

SUMMARY OF UW SYSTEM PRIORITIES FOR FY 2007

Academic Advanced Distributed Learning Co-Laboratory

- The Department of Defense's Advanced Distributed Learning (ADL) program is designed to provide "just in time" education and training in the field or anywhere in the world service men and women are deployed through the use of distributed technology. ADL offers interoperable, reusable learning content, learning management systems, and technology tools that dramatically reduce the cost of providing training and facilitate the rapid creation and deployment of networked training.

In 2000, the Academic ADL Co-Lab at the University of Wisconsin System was tasked with acquainting the higher education community with the ADL technology standards initiatives, applying learning sciences research to distributed learning, and piloting and prototyping next-generation learning technologies that would prove useful to the Department of Defense, as well as to higher education, with the goal of improving the quality of anytime, anywhere learning and training.

The Academic ADL Co-Lab has established the nation's pre-eminent science of learning faculty devoted to research and development of games for learning, called GAPPS (Games and Professional Practice Simulation). It has produced training content used by the Department of Defense to combat Trafficking in Persons, the third largest criminal activity in the world. An effort currently underway is the installation of a National Guard classroom to train National Guardsmen. Some of the training will include the use of ADL distributed technology.

UW System seeks competitive funding to continue the ADL program mission.

The Collaborative Language Program: Expansion, Community and Community Building

- The University of Wisconsin System Collaborative Language Program (CLP) has helped create globally and culturally literate students since 1999. CLP is teaching less commonly taught languages throughout Wisconsin using a hybrid approach of videoconferencing and web-based course management systems. Instruction has focused on Chinese, Japanese, Russian, Portuguese and Arabic. Twelve UW System campuses participate in the language program and, now, with an urgent call in the area of Arabic studies, the demand is not being met. Funding is being sought to expand in three areas: additional courses in Arabic, use of technology to increase oral proficiency, and programming to enhance cultural understanding.

International Center for Enterprise Studies

- The Center for Entrepreneurship at J.J. Strossmayer University in Osijek was established as the only such program in the Balkan region of Eastern Europe. The Center's graduate program in entrepreneurship has attracted over 250 students from all parts of the former Yugoslavia. The University of Wisconsin institutions enjoy a long and continuing history with the Center as its founding partner. Funds will be used to expand the program and provide teaching, technical, curriculum and research expertise, as well as an expanded faculty exchange and new student exchange.

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REQUEST FOR FUNDS:
ACADEMIC ADVANCED DISTRIBUTED LEARNING CO-LABORATORY

ORGANIZATION: In 1999, the U.S. Department of Defense created the Advanced Distributed Learning (ADL) Initiative to lower the cost and improve the quality of anytime, anywhere learning to modernize military education, training and performance support. It accomplishes this through the adoption of interoperable standards-based versions of reusable learning content, learning management systems, and technology tools that dramatically reduce development costs and facilitate the rapid creation and deployment of networked training in the field and anywhere in the world service men and women are deployed.

Since 1999, it has become universally recognized that the ADL Initiative's technology standards and applications are germane not only to the Department of Defense, but also to other government agencies, educational institutions, and private-sector training organizations. What began with the military, quickly evolved into a cooperative effort between the public and private sectors that resulted in the development and sharing of common technology standards so that exemplary training and learning content can be easily discovered, adapted, and used by government agencies, educational institutions and private sector training.

As part of the ADL Initiative, the Department of Defense established the Advanced Distributed Learning Co-Laboratory (called a "co-laboratory," because it operates collaboratively across organizational boundaries to coordinate and lead the systematic development and refinement of the future learning environment), in Alexandria, Virginia. It develops technology standards in the network-based learning industry and tests and certifies digital learning tools, content created by training and learning experts, and learning management systems. The Alexandria Co-Lab is owned and operated by the Department of Defense.

