# INTERNATIONAL RESEARCH AND STUDIES PROGRAM (84.017A)



# Fiscal Year 2006 New Grants Summary and Abstracts

International Education Programs Service U.S. Department of Education 6th Floor, 1990 K Street, N.W. Washington, DC 20006-8521

Application Number, Applicant and Project Director	Project Title	Type IM/RE	Years	Funding Allocations FY 2006 FY 2007 FY 2008		
P017A060006 Center for Applied Linguistics 4646 40th Street, N.W. Washington, DC 20016 Nancy Rhodes	National K-12 Foreign Language Survey Research Project (K-12)	RE	3	\$165,000	\$179,000	\$176,000
P017A060011 Five Colleges, Incorporated Department of French and Italian Amherst, MA 01003 Elizabeth Mazzacco	CutureTalk Islamic Worlds: A Video Resource of Language and Culture	IM	3	\$113,000	\$124,000	\$124,000
P017A060014 University of California, Los Angeles 1333 Hearshey Hall Los Angeles, CA 90095 Thomas Hinnebusch	K-12 Gateway to the Less Commonly Taught Languages (K-12)	RE	3	\$157,000	\$190,000	\$180,000
P017A060016 University of Wisconsin, Madison 732 Van Hise Hall, 1220 Linden Drive Madison, WI 53706 Sally Magnan	National Online Less Commonly Taught Languages (LCTL) Teacher Training Initiative (K-12)	IM	3	\$96,000	\$164,000	\$85,000
P017A060017 University of Wisconsin, Madison 1254 Van Hise, 1220 Linden Drive Madison, WI 53706 Uli Schamiloglu	CAILS: Central Asian Interactive Learning Series	RE	3	\$117,000	\$130,000	\$132,000
P017A060018 University of Wisconsin, Madison Center for Southeast Asian Studies Madison, WI 53706 Robert Bickner	Thai Reading Textbook	IM	3	\$115,000	\$158,000	\$155,000
P017A060020 University of Montana Department of Geography Missoula, MT 59812-4840 Sarah Halvorson	New Travels on Old Roads: The Geography of Central Asia and the Caucasus (K-12)	IM	3	\$98,000	\$117,000	\$145,000
P017A060024 Modern Language Association 26 Broadway New York, NY 10004-1789 Nelly Furman	Survey of Foreign Language Enrollments at U.S. Colleges and Universities, Fall 2006(K- 12)	RE	2	\$67,000	\$45,000	\$0
P017A060025 University of Maryland, College Park National Foreign Language Center College Park, MD 20742 Myriam Met	E-Learning Materials for Improving Reading Proficiency in Chinese (K-12)	IM	3	\$120,000	\$132,000	\$135,000

Application Number, Applicant and Project Director	Project Title	Type IM/RE	Years	Funding Allocations FY 2006 FY 2007 FY 2008		
P017A060033 University of Arizona 1717 East Speedway Boulevard Tucson, AZ 85721-0151 Alex Dunkel	Advancing Computer Assisted Instructional Materials for Less Commonly Taught Languages: Kurdish, Turkish and Ukrainian	IM	3	\$136,000	\$150,000	\$155,000
P017A060034 Social Science Research Council 810 Seventh Avenue New York, NY 10019 Seteney Shami	Internationalization, Inter- Disciplinary and Boundary- Crossing: An Evaluation of Title VI NRCs for the Middle East, Eurasia and South Asia	RE	3	\$170,000	\$189,000	\$189,000
P017A060038 University of Minnesota, Duluth 11217 Blue Heron Lane Hayward, WI 54843 Mary Hermes	Ojibwe Movies	IM	3	\$114,000	\$119,000	\$94,000
P017A060044 Coalition of Distinguished Language Centers, 784 Northridge PMB 293 Salinas, CA 93906 Betty Leaver	Development of Integrated Four-Skill Workbooks in Russian for Students Studying Toward Distinguished Level Proficiency	IM	3	\$66,000	\$43,000	\$16,000
P017A060057 University of Minnesota 330 Wulling Hall Minneapolis, MN 55455 Michael Paige	Beyond Immediate Impact: Study Abroad for Global Engagement	RE	3	\$135,000	\$156,000	\$176,000
P017A060058 CRCL Inc. 820 Calle Pluma San Clemente, CA 92674 Doug Cooper	SEALANG Lab: Assistive Technology for Reading, Writing and Vocabulary Acquisition in Complex Script Languages	IM	3	\$152,000	\$172,000	\$174,000
P017A060059 University of Pittsburgh 5106 Posvar Hall, 230 Bouquet Pittsburgh, PA 15260 Daniel Dewey	Advanced Proficiency Development in Chinese, Japanese and Korean	IM	3	\$125,000	\$141,000	\$145,000
P017A060064 Colleges of the Seneca 114 Honness Lane Ithaca, NY 14850 David Galloway	A Dynamic Trainer for Russian Verbs	IM	2	\$112,000	\$131,000	
P017A060067 University System of Georgia 270 Washington Street, S.W. Atlanta, GA 30334 Richard Sutton	GLOSSARI: Georgia Learning Outcomes of Students Studying Abroad Research Initiative	RE	3	\$170,000	\$188,000	\$189,000

Application Number, Applicant and Project Director	Project Title	Type IM/RE	Years	Funding Allocations FY 2006 FY 2007 FY 2008		
P017A060068 Tufts University Perseus Project/Classics Department Medford, MA 02155 Gregory Crane		RE	3	\$126,000	\$151,000	\$155,000
P017A060073 George Washington University NCLRC, 2134 G Street, Room 422 Washington, DC 20052 Anna Chamot	Arabic K-12: Training the Teachers (K-12)	IM	3	\$110,000	\$124,000	\$121,000
P017A060079 SUNY, Buffalo Department of Linguistics Buffalo, NY 14260 Guofang Li	Pathways to Bilingualism: e- Learning and the Teaching of Modern Foreign Languages	RE	3	\$166,000	\$185,000	\$189,000
		•		\$2,630,000	\$2,988,000	\$2,735,000

NOTE: **IM** = instructional materials; **RE** = research

P017A060006 Center for Applied Linguistics 4646 40th Street, N.W. Washington, DC 20016 Nancy Rhodes

### NATIONAL K-12 FOREIGN LANGUAGE SURVEY

Foreign language education is in the spotlight. In the aftermath of 9/11, there has been renewed attention to the need for Americans who can communicate in more than one language. At the same time, No Child Left Behind legislation recognizes foreign languages as a core subject. To determine how well the United States is preparing students to meet the need for individuals with proficiency in critical languages, educators and policy makers alike need up-to-date, detailed information on the current status of foreign language education in this country. Thus, it is time to conduct a comprehensive national survey of elementary and secondary school language programs.

