DOT-EDU

Quarterly Report

October - December 2001

Digital Opportunities through Technology for Educating the Disadvantaged and Underserved

Associate Cooperative Agreement with EDC and partners, under the
G/EGAT/EIT Leader with Associates LWA Award 3: Learning Systems Activities
Award No. GDG-A-00-01-00011-00

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dot-EDU Quarterly Report
October – December, 2001

Executive Summary

This is the first quarterly report of dot-EDU project activities, covering the period October-December 2001. This was the start-up period for this 5-year project. It was therefore characterized by:

- presentations to and meetings with USAID – Washington Headquarters and Regional Bureau staff;
- presentations to and meetings with representatives of the dot-EDU partner organizations;
- meetings with the key staff of dot-GOV and dot-ORG, the other two awards that make up the DOT-COM triumvirate;
- planning and developing promotional and marketing strategies and media / materials;
- planning and developing a project management / information system.

In addition to these basic start-up activities, work commenced on the detailed planning of several project proposals for specific USAID Missions. These include:

- Mali - a University-to-University technical support and training project for the University of Mali. This will involve Michigan State University and Howard University as key partners, together with some input from several other partner institutions;
- Guatemala - an extension and expansion of work already initiated under the previous, USAID sponsored, LearnLink project. This focuses on the equipping of local telecenters and training of local teachers to develop IT based learning systems and materials for the teaching of Mayan language and culture in the schools;
- Rwanda - assistance in the implementation of IT solutions for teacher education. At the close of the first quarter, this project proposal was in the early stages of development. A visit to Rwanda by USAID and dot-EDU staff was being planned in order to better identify the needs and plan an appropriate response;
- Namibia – a Learnlink project extension / expansion, similar to the one being planned for Guatemala. A visit to Namibia is planned to take place at the same time as the Rwanda visit;
- Pakistan – a joint proposal with the other DOT-COM awardees in response to a USAID request for a solution to some of the critical problems currently faced by Pakistan's educational system.

Initial contacts have been made with USAID Missions in many other countries. Some of these were initiated by USAID Washington staff, through the circulation of email announcements of the awards to all the Missions and the placing of information about the awards and their goals on the USAID website. Others were instigated directly by dot-EDU staff reviving previous contacts with Mission directors or key staff members. At the end of the quarter, these contacts had resulted in promising initial discussions with about

a dozen countries, in addition to those mentioned above. These include: Bolivia, Brazil, El Salvador, Ghana, Haiti, Malawi, Peru, Senegal, South Africa, Uganda and Viet Nam.

It is expected that some of these initial discussions will develop to the project planning phase during the next quarter. The report concludes with recommendations on how this planning activity may be implemented in order to maximize long term returns on the overall dot-EDU initiative.

1. The DOT-COM Vision

"Digital Opportunity through Technology and Communication" (DOT-COM) is an alliance of three cooperative agreements to promote information and communication technology for development. The DOT-COM program provides USAID access to fifteen grantee institutions and over 75 resource partners who work on ICT-for-development issues. Building on the strategies of the African Leland initiative and the worldwide Internet for Economic Development Initiative, DOT-COM provides USAID missions with a broad set of tools to participate in a global effort to bridge the digital divide

DOT-COM builds on the principles of USAID's Leland Initiative in Africa, the U.S. Internet for Economic Development Initiative (IED), and the Digital Opportunity Task Force (DOT Force) of the G8 to foster an appropriate policy and regulatory environment, extend information and communication technology (ICT) access to the under-served, and promote ICT applications across sectors, particularly for the participation of women. Gender equity and collaboration with private sector ICT firms are emphasized throughout DOT-COM. The Global Bureau Center for Human Capacity Development (G/HCD) and the Office of Women in Development (G/WID) fund the core DOT-COM awards.

DOT-COM activities cross all sectors, including education, economic growth, women in development, agriculture, trade, health, environment, and telecommunications/e-commerce policy. The three DOT-COM cooperative agreements provide expertise and services in policy, access, and learning systems. The following paragraphs summarize the principal focus of each of the three awards. Further general information may be found on the USAID website (www.usaid.gov) and also in Appendix 1 of this report.

dot-GOV – The DOT-COM program for telecommunications and e-commerce policy and regulatory reform. Examples include assessments and workshops on the telecommunications and e-commerce policy environment; assessments of gender equity within the information and ICT sector; assistance to governments preparing telecom legislation or in strengthening the regulatory authority; and assistance in developing policies and regulation to promote ICT access for the under-served.

dot-ORG – The DOT-COM program for extending ICT access to the under-served. Examples include assessments and pilot activities for Missions on how to incorporate ICT in their programs in education, democracy & governance, environment, health, and economic growth; systems of community ICT access; assistance in using ICT for crisis

intervention, distance training, environmental surveillance, and telemedicine; and solutions for off-grid and wireless access. Gender equity is a priority throughout.

dot-EDU – The DOT-COM program for ICT in learning systems. Examples include Internet/ICT and multi-media CD-ROM technology use to increase the reach and quality of programs in basic education, teacher training, workforce development, and higher education; and applications of Internet/ICT for learning systems in countries suffering the effects of civil unrest, natural disasters, or HIV/AIDS.