A second Co-Lab was created in 1999 in Orlando, Florida, called the Joint ADL Co-Lab, to promote collaboration and rapid deployment of ADL prototypes and system acquisitions among the Department of Defense's service branches. The Joint Co-Lab is owned and operated by the Department of Defense.

The DoD soon recognized the need to tap the enormous resources of higher education and, in January 2000, authorized the establishment of the Academic Advanced Distributed Learning Co-Lab, in Madison, Wisconsin, with the University of Wisconsin and the Wisconsin Technical College Systems. The Co-Lab was tasked with acquainting the higher education community with ADL technology standards initiatives, applying learning sciences research to distributed learning, and piloting and prototyping next-generation learning technologies that would prove useful to the Department of Defense, and to higher education, in improving the quality of anytime, anywhere learning.

The Academic ADL Co-Lab, in time, formed partnership agreements with 15 multi-institutional systems and associates and 54 individual higher education institutions in the United States, Europe, Australia, and North and South Americas. These agreements are designed to promote the ADL concepts, technology, and mission.

The Academic ADL Co-Lab has become integral to the DoD's ADL Initiative, collaborating in the development, testing, and revision of the SCORM (Shareable Content Object Reference Model) specifications, now used by many private sector learning management companies to enable reuse of learning content. The Academic ADL Co-Lab's collaboration in the development of CORDRA (Content Object Repository Discovery and Registration/Resolution Architecture), a standards-based registry of learning object repositories, enables trainers and teachers to find and reuse high-quality content that would otherwise be inaccessible. In addition, the Co-Lab's work on a host of technology tools makes it easier for educators to utilize the standards and specifications – to even retrofit courses and content to conform to the standards. (The Academic ADL Co-Lab hosts the Wisconsin Testing Organization, which certifies SCORM conformance in learning managements systems and content.)

Further, the Academic ADL Co-Lab has established the nation's pre-eminent science of learning faculty devoted to research and development of games for learning, The Games and Professional Practice Simulation or GAPPS initiative. The Academic ADL Co-Lab has produced outstanding training content, under contract, for use by the DoD in its fight against Trafficking in Persons.

In 2003, the DoD authorized the Workforce ADL Co-Lab, headquartered in Memphis, Tennessee, to focus on ADL implementation in industry. In addition, there are two ADL Partnership Labs (United Kingdom and Canada) and two ADL Centers (Job Performance Center in Alexandria, Virginia and Technology Center at Johnstown, Pennsylvania).

DESCRIPTION: The Academic ADL Co-Lab and the Workforce ADL Co-Lab have carried the ADL Initiative mission into higher education and workplace training – to apply learning sciences research to distributed learning and to pilot and prototype standards-based technologies on mobile offices, in games, and in online courses

However, despite many successes, neither the Academic ADL Co-Lab nor the Workforce ADL Co-Lab has sustainable, ongoing funding, such as the Department of Defense funds provided to the ADL Co-Lab and the Joint Co-Lab, or Defense Appropriations funding annually allocated to the ADL Technology Center.

While the DoD ADL program office supports continued collaboration with these two Co-Labs, the DoD is unlikely to budget for them. Without a source of sustainable, ongoing funding, the Co-Labs are instead dependent upon the often erratic and unsustainable piecing together of grants, contracts, and local funding to carry out the Initiative. (The Academic ADL Co-Lab accepts smaller grants from public and private sources to carry out applied research on the effectiveness, cost, and quality of standards-based distributed learning.)

While the ADL Co-Labs are willing to compete for larger grants, there are few such grant competitions available which relate to their advanced research and provide the opportunity to leverage the higher education research community and other

partners' resources to use ADL technology infrastructure to create and test ADL in K-postsecondary education and in the workplace.