In a three-year project, the Center for Applied Linguistics (CAL) proposes to replicate its 1987 and 1997 surveys of K-12 foreign language programs to identify current patterns and shifts over time in enrollment, amount of foreign language instruction, and type of foreign language offerings, foreign language curricula, teacher qualifications, and other issues. Results will show trends in foreign language education over three decades.

The study aims to provide a portrait of elementary and secondary foreign language education at national and regional levels. The survey will be sent to a random sample of public and private schools. Working with Westat, a leader in survey design, CAL will use various techniques to ensure a high response rate (60 percent or higher), including the option of responding online. Final products will include a comprehensive report, an executive summary, and a brochure with key findings.

This project will expand our knowledge, suggest needs for increased or improved foreign language instruction, and provide data to inform language education policy at the local, state, and national levels.

P017A060011

Five Colleges, Incorporated
Department of French and Italian
Amherst, MA 01003
Elizabeth Mazzacco

### **CULTURETALK ISLAMIC WORLDS**

This innovative, Web-accessible collection of 1,200-1,500 short video clips addresses the need for students of languages and cultures at all levels to hear ordinary people talking about their lives in the languages and dialects they use every day, to read accessible transcripts and translations of those interviews and conversations in English, and also to hear citizens of predominately Muslim countries speaking in English about their everyday lives and cultures. There is no similar resource currently in existence.

CultureTalk Islamic Worlds will feature video interviews with individuals who are native speakers of multiple dialects of Arabic from regions such as North Africa, Egypt and the Sudan, the Levantine coast, Iraq and the Gulf states; African languages such as Wolof, Hausa, Somali, and Swahili; Turkish and Turkic languages such as Azerbaijani, Turkmen, Uzbek, Kazakh, and Kirghiz; Persian dialects from Iran, Afghanistan, and Tajikistan; South Asian languages such as Pashto, Urdu, and Bangla; Indonesian and Malaysian from Southeast Asia; and Serbo-Croatian and Albanian from Eastern Europe. CultureTalk Islamic Worlds will forge the important link between linguistic and cultural proficiency that comes from an understanding of language but also of the value systems and cultural networks that inform the target language.

CultureTalk Islamic Worlds will be of use to postsecondary language and area studies students, K-12 students and teachers, and individuals involved in international occupations or who desire increased international understanding (military, government, and the business community). This rich, innovative video resource will have free and easy access via the Web for anyone with computer access.

P017A060014 University of California, Los Angeles 1333 Hearshey Hall Los Angeles, CA 90095 Thomas Hinnebusch

### K-12 GATEWAY TO THE LESS-COMMONLY-TAUGHT LANGUAGES

This proposal seeks U.S. Department of Education funding to expand the K-12 components of the University of California (UCLA Language Materials Project's (LMP's) Online Digital Bibliography, increasing its effectiveness for elementary and secondary language teachers. The proposed project will:

- 1. Identify traditional teaching materials and Authentic Materials in Less Commonly Taught Languages (LCTLs), focusing on materials for cultural and social curricula in grades K-12, and present those items on the LMP's Online Digital Bibliography, with a special K-12 search function for easy access.
- 2. Identify resources on K-12 teaching methodology for specific Less Commonly Taught Languages or language groups, and add them to the LMP's Online Digital Bibliography.
- 3. Expand the existing Authentic Materials Guide by providing templates of lesson plans for K-12 teachers.
- 4. Create a K-12 portal to unify the presentation of K-12 resources from the Language Materials Project, publishers and distributors, and external Web sites.

Although there are currently 2476 courses offering Less Commonly Taught Languages to K-12 students, there are few online tools to support those instructional programs. There is no comprehensive public source of information on materials to support LCTL instruction in grades K-12. This proposal offers a means to fill that gap.

The LMP is well suited for locating materials on K-12 language-teaching and methodology, and making them known. We already provide a comprehensive Online Digital Bibliography of postsecondary language teaching materials for 138 LCTLs, including 48 languages of Islamic countries, on our Web site at <a href="http://www.lmp.ucla.edu">http://www.lmp.ucla.edu</a>. The current proposal will extend that expertise to materials appropriate to K-12 LCTL education.

The strength of this proposal lies in the fact that it builds on the existing LMP database, processes, and expertise. The team has a proven history of collecting and disseminating information on language teaching materials. We maintain a dialog with language professionals, Language Resource Centers, and national LCTL teaching organizations to assure our awareness of teachers' changing needs. We are fortunate to have access to a wide range of LCTL speakers and teachers, both on the UCLA campus and through the national Language Resource Centers. Our Advisory Board is made up of leading LCTL experts.

The LMP Bibliography is used extensively by researchers, foreign language teachers and area studies programs. The Web site receives nearly 900 visits a day from United States educational, government, and military entities, a measure of our accessibility to a wide audience of potential users, and recognition of the project as an acknowledged source of language teaching information. There are currently over 300 significant Web sites in the United States and abroad that provide links to the LMP.

P017A060016 University of Wisconsin, Madison 732 Van Hise Hall, 1220 Linden Drive Madison, WI 53706 Sally Magnan

## NATIONAL ONLINE LESS COMMONLY TAUGHT LANGUAGES (LCTL) TEACHER TRAINING INITIATIVE

The National Council of Less Commonly Taught Languages (NCOLCTL) and the University of Wisconsin-Madison Language Institute propose to launch the National Online Less Commonly Taught Languages (LCTL) Teacher Training Initiative. This initiative will strengthen the teaching and learning of LCTLs in the United States by helping postsecondary LCTL teachers learn about current research and teaching methods, reflect on their own and others' teaching practices, build communities of practice around language teaching, and strengthen their connections to their professional organizations. The current proposal requests funding for the first phase of the initiative, to develop a series of five, one-credit online teaching methods courses for the LCTLs. The courses will be offered through the University of Wisconsin-Madison (UW-Madison) and made available to educational programs and institutions throughout the United States. The NCOLCTL will offer a certificate of completion for the courses; this certificate will form the basis of a national certificate of instruction for postsecondary LCTL teachers, currently under consideration by NCOLCTL.

