCALE: Strongly Disagree ___, Disagree ___, Undecided ___, Agree ___, Strongly Agree ___.

27. The lessons were so difficult that they discouraged me from continuing to use them.
SCALE: Strongly Disagree ___, Disagree ___, Undecided ___, Agree ___, Strongly Agree ___.

28. I would like to participate in an in-country immersion program to improve my language skills.
SCALE: Strongly Disagree ___, Disagree ___, Undecided ___, Agree ___, Strongly Agree ___.

Free-response questions:
Directions: There is no rating scale for the following questions. Please respond freely.

1. Did you have any technical problems? (i.e. problems reading the Cyrillic, problems running the videos, problems typing in Cyrillic, etc.). If yes, please describe:

2. If you had technical problems, who solved them and approximately how much time did it require?

3. Were your local computer folks helpful in solving any problems you had. (yes/ no/ not applicable). If not, please explain the situation.

4. What is one thing you would change about the lesson format?

5. What is one thing you would change about the lesson content?

6. What else would you like to tell us?

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