To continue these efforts, **the Academic ADL Co-Lab is seeking a \$5 million annual grant competition** under the DoD research, Development, Test and Evaluation (RDT&E) Defense-Wide account. *The work done directly benefits the Department of Defense. Applied research on reusable learning materials is of value for military training, including many of the senior staff colleges, such as the Naval Post Graduate School, Defense Acquisition University, and the University of Mounted Warfare (current partners with the Academic ADL Co-Lab). The funding could be used to establish a structured research agency on outcomes to games for learning, an emerging area of great promise for Joint Services training.*

NOTE: The standards-based interoperable technology would also be useful to non-military personnel – First Responders, HAZ-MAT crews, CDC and FEMA workers, and others – in national and regional emergencies!

The funding could be used to establish content repositories and registries, to teach faculty about online course quality with advanced distributed learning techniques, to explore game use in alternative learning environments for students with poor learning outcomes from traditional methods, to experiment with rapid development and deployment of high-quality distributed learning, and to develop high quality learning for hand-held (mobile) devices.

- TIMELINE:** Ongoing.
- CONTACT:** Ed Meachen, UW System; 608.265-4622 or
Judy Brown, Executive Director, Academic ADL Co-Lab; 608.263-9270
- PAST FUNDING:** In FY03, the Academic ADL Co-Lab received a federal appropriation of \$1 million. The funding provided critical infrastructure support. The Co-Lab is also the recipient of several public and private sector grants. It has won federal competitive awards from the Fund for the Improvement of Postsecondary Education, National Science Foundation, Department of Commerce Technology Opportunities Program, Hewlett, Spencer and Sloan Foundations.
- BUDGET:** *This is to request that funds be authorized and appropriated for a competitive grant program to enable broad government, industry, and academia partnerships to advance the adoption, development and further exploration of ADL initiatives, including distributed learning standards and specifications, repositories and registries of digital learning content, improved job performance and learning outcomes, rapid deployment of quality distributed learning, mobile learning, and games for learning. The program would be funded at \$5 million in FY2007 under the Department of Defense, Research, Development, Test and Evaluation, Defense-Wide (RDT&E) account. The fund would be administered through the Office of Readiness and Training at the U.S. Department of Defense.*
- SIGNIFICANCE:** The Department of Defense Advanced Distributed Learning (ADL) Initiative is designed to provide “just in time” education and training in the field or anywhere in the world service men and women are deployed through the use of information technology.

The Academic ADL Co-Lab at the University of Wisconsin System was tasked with acquainting the higher education community with the ADL technology standards initiatives, applying learning sciences research to distributed learning, and piloting and prototyping next-generation learning technologies that would prove useful to the DoD, as well as to higher education, with the goal of improving the quality of anytime, anywhere learning and training.

To promote adoption of the technology framework, it is necessary that government, academic, and industry work in partnership to fully utilize what has been so painstakingly developed in the past 7 years.

CONTACTS WITH
CONGRESS:

All members of the Wisconsin Congressional Delegation have been contacted and kept apprised of the activities of the Academic ADL Co-Lab. Members of the delegation and several staff have visited and toured the Co-Lab.

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REQUEST FOR FUNDS:
STATE-WIDE COLLABORATIVE ARABIC LANGUAGE INSTRUCTION

ORGANIZATION: The University of Wisconsin System Collaborative Language Program (CLP) has helped create globally and culturally literate students since 1999. CLP is teaching less commonly taught languages throughout Wisconsin using a hybrid approach of videoconferencing and web-based course management systems. CLP provides critical language instruction on campuses otherwise unable to support these offerings. UW Faculty teach students in a traditional classroom setting that has been modified for interactive two-way videoconferencing (ITV). This allows the language class to be broadcast to a remote classroom. Because ITV is used, students in both classrooms can interact in real-time with each other and the instructor. Native speaking facilitators also aid students in the remote classroom. The use of facilitators helps ensure the success of our program on receiving campuses. More recently, web-based course management systems have been added increasing student written communication between campuses and with outside experts.

When the CLP was started, it first focused instruction on Chinese, Japanese, and Russian. Using these languages, an instructional model for effective language learning in a distance environment was developed. Over time, Portuguese and Arabic were added to the CLP offerings. Students in our program are acquiring the skills required in the global economy through language and cultural knowledge that, prior to the CLP, was not available on their campuses.