Most of the world's population speaks a language not commonly taught in American colleges and universities. Despite the strategic, economic, and social importance of the "less-commonly taught languages" (languages other than English, French, German, Spanish), the LCTLs and their instructors occupy a marginal place in our educational system. The proposed initiative will enhance the capacity of United States' institutions to produce graduates with foreign language expertise by nurturing a growing national corps of teachers and leaders in the LCTLs. The initiative will also produce a substantial "washback" effect for preparing future secondary teachers as well by helping to produce a cadre of postsecondary instructors who can, in turn, train teachers on the secondary level, or work with them to build secondary programs.

P017A060017 University of Wisconsin, Madison 1254 Van Hise, 1220 Linden Drive Madison, WI 53706 Uli Schamiloglu

### **CENTRAL ASIAN ADVANCED INTERACTIVE LISTENING SERIES**

The Department of Languages and Cultures of Asia at the University of Wisconsin-Madison (UW-Madison) seeks U.S. Department of Education funding to support the first phase of an initiative to rapidly expand national capacity in critical Turkic languages of Central Asia and surrounding regions. The current proposal is to support CAILS, the Central Asian Advanced Interactive Listening Series, a project to develop a series of 20 online listening comprehension and culture lessons targeting advanced level listening proficiency in Kazakh and Uzbek. The lessons will be based on video clips of interviews conducted in the target languages, both incountry and in the United States, and will cover topics such as history, literature, culture, politics, education, and economics. The project is unique in providing cross-language training for students with intermediate proficiency in Kazakh, Uzbek, or other Turkic languages to develop advanced-level listening comprehension proficiency in Kazakh or Uzbek without having to begin a four-skills language course in that language from the first semester.

The CAILS project is directed by Professor Uli Schamiloglu, a leading specialist in the Turkic languages and cultures of Central Asia and president of the American Association of Teachers of Turkic Languages. The project builds upon, and extends, the work of other successful materials development projects in advanced-level listening comprehension and technology at the UW-Madison -- RAILS: Russian Advanced Interactive Listening Series directed by Professor Benjamin Rifkin, and Utamaduni Online: An Advanced Level Course in Swahili Language and Culture, directed by Professor Magdalena Hauner.

P017A060018 University of Wisconsin, Madison Center for Southeast Asian Studies Madison, WI 53706 Robert Bickner

### DEVELOPMENT OF MATERIALS FOR THE TEACHING OF READING PROFICIENCY IN THAI

Professor Robert J. Bickner of the University of Wisconsin-Madison (UW-Madison) proposes a three-year project for the development of materials for the teaching of reading proficiency in Thai. The materials will be designed to supplement any basic Thai language text. The difficulty of the reading materials will range from novice (0) through advanced-high (2+) levels on the American Council on the Teaching of Foreign Languages (ACTFL) proficiency scale. Thai is an appropriate language for this type of project. Spoken by the vast majority of Thailand's population of more than 60 million, it is the primary means of communication in all government, commercial, and academic endeavors in Thailand, which is a staunch ally of the United States. With its lengthy border with Malaysia, Thailand has a significant Islamic population and has experienced considerable unrest in Islamic areas, but remains an active participant in efforts to eradicate international terrorism. Thailand remains an open society that grants easy access to United States students, scholars, governmental representatives, and businesses. Interest in studying Thai has grown significantly in recent years, and that interest seems likely to be sustained into the future.

This project continues efforts to adopt competency-based methods for the development of materials for both teaching and testing Thai language skills. The communicative and interactive materials will be designed for use in the first through third years of Thai language instruction in the United States and will be used during regular academic year instruction as well as in courses offered through the Southeast Asian Studies Summer Institute (SEASSI), which is funded by a consortium of nearly two dozen universities in part through a pooling of the Foreign Language and Area Studies Program fellowship funds, and which will be hosted by UW-Madison at least through the completion of the grant period. The materials will also be used by the Advanced Study of Thai (AST) program, which is sponsored by the Consortium for the Advanced Study of Thai (CAST) and funded by the U.S. Department of Education.

The materials to be used will be authentic texts collected from Thailand; they will be drawn from written material found in magazines, newspapers, announcements, signs, documents, letters, instructions, advertisements, and so on. Two volumes will be produced, the first of which will cover from novice through intermediate-mid levels, with the second to cover from intermediate-high through advanced-high levels. Within each volume materials will be organized thematically; topics will include categories such as entertainment (theater, movies, music, television), life events (birth, marriage, death and related rituals), sports, shopping (food items at stores and restaurants, clothing, household goods, toiletries, etc.), travel and transportation (both local and international), occupations, business, economics, politics, biography, people, and religion. As the volumes are being created, they will be tested in class sessions in Madison during the academic year and also in the summer intensive language institute (SEASSI), as well as the Advanced Study of Thai program in Chiang Mai, Thailand. Bickner, as Language Director of SEASSI and past president of CAST, will maintain good communication with SEASSI and CAST member institutions to make the materials available to them for additional testing for and feedback from them regarding project design.

Finally, Bickner will supervise and participate in the development of guidelines for Thai reading proficiency, and a reading test to measure proficiency from intermediate-mid through advanced levels. This test will then be used in academic year programs, SEASSI and the AST program, providing a national standard for reading proficiency measurement.

P017A060020 University of Montana Department of Geography Missoula, MT 59812-4840 Sarah Halvorson

# NEW TRAVELS ON OLD ROADS: UNDERGRADUATE TEACHING MATERIALS ON THE GEOGRAPHY OF CENTRAL ASIA AND THE CAUCASUS

The Central and Southwest Asian Studies (CASWAS) Program at the University of Montana (UM) requests funds to support a project titled "New Travels on Old Roads: Undergraduate Teaching Materials on the Geography of Central Asia and the Caucasus." U. S. Department of Education funds will support the design, development and evaluation of a much-needed curriculum package for undergraduate students that are focused on the regional geographies of Central Asia and the Caucasus.

The curriculum package of this pioneering effort will consist of three components: (1) an undergraduate introductory geography textbook; (2) an instructor's manual; and (3) a multimedia compact disk with supplementary materials such as map resources and activities, resource links, country and regional data sets, virtual field trips (i.e., pictorial narrated walkthroughs that integrate text and image galleries of six places around these regions), literary excerpts, and previously un-translated documents from the region. It will be structured around six broad interdisciplinary themes that are fundamental to the study of these strategically important regions: (1) environmental geography; (2) cultural landscapes and religious diversity; (3) population and settlement; (4) history and geopolitics; (5) social and economic development; and (6) globalization and local responses. They can be adapted for semester-long courses or as modules for intensive short courses.