DESCRIPTION: Over the last five years, CLP has relied upon grant funding from the UW System and its campuses to provide more diverse language learning opportunities to students throughout the state. The current level of grant funding allows our courses to meet the needs of students of Business, International Studies, International Agriculture and a number of other degree programs.

With additional grant funding CLP will be able to expand in three areas:

1. Hire an additional Arabic instructor to allow for a comprehensive four semester program in Arabic on a total of six UW campuses, thus doubling our current offerings in Arabic. There is now an even more urgent call in the area of Arabic studies for national security interests and to help build stronger economic ties with the Middle East. CLP 's expanded Arabic offerings will reach a greater number of Wisconsin's students.
2. Implement Voice over Internet Protocol (VoIP) desktop technology for additional small group and pair work. Because of the complexity of the languages that the CLP offers, students require much more time in the target language to attain the same level of oral proficiency as other more commonly taught languages. By increasing student oral practice opportunities, oral proficiency increases and a stronger community of learners is built. This technology also allows experts in the field to participate with students as they explore the target language and culture.

3. Work with experts in the field for all languages taught by CLP to provide varied cultural programming. This programming will be broadcast to several campuses and will provide students with a better understanding of the target culture. This knowledge is essential to prepare students to know how to appropriately communicate in a global workplace.

TIMELINE:

Phase	Time Frame	Activity
Planning	Fall – Winter 2007-08	Arabic instructor hired, technology installations, experts contacted for cultural event planning
Implementation	Spring 2008 – Fall 2008	Additional Arabic courses, students use VoIP technology, cultural events broadcast
Outcomes	Spring-Summer 2008	Enrollment data, course surveys & proficiency data studied for comparison to courses prior to implementation of new technologies & cultural activities.

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PAST FUNDING: To date this program has been funded by the UW System and internal granting programs.

BUDGET:	Total Costs in FY 2007:	<u>\$163,750</u>
	3 Arabic Instructors:	\$65,000
	6 Receive site facilitators:	20,250
	Instructors/facilitators Travel & Training	3,500
	Additional videoconferencing equipment:	20,000
	Voice over IP Software & Support:	35,000
	Cultural Programming:	20,000
	Funds from Other Sources in FY 2007: <u>\$104,000</u>	
	UW-System:	\$100,000
	Voice over IP Software & Support:	4,000
	<u>Federal Funding Requested in FY 2007:</u>	<u>\$163,750</u>

SIGNIFICANCE: Numerous media sources have recently cited U.S. intelligence and defense agencies as remaining critically short of Arabic speakers. As a result, these agencies face a much tougher challenge in the reconstruction of Iraq. With funding, CLP will address these concerns. It is not enough to just speak another language--one must also have an understanding of its people and culture in order to effectively communicate with them. Combining the current instructional model of the CLP with additional courses in Arabic, technologies to increase oral proficiency and cultural events will substantially increase student competency in the target language and culture. These improvements will be demonstrated through oral proficiency tests that measure how well students are able to communicate in a variety of situations. This collaborative effort throughout the University of Wisconsin System will meet the needs of numerous Wisconsin

corporations, federal government agencies and business leaders working in the Middle East and other nations where these critical languages are spoken.

CONTACTS WITH
CONGRESS:

Congressmen Mark Green and Tom Petri, and Senator Herb Kohl have been contacted regarding this project.

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REQUEST FOR FUNDS:
INTERNATIONAL CENTER FOR ENTREPRENEURIAL STUDIES
A PARTNERSHIP WITH
J.J. STROSSMAYER UNIVERSITY, OSIJEK, CROATIA

ORGANIZATION: The Center for Entrepreneurship at J.J. Strossmayer University in Osijek was established in 2000 as the only such program in the Balkan region of Eastern Europe. Since that time, the Center's graduate program in entrepreneurship has attracted over 250 students from all parts of the former Yugoslavia. The University of Wisconsin enjoys a long and continuing history with the Center as its founding partner.