The goal of the project is to help students gain deeper knowledge and understanding of the complex regional geographies of Central Asia and the Caucasus, two predominantly Islamic regions. For purposes of this project, we have chosen to define the countries comprising the Central Asia and Caucasus regions as including: Armenia; Republic of Georgia; Turkey; Azerbaijan; Iran; Afghanistan; Pakistan; the five Central Asian Republics of Kazakhstan, Uzbekistan, Turkmenistan, Tajikistan, and Kyrgyzstan; Mongolia, and the Xinjiang province of China. With the exception of the Republic of Georgia, Armenia and Mongolia, Islam is the preponderant religion of all the other countries. The proposal responds to the Department of Education's Invitational Priority I for materials development projects focusing on Islamic societies.

The CASWAS Program has a solid track record of achievement in providing interdisciplinary and pedagogically effective instruction on the geography, history, and environments of Central and Southwest Asia. Building on the success of its popular undergraduate program, the project will strengthen UM's existing curriculum with the latest instructional materials and make the resulting curriculum package widely accessible to students at institutions of higher education across the nation. The package will be produced by a team of area and curriculum specialists, pilot-tested and evaluated, and made available for national distribution. It addresses an urgent need for more integrated, well-documented and comprehensive teaching and learning on Central Asia and the Caucasus regions.

P017A060024 **Modern Language Association** 26 Broadway New York, NY 10004-1789 Nelly Furman

## SURVEY OF FOREIGN LANGUAGE ENROLLMENTS IN U.S. COLLEGES AND UNIVERSITIES, FALL 2006

The Modern Language Association (MLA) has for nearly half a century conducted surveys of fall-semester enrollments in foreign languages in all United States institutions of higher education, and we are hereby applying for a grant to conduct a survey of enrollments for the fall of 2006. Preparation of the survey, information gathering, data analysis, and publication and dissemination of the survey results will extend over an eighteenmonth period from July 2006 to December 2007. The last MLA survey covered enrollments in the fall of 2002. The response rate to past enrollment surveys has consistently hovered between 97 percent and 99.6 percent, which allows us to examine with precision changing trends in the study of languages other than English in United States colleges and universities. Our last survey included detailed responses from all but twelve of the 2,781 postsecondary institutions surveyed.

As we have done with each previous survey, at the conclusion of the fall 2006 survey we will broadly disseminate a report with findings that encompass the most commonly taught languages (currently, Spanish, French, German, Italian, American Sign Language, Japanese, and Chinese), as well as the less taught languages. Our last survey reported on enrollments in over 175 languages. Our final report will compare enrollments in foreign languages with enrollments in higher education overall, provide information in actual numbers and percentages, and indicate the geographic distribution of language enrollments. We will note new programs and program closings by language and institutional type, and augment current enrollment data with data from preceding surveys (1960, 1965, 1968, 1970, 1972, 1977, 1980, 1983, 1986, 1990, 1995, 1998, and 2002) to present a comparative portrait of language enrollments in the United States through time in narrative text, tables, and graphic form. Findings will be disseminated through the Association of Departments of Foreign Languages (ADFL) Bulletin and the MLA Web site and in response to requests from the public and the press. In 2004 and 2005 over 260 articles in the national media referenced the MLA's 2002 enrollment data; this coverage attests to the continuing public interest in developments in the nation's study of languages other than English. MLA enrollment surveys are also the standard resource for teachers, program and school administrators, researchers, and publishers.

At a time when knowledge of foreign languages is recognized as an advantage for the expansion of global economic partnerships and considered a significant factor in world events, the MLA provides an essential service through its enrollment surveys, not only to educators but also to public and private agencies and the nation's political, social, military, and business communities. In view of recent events, security concerns, and economic pressures, we expect that the proposed 2006 enrollment survey will again be received with intense public attention.

P017A060025 **University of Maryland** National Foreign Language Center College Park, MD 20742 Myriam Met

# DEVELOPING E-LEARNING MATERIALS THAT WILL HELP STUDENTS IMPROVE THEIR ABILITY TO READ CHINESE

The National Foreign Language Center (NFLC) at the University of Maryland proposes a project to address the growing interest in teaching Chinese in secondary schools by developing high quality e-learning materials that will help students improve their ability to read Chinese.

The project builds on a five-year, \$17 million investment in LangNet, a sophisticated e-learning system developed for the United States government. LangNet provides electronic practice materials (primarily at Interagency Language Roundtable (ILR) Levels 2 and above) that enable government workers to improve their ability to carry out their jobs by increasing their reading and/or listening proficiency. This project will extend the technology, expertise, and production processes developed at NFLC over the last five years to address the needs of a new audience: secondary students of Chinese reading at the 0 to 1 (ILR) levels of proficiency.

The proposed project responds to a growing interest in Chinese language study that has not as yet been met by an infrastructure of highly qualified teachers and excellent materials appropriate to secondary school students. Not only will the project provide an additional source of instructional materials, it will also allow schools to use technology to moderate the effects of a severe teacher shortage by supplementing face-to-face instruction with technology-delivered learning activities.

These materials will be available at no cost on the Internet, accessible without User ID or password. Therefore, in addition to meeting the need for improving reading proficiency in secondary students, the materials will also be accessible to students in lower level courses at colleges and universities, to government personnel seeking to improve their reading skill, and to the public at large. In addition to Internet accessibility, the project will make CD-ROMs available to schools prefer that form of access.

To ensure the production of high quality materials, the project will train and employ secondary school Chinese teachers as materials developers. A side benefit of this training will be that the teachers hired by the project will themselves become more skilled in both teaching and curriculum development.

Project evaluation will include online testing of students to assess their reading skills prior to using the materials and at the end of the academic year. In addition, using questionnaires and focus groups, data on teacher and student perceptions of the quality of the materials, their usefulness, and their strengths/weaknesses will be collected regularly throughout the pre-testing and revision phase of the project.

Building on LangNet, a project designed to meet the needs of government workers, the proposed project represents a considerable cost savings. Needed hardware and software have been purchased and/or developed; an authoring tool that both facilitates and guides the work of materials developers has been developed, tested, and refined; quality criteria for materials have been developed, reviewed, and revised over a five year period; support for developers that includes face-to-face training, a resource manual, and computer-based modules are now available; and production processes and management protocols that have resulted in over 3,000 hours of LangNet instructional materials for government workers delivered to specifications and on time will be used to manage production in this project.

P017A060033 **University of Arizona** 1717 East Speedway Boulevard Tucson, AZ 85721-0151 Alex Dunkel

# ADVANCING COMPUTER ASSISTED INSTRUCTIONAL MATERIALS FOR LESS COMMONLY TAUGHT LANGUAGES

This project will provide state of the art courseware in Turkish, Ukrainian, and Kurdish that addresses several urgent, unmet needs, expanding the national capacity to offer the Less Commonly Taught Languages (LCTLs) in a wide variety of learning environments. In order to develop cadres of professionals in various fields who possess significant language proficiency in LCTLs, innovative programs, materials, and instructional delivery systems must be created that promote increased cooperation and collaboration among secondary and postsecondary institutions, government, and business. Toward these ends, this project extends the contributions of a team of courseware experts in the University of Arizona Critical Languages Program (UACLP), the UA Computer-Aided Language Instruction group (UACALI), and the National Association of Self Instructional Language Programs (NASILP).

For over three decades, since the advent of the audio cassette, NASILP has promoted, coordinated, and established national standards for instruction in LCTLs at schools, colleges and universities. Since 1997 the University of Arizona (UA), in partnership with NASILP, has developed, published, and distributed a series of much needed instructional materials to aid learners and teachers of Brazilian Portuguese (Level I), Cantonese (Level I & II), Mandarin Chinese (Level I), Korean (Level I), Kazakh (Level I, II, & III), Turkish(Level I & II), and Ukrainian (Level I). More than 3,000 CD-ROM and DVD-ROM versions of these materials have been sold since the first courseware became available in 2000.

These materials are being developed using the highly successful MaxAuthor language-teaching authoring software that has been created, distributed, and refined at the UA over the past decade. MaxAuthor programs can be used flexibly by teachers, students, and independent learners to provide instruction or to supplement it systematically. Under the supervision of the project's directors, competitively selected authors will create the equivalent of one year's worth of material for three languages, including digital audio and video recordings and integrated activities based on these recordings. The three language projects are: Kurdish (Level I); Ukrainian (Level II); and Turkish (Level III). As in past projects, instructors and students nationwide will test and help refine the new materials. They will then be published by UACLP on DVD-ROM and distributed by the UA Press. They will also be available on an e-commerce Internet host easily accessible to schools, colleges, businesses, government agencies, and the general public for a modest subscription fee. This publishing model provides royalties to authors and assists in distributing and funding future LCTL materials development.

In addition to materials development, the team will continue to make MaxAuthor available free for non-commercial use to authors worldwide who wish to create their own lessons. UACLP will provide technical support, provide training materials, and continue refining the software. By providing completed courseware and the capacity to develop additional lessons, and by continuing professional development efforts among LCTL programs and instructors, this project will promote in ongoing ways the study of a wider range of LCTLs in secondary and postsecondary institutions and beyond.

P017A060034 Social Science Research Council 810 Seventh Avenue New York, NY 10019 Seteney Shami

# INTERNATIONALIZATION, INTER-DISCIPLINARY AND BOUNDARY-CROSSING: AN EVALUATION OF TITLE VI NATIONAL RESOURCE CENTERS FOR THE MIDDLE EAST, EURASIA AND SOUTH ASIA

This project has the following main objectives:

- To evaluate the current performance of National Resource Centers (NRC) for the Middle East, Eurasia and South Asia in terms of meeting national needs for intercultural competence and international education as well as their roles in promoting inter-disciplinary approaches and cross-boundary expertise.
- To map the context in which the NRCs operate both in terms of wider campus resources and nationally available resources through educational, exchange and funding programs.
- To produce analytical essays, educational policy briefs and project reports and to disseminate them by print and Web-based media to aid a variety of actors and agencies in programmatic planning in area and international studies.

The project will be undertaken by experienced Social Science Research Council (SSRC) staff including a full-time researcher, as well as a senior consultant and a statistical consultant who will provide additional expertise for the design of research instruments, analysis and report preparation. Outside experts will be involved through two workshops to provide input and evaluate the project at different stages. A final conference and print and Web-based dissemination will ensure a broad outreach.

The project will evaluate the role that Title VI centers play, and potentially could enhance, in meeting new demands placed on international and area studies in the United States through evaluating how the centers cope with the declining presence of crucial social science disciplines, how the post 9/11 context has affected their ability to provide in-depth training and intercultural competence; and finally, the potential, incentives and challenges faced by centers in designing creative responses to the understanding of thematic, cross-regional and global phenomena.

P017A060038 University of Minnesota, Duluth 11217 Blue Heron Lane Hayward, WI 54843 Mary Hermes

### **ONLINE OJIBWE LANGUAGE TEACHING MODULES**

We propose to create 12 online Ojibwe language teaching modules that address the needs of beginning (high) through intermediate levels of Ojibwe learners. These modules will consist of four short (three-five minutes) movies per module; interactive comprehension and vocabulary lessons; audio only transcriptions at normal and slow speeds, and a short quiz for each module. Modules will be organized around themes that feature daily functional language. Themes will be culturally rich and visually interesting and may include, for example, visiting Elders; driving; cooking; shopping; taking care of children; sewing blankets and preparing a feast. The raw footage for the modules will be collected using first speakers of the language, which are likely to be Ojibwe Elders. Building on a previously funded Nation Science Foundation project (SERG #0442489) the Elders will be given a situation, props and asked to improvise. This will provide authentic, informal, unscripted dialogue for the learning modules.

In an effort to bring together diverse stake-holders, faculty from the University of Minnesota Duluth and Twin Cities' campuses are working collaboratively with Ojibwe communities, Elders and area schools. The creation of this resource relies on collaboration and will model distance delivery (online) teaching for oral proficiency in a less commonly taught language to a population that is rural. This innovative and creative project will assist other communities who are attempting to meet these same challenges in fostering proficient speakers of less commonly taught languages by utilizing internet and multimedia technologies.