The University of Wisconsin draws from the breadth of its resources – including the Wisconsin Innovation Service Center (WISC) at UW-Whitewater and faculty members from various departments – in support of the Center for Entrepreneurship.

DESCRIPTION: Supported by its advisory board consisting of representatives from several American universities – led by the University of Wisconsin – the Center seeks support to grow into an autonomous International Center for Entrepreneurial Studies (ICES). The University will provide teaching, technical, curriculum and research expertise, as well as an expanded faculty exchange and new student exchange.

The newly-expanded ICES will provide convenient and affordable distance-learning courses to students throughout the Balkans, as well as condensed programs for existing entrepreneurs. Outside the classroom, the Center will mentor nascent business in its Business Incubator. It will sponsor youth Business Plan competitions, Entrepreneurship Clubs in schools, and the development of an alumni association.

The Wisconsin Innovation Service Center at the University of Wisconsin-Whitewater will use its significant expertise in innovation assessment and new product development to support a focus on the creation of high impact, economic growth businesses. WISC's mission is to help aspiring entrepreneurs, innovative manufacturers and independent inventors make profitable new product and market decisions. WISC has conducted over 6500 research projects, including exploratory new product assessments, licensing partner searches, competitor intelligence reports, distributor assessments, and customer satisfaction analyses, for both new ventures and established companies. Manufacturers continue to be an important part of WISC's client base, representing over half of the existing businesses clients served. WISC staff has provided training on early-stage assessments to a national audience.

In the short term, the Center hopes to see increased student enrollment, especially among disadvantaged students, and greater visibility of ICES's graduates as

entrepreneurial leaders throughout the region. In the long term, the ICES hopes to grow into a premiere European Small and Medium Enterprise education resource, having measurable effects on regional unemployment and social reconciliation.

TIMELINE: ICES is requesting funding for Fiscal Year 2007. Startup Phase: January – March. Implementation Phase: April – November. Outcomes: December – January 2008.

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PAST FUNDING: The Center for Entrepreneurship has received the majority of its funding from private foundations.

BUDGET: Costs in FY 2007:

Operational Costs:	\$ 500,000
Development Costs:	\$1,350,000
<i>(undergraduate program, executive program, doctoral program, entrepreneurship resource library, technology, and entrepreneurship clubs)</i>	

<u>Total Costs in FY 2007</u>	<u>\$1,850,000</u>
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Funds from Other Sources in FY 2007:

Fees:	\$150,000
Government of Croatia:	\$350,000
EU – Tempus	\$500,000
Private Support:	\$100,000

<u>Total from Other Sources:</u>	<u>\$1,100,000</u>
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<u>Federal Funding Requested in FY 2007</u>	<u>\$750,000</u>
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SIGNIFICANCE: The Western Balkan region continues to face enormous socio-economic and political challenges as a result of the 1991-1995 war that destroyed the regional business infrastructure. Unemployment is rampant, the small and medium enterprise (SME) sector is slow to recover and the process of national reconciliation has stalled. International surveys, such as those by the World Economic Forum and the Global Entrepreneurship Monitor, identify low competitiveness, lack of innovation and the absence of an entrepreneurial culture as the most significant obstacles to regional growth. The University of Wisconsin has been at the forefront of the Center for Entrepreneurship's efforts to help alleviate these problems, providing a model for the Center to follow in the development of its graduate entrepreneurship program and its small business outreach program. As noted

earlier, this initiative will also integrate the unique strengths of the WISC at UW-Whitewater, recognized as a national model for innovation assessment programs. This relationship has benefited the University of Wisconsin as well, allowing greater cultural understanding through faculty exchange, as well as new and more varied curriculum development and research tools. The University of Wisconsin seeks to expand this relationship for the benefit of both institutions.

CONTACTS WITH
CONGRESS:

No Member of Congress has been contacted to date regarding this initiative.