P017A060044

Coalition of Distinguished Language Centers
784 Northridge PMB 293
Salinas, CA 93906
Betty Lou Leaver

### DEVELOPMENT OF INTEGRATED FOUR-SKILL WORKBOOKS IN RUSSIAN

The Coalition of Distinguished Language Centers (CDLC), comprised of programs and centers devoted to the development of very high levels of foreign language proficiency and staffed by individuals experienced in teaching high-level students, proposes to prepare replicable materials in the sociocultural, sociolinguistic, and linguistic aspects of communicative competence for students of Russian at Interagency Language Roundtable (ILR) Level 3 (American Council on the Teaching of Foreign Languages [ACTFL] Superior) proficiency trying to attain ILR Level 4 (ACTFL Distinguished) proficiency, as indicated by the project title, "Development of Integrated Four-Skill Workbooks in Russian for Students Studying toward Distinguished-Language Proficiency, with a Generic Template for Other Languages." These materials, published as books and made available on line, include teacher materials, audio and video for students, and a faculty development video tape. The materials will be field-tested in the various programs of the institutions affiliated with the CDLC and made available to any other high-level programs in the United States. Feedback will be sought from all users, both online and onsite.

The population to be served, on the surface, is the elite but very important group of students who possess Level 3 (Superior) proficiency in Russian and want to reach Level 4 (Distinguished/"near-native"), for whom almost nothing currently exists in the way of learning materials, the goal being to fill this gap in the areas of culture and language (linguistic expression). In reality, the nature of these materials are likely to have a washback effect on the teaching of language at lower levels of proficiency, and some of the materials, e.g., some sociocultural components, could possibly be introduced in adapted form as low as at the advanced level. The materials, while meant to be used by teachers in a classroom, will take into account that many students at this level are teacher-less and have become good independent language learners. The online availability will help such learners.

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### WHAT IS THE NEAR- AND LONG-TERM IMPACT OF STUDY ABROAD?

What is the near- and long-term impact of study abroad on alumni's professional development, personal development, and social capital contributions as perceived by the alumni themselves and as assessed by a set of external measures? During the past decade, education abroad has experienced considerable growth in the number and range of programs being offered, the level of student participation, and the size of the investments being made by United States colleges and universities to develop and support these programs. We argue that, despite the rapid expansion and professionalization of study abroad, the research literature, while extensive, focuses almost exclusively on the immediate post-return impact of study abroad and notably on the personal development dimension. No studies, to our knowledge, have examined the social capital impact of study abroad, i.e., commitments to the public good expressed, for example, through philanthropy, socially conscious career and professional paths, civic engagement activities, social entrepreneurship, and knowledge production (Putnam, 2000). Akande and Slawson (2000), who did the major previous study in this area, note the serious limitations of their study and call for "a larger scale, more comprehensive survey based on a more representative sample of all study abroad students"

Though the major focus of this study is practical and policy-related, it can also inform important theoretical thinking and constructs developed by scholars and writers such as Gordon Allport (social contact theory), Milton Bennett (development of intercultural sensitivity), Robert Lifton (the Protean self), and Thomas Friedman ("the world is flat"). The implication of these theories, and the hypothesis of this research, is that study abroad should have significant impact on the reduction of ethnocentrism while enhancing cultural understanding, civic engagement, and global citizenship and consciousness.

The proposed research is based on tracer study methodology. Our population of interest will be alumni who in college had overseas study experience(s). We will stratify our intensity sample of colleges and universities using the following categories: (1) Doctoral degree granting institutions; (2) institutions granting up to the master's level; and (3) institutions offering only the bachelor's degree. Given the serious under-representation of groups such as African-American students in study abroad, we add a fourth important category, Historically Black Colleges and Universities (HBCUs). With a goal of studying the long-term impact of study abroad, we will begin with 1960 graduates, and then randomly sample groups of alumni every five years. Thus, we will have ten panels covering the years, 1960-2005. For each five year interval, our target will be a total of 200 alumni from the four basic categories (50 from each genre of higher education institutions). Individuals will be randomly selected from the study abroad alumni lists for the selected five year panels. Thus, our total target sample will be 2,000, providing for considerable statistical power and external validity.

Two types of factors may influence the near- and long-term impact of study abroad. The first are background demographic factors such as gender, ethnicity, and socioeconomic status. These also serve as important control variables in our study. The second set of factors includes those explanatory variables that are hypothesized to relate to professional and personal development, and social capital contributions. These explanatory variables include study abroad-related factors, and other control variables not related to study abroad. Following completion of a quantitative electronic survey, qualitative case studies of individuals will be completed to provide a more nuanced and deeper understanding of the nature of the study abroad experience and its impact.

P017A060058

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# THE SEALANG LAB: ASSISTIVE TECHNOLOGY FOR READING, WRITING, AND VOCABULARY ACQUISITION IN COMPLEX-SCRIPT LANGUAGES

Prepared learning resources for less commonly taught languages (LCTLs) are rarely sufficient. Nevertheless, broad reading of authentic texts usually helps mitigate the lack of ancillary study or reference materials – and even, for some self-directed students, of teachers or native speakers. But dozens of languages in Southeast, Central, and South Asia and the Middle East (including Arabic, Thai, and Urdu) require complex scripts. They use non-roman alphabets, non-linear ordering, context-dependent letterforms or ligatures, implicit vowels, tones, and registers, and may not even space between words. Students who turn to authentic materials are deadlocked: they must read extensively to acquire vocabulary, yet cannot until they already have vocabulary.

The SEAlang Lab takes a new approach to reading, writing, and vocabulary acquisition for complex-script LCTLs. Our goals are well-defined and achievable; we will build:

- Reader's Workbench: a free, online complex-script reading tool that increases reading speed and
  accuracy at all levels, using any text (such as Web-accessible newspapers). Besides integrating
  dictionary and corpus data, the Workbench provides word and phrase segmentation, automates phonetic
  transcription, highlights core-vocabulary coverage, evaluates text difficulty, and even finds appropriately
  graded texts for the student.
- Writer's Workbench: a free, online complex-script writing tool. The tool addresses both mechanical ability (using predictive completion from local script, phonetic transcription, or letter-by-letter transliteration), and syntactic / expressive competence (via integrated corpus and collocation reference tools).
- Vocabulary Workbench: a free, online data-driven drill and test tool. Using novel heuristics that draw on
  dictionary and corpus data, the Workbench dynamically generates review and reinforcement based on
  student queries, arbitrary texts, or required word lists. It can be coupled to the Reader's Workbench, or
  used standalone as a teacher's assistant.

The Workbenches are enabled by enriched lexical resources derived from the U.S. Department of Education and Center for Research in Computational Linguistics (CRCL)-sponsored SEAlang Library by extending the functionality of e-text corpora, and adding word origin, frequency, difficulty, collocation, usage, and core-wordlist data to existing dictionaries.

The SEAlang Lab proposal is submitted by the Center for Research in Computational Linguistics (CRCL Inc., a US 501(c)3 nonprofit agency). Its design has benefited greatly from wide, public demonstration of our preliminary development, most recently as the invited plenary speaker at the September 2005 Interagency Language Roundtable in Washington, D.C. All tools will be class-tested and improved in collaboration with the nation's best intensive language programs: the Foreign Service Institute, the Defense Language Institute, the University of Wisconsin-Madison's Center for Southeast Asian Studies and the Southeast Asian Studies Summer Institute.

Our working language is Thai. Unlike Arabic or Urdu, Thai has all of the characteristic complex script problems, including lack of word separation. Southeast Asia's strategic importance to the United States makes Thai very attractive as a cross-training source or target vis-à-vis Khmer, Burmese, and Lao, as well as Shan and other ethnic minority languages. Finally, despite its difficulty, Thai has sufficient existing resources and students for timely, cost-effective development and testing.

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## ADVANCED PROFICIENCY DEVELOPMENT IN CHINESE, JAPANESE AND KOREAN

We are requesting funding for a three-year longitudinal study of advanced proficiency development in Chinese, Japanese and Korean. We will focus on producing profiles of American learners who are successful in achieving advanced or better proficiency in these three languages. Our study will address the national need for "foreign language specialists with advanced levels of proficiency," in particular in "the 'investment' languages, such as Chinese, Japanese, Korean, Arabic and Farsi" (Lukach, 2005).

We will collect data from as many as 1,000 learners (300-400 Chinese, 400-500 Japanese, and 120-150 Korean) over a three-year period. We will assess learners' proficiency in both oral and written modes prior to and following study abroad. In order to address important issues relating to: (1) at-home proficiency development prior to time abroad; and (2) the importance of timing and length of study abroad immersion, we will include students with varying amounts of previous instruction in Chinese and Japanese and with differing lengths of stay abroad in our study.

Profiles of effective language learners will be created by analyzing a range of data on individuals' background and experiences (demographic information, questionnaire data, journal entries and interviews) and comparing this data with proficiency exam results. We will focus our proficiency analyses not only on test scores, but also on specific aspects of speech such as oral fluency and the use of culturally appropriate speech (speech adjusted according to setting, goals, roles and relationships, audience, etc.).

Contact information and results from individuals involved in this study will be placed in a database for use in continued longitudinal research after study abroad. We will be able to further explore proficiency development and language use by returnees using this database.

P017A060064

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### A DYNAMIC GRAMMAR TRAINER FOR RUSSIAN VERBS

We propose an instructional materials project which will enhance the teaching of Russian at the beginning and intermediate levels, and which offers a powerful solution to the structural limitations of existing Web-based exercises in all languages. With help from a Mellon Foundation Center for Educational Technology grant, we have completed a Web-based pilot application that tests student knowledge of Russian noun declension. The successful implementation of this pilot application leads us to the next logical stage of development—creating a module that allows users to practice exercises based on the complex Russian verb system.

What we propose is completely unknown in the field. Existing Web-based exercises are static and do not change with repeated use. Our solution to this problem is an application that generates its content in response to user specifications. The exercises are not stored in a static form, but change every time a user encounters them, thus making the application ever-relevant and useful to students, even with daily use.

Our project, by providing a free-access Web-based application, will particularly support efforts at teaching Russian at both the high school and University levels, and its availability will allow it to be used by any user who desires training in Russian grammatical structures. Our work also serves as a powerful model of a new way to construct Web-based language modules that is easily transferable to other languages.

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# GLOSSARI: THE GEORGIA LEARNING OUTCOMES OF STUDENTS STUDYING ABROAD RESEARCH INITIATIVE

To support a systematic initiative to document learning outcomes accruing from United States' student participation in study abroad. The Georgia Learning Outcomes of Students Studying Abroad Research Initiative (GLOSSARI) will develop significant new knowledge about international education programs that will contribute to the purposes of Title VI, Part A, of the Higher Education Act.

Proficiency in foreign languages, enhanced understanding of host cultures, more authentic area studies knowledge, and improved international expertise are among the learning outcomes that we associate with academic programs abroad. Yet we have limited empirical evidence about the impact of the study abroad experience on the learning process. The GLOSSARI project is intended to address concerns of multiple constituencies through a series of structured investigations that pose basic questions about the academic consequences of studies abroad. Because of the broad range of experiments, research instruments, and techniques that we will employ, our research methods are replicable in many different settings. We expect our findings to be tested rigorously by colleagues in the field. A substantial part of our evaluation plan envisions a coordinated, independent replication of research results to determine their validity across varied populations.

The GLOSSARI project is perhaps the most ambitious and comprehensive attempt to measure the impact of study abroad ever designed. The University System of Georgia is comprised of thirty-five public institutions and currently enrolls 253,000 students. Campuses range from small, rural two-year colleges to large, cosmopolitan doctoral research-intensive universities. They offer more than 325 study abroad programs.

The Board of Regents strategic plan calls for a major increase in study abroad participation—to 25 percent of undergraduate degrees awarded by 2007 (approximately 6,200 students). As part of its documentation for annual reports to the Regents, since 2002 the System Office of International Education has collected detailed information about each student (by name and identification number) and their study abroad experience (country of study, duration, etc.). This extensive data collection effort, now numbering nearly 5,000 individual records per year, provides a rich, self-standing resource for analysis of study abroad patterns and characteristics. It can also be linked to other System databases to extract additional data about study abroad participants. In addition to supporting analysis of student demographic data, an important function of this design is its ability to access preand post-participation academic performance measures and behaviors.

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### READING SUPPORT FOR ARABIC AND ISLAMIC STUDIES

Students learning Arabic or reading English texts about Islamic Culture are confronted with a dizzying set of references as well as quotations from religious texts and classical poems that are part of the vocabulary of even ordinary, and apparently, unrelated discourse, understood by native speakers but unintelligible to outsiders. This project develops and evaluates a reading environment, based on automatic linking within a digital library framework, that automatically provides lexical and/or encyclopedic background information adapted to individual users.

The work proposed here transfers digital library research to a pedagogical setting. Heavy and growing usage of a reading environment for Greco-Roman culture suggests that a similar set of tools may attract substantial use for Arabic and Islamic studies. This project goes beyond implementation, studying the impact of these technologies on two core groups of learners: Arabic language students moving beyond annotated texts and to real world Arabic, and students reading texts about Islamic culture, especially non-specialists from other disciplines.

We focus upon two broad areas. First, to what extent does this reading environment enhance existing practice? Can readers move more quickly through new text? Can readers begin working with culturally complex documents at an earlier stage? Second, to what extent does this reading environment change the goals of learners? Can they address more challenging topics? Do they make broader use of more complex source materials? We will examine three core user groups:

- 1) students enrolled in Arabic courses at Tufts University;
- 2) students working with Islamic cultural materials as part of courses taught as International Relations;
- 3) individuals making use of the reading environment online from outside Tufts. Instruments include reading comprehension tests for both Arabic and English texts on Islamic culture, field observations of practice, structured interviews with students, instructors and focus groups, and analysis of lookup patterns.

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### THE ESSENTIALS FOR ARABIC K-12 TEACHERS

The proposed project meets the critical need for familiarizing K-12 Arabic teachers with modern language teaching methodology. Furthermore, it meets the equally critical need to develop teacher educators who will prepare a cohort of highly qualified teachers for U.S. Arabic language classrooms and programs.

The proposed project will be carried out in two parts. The first part will be an Arabic language Web site that will parallel and add to a popular Web site for foreign language teachers, The Essentials of Language Teaching (www.nclrc.org/essentials), developed by the National Capital Language Resource Center. This Web site contains a series of modules that are aimed at encouraging best practices and professional development for language teachers. For this project, The Essentials will be translated into Arabic, and Arabic-specific additional pages will be added, including explanatory text and examples to help teachers. The purpose of the supplement is to focus on K-12 because The Essentials was primarily written for teachers in postsecondary situations. Additions to the modules will highlight specific issues that confront Arabic K-12 language teachers on a regular basis, such as multilevel classes, the problem of teaching Modern Standard Arabic vs. a dialect, and the need for developing proficient communicative competence to meet U.S. national needs. All these materials will be based on the recently completed Standards for Learning Arabic K-16 in the United States (in Standards for Foreign Language Learning in the 21<sup>st</sup> Century, American Council on the Teaching of Foreign Languages, in press).

The new standards-based Arabic materials will be augmented by video clips of excellent teaching in Arabic provided by the National Middle East Language Resource Center. These videos will demonstrate the innovative and effective teaching approaches described in 'The Essentials.' Teachers viewing the videos in conjunction with reading the modules will better understand and appreciate how to apply the material to their own practice, much as they would benefit from watching a master teacher. The Arabic version of The Essentials of Language Teaching will become a powerful tool for preparation of teachers.

The second part of the project is to develop curriculum materials for use in Arabic language teacher-education institutes and workshops. These materials will be a collection of relevant articles, lesson plans, curriculum resources, and descriptions of how to adapt existing materials, overheads, and PowerPoint presentations. The curriculum materials will be field-tested in summer workshops run by the National Capital Language Resource Center in Washington, D.C. The curriculum materials will in a form that can be easily updated, such as loose leaf binders for print delivery and CD-ROM for electronic delivery.

Dissemination is a crucial component of this project. It will be based on the success of the K-12 Arabic Language Teachers Network, which has received an overwhelming number of requests for teacher education resources and information about pedagogy since its inception. Providing Arabic K-12 language teachers with high-quality professional teacher preparation will allow them to become a visible and respected group in the foreign language teaching and learning world. The Arabic K-12 Teacher's Network will use its Web site and numerous collaborative partners to inform teachers and program directors about the Arabic K-12 Teacher Materials project, encourage their participation, and solicit their input.

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## PATHWAYS TO BILINGUALISM: E-LEARNING AND THE TEACHING OF MODERN FOREIGN LANGUAGES

Goals: Fiscal Year 2006 Code of Federal Domestic Assistance (CFDA) Invitational Priority 2: Research, surveys, studies or the development of instructional materials that serve to enhance international understanding for use at the elementary and secondary education levels, or for use in teacher education programs.

Expected Outcomes and Contributions: E-learning refers to learning that takes place using a network for the delivery, interaction, or facilitation of learning. This network could be on the Internet or an organizational Intranet. Current research on e-learning has been primarily limited to distance education (cf. Waterhouse, 2005) and no research to date has examined its impact as a blended language pedagogy, that is, as a combination of multimedia e-learning environments and face-to-face interaction. In our three year research program, we aim to establish an evidence-based research to assess the effectiveness of this blended nature of the e-learning pedagogy in teaching modern foreign languages in early bilingual education. This e-learning pedagogy will complement the knowledge of the bilingual teacher and create a culturally and linguistically authentic language learning environment. This aspect of e-learning is especially important for students living in contexts that lack authentic materials and contact with the target language and culture.

The Sample Population: This research will involve approximately 10,500 students, 500 teachers, and 40 principals and vice principals in 20 bilingual elementary schools in Shanghai, China. The ages of the Chinese students will be 10-12.

Research Methods: This study will use a mixed methods design that consists of quantitative and qualitative study of the effects of E-learning Across the Curriculum (EATC) on bilingual Chinese/English education in grades four-six classrooms in Shanghai, China. Quantitative methods will focus on a survey study of how e-learning is used and perceived in bilingual Chinese/English elementary schools, a two-year experimental study of the EATC intervention using a randomized pre-and post-test control group design. Outcome measures will be students' performance in Chinese and English literacy skills. Quantitative data will be analyzed using descriptive statistics, Analysis of Covariance (ANCOVA), and multiple regression analysis. Qualitative methods will be used throughout the research to conduct needs assessment and to design, implement, and observe the intervention, and will consist of video- and audio-taped classroom observations, interviews, group discussions, participant observations, teacher logs, lesson plans, student writing samples, and formative assessment. Qualitative data will be analyzed using content and thematic analysis.

The Proposed Intervention: The proposed EATC intervention will include six bilingual e-learning modules for students and ten e-learning instructional modules for bilingual teachers. Using appropriate software such as Fabula that was funded and tested by the European Union Multimedia Software program, the project will create content modules in social studies and children literature within an interactive multimedia environment in English and Chinese. The modules emphasize the nature of a blended language pedagogy that combines the use of technology (e.g., Internet and Intranet), the methodology of bilingual education, and the face-to-face learning environment.

### 12/08/06