2. The DOT-EDU Activity

2.1. Purpose and Objectives

The goal of dot-EDU (as stated in the EDC proposal – see Appendix 2) is to assist developing countries in strengthening learning systems to improve quality, expand access, or enhance equity through carefully planned applications of digital and broadcasting technologies. The purpose is:

- To provide training and technical assistance to support USAID Missions in developing and implementing technology-assisted applications related to learning systems consistent with their strategic objectives and results frameworks;
- To conduct pilot projects and prepare knowledge products using available core resources, matched by our own resources and other outside funds. These activities will result in improved understanding, strategic planning, and implementation of technology-assisted educational applications in developing countries.

Through these activities, dot-EDU hopes to reach the following results:

- Improved quality, demonstrated through increased learning outcomes across gender;
- Improved teacher development, demonstrated through numbers of teachers trained and evaluations of classroom performance;
- Improved efficiency of learning systems, demonstrated by better planning and implementation;
- Increased participation by communities, women and girls, the disabled and others traditionally isolated from educational resources and learning; and
- Improved evaluation and monitoring systems, demonstrated by data and knowledge learned.

Under the dot-EDU cooperative agreement, EDC and its partners establish learning systems pilots and applications, with gender equity as a priority throughout, that include:

- using Internet/ICT to increase the reach and quality of programs in basic education, teacher training, workforce development, and higher education;
- developing centers of excellence for the production of interactive, multi-media instructional materials in national and indigenous languages;

- applications of Internet/ICT for learning systems in countries suffering the effects of civil unrest, natural disasters, and HIV/AIDS;
- developing distance learning programs using multi-media and CD-ROM technology; and
- establishing and enhancing networks of school-to-school programs to stimulate teacher and student use of CD-ROM and Internet technology for learning.

In order to achieve these results, dot-EDU has formed a consortium, or alliance, of some of the best technical resources available in U.S.-based educational technology and in the application of technology for learning. EDC, the prime awardee, has been a leader in the USA and internationally in pioneering the application of older and newer technologies, focusing on their role within broader learning systems. EDC is complemented by a partnership that includes at its core the Academy for Educational Development, the Concord Consortium, and three universities which have been active internationally in applying technologies to education: Howard University, Michigan State University and Prince George's County Community College, who themselves bring a large network of other universities with them. Also at the core are four private sector organizations: IBM, Intel, Sun Microsystems and ThinkQuest. In addition, over 30 resource institutions complement the expertise of the core partners with their project experience in specific areas of technology applied to education and training. The list of resource partners includes: M.I.T.'s Media Lab; I.L.I.; World Education; WorldLinks; Classroom Connects; the Council For Basic Education; I*EARN; EarthWalk Communications; the World Computer Exchange; Real World Productions; Media Bridge; World As a Classroom; the University of Pittsburgh; WorldSpace Foundation; INCRE; Omar Dengo Foundation; CPAL; SchoolNet/Namibia; INNOTECH; NIIT; IREX; and PREL.

The following section summarizes the expertise and resources that have been pulled together under the umbrella of dot-EDU.

2.2. The dot-EDU Team

2.2.1. The Prime Awardee

Education Development Center (EDC).
The Education Development Center, Inc. (EDC) is one of America's leading research and development organizations in the use of information and communications technologies (ICT) to achieve development objectives. EDC has worked domestically and internationally on improving education systems, much of the time incorporating technology into its strategies. Internationally, EDC has, among many other projects, implemented the Radio Science Project in Papua New Guinea, helped Malawi design an instructional radio program and managed Radio Learning Projects throughout the world. Internationally, EDC has embedded technology-based delivery systems for teacher training into larger national basic education projects, such as the FQEL project in Guinea. EDC has used technology to promote greater opportunities for women and girls to learn,

has developed strategies that make it easier in classroom settings for girls to participate in learning, and evaluated technologies based on the learning outcomes and changed attitudes they produce among girls

2.2.2. Core Partners

Academy for Educational Development (AED)
The Academy for Educational Development (AED) is a private, nonprofit service organization with 40 years of experience in development assistance. AED has been designing applied IT projects throughout the world through LearnLink, a USAID-funded project. LearnLink has, for example, been supporting the Ministry of Education in Brazil in its efforts to integrate technologies into the education system through a unique online collaboration known as the Learning Technologies Network (LTNet). In Namibia, Learnlink has four operational teacher-training centers. Using IT tools to improve the knowledge and teaching of Mayan languages, LearnLink is preparing future teachers in the Quiché region of Guatemala to teach in the local languages. In Uganda, LearnLink has digitized the text version of the six subjects and this material is currently being integrated into the curriculum. All of these efforts and others conducted under LearnLink are demonstrating the possibilities, as well as the limitations, of these learning systems, sometimes in very challenging environments

Concord Consortium

The Consortium's expertise is in online teacher professional development and the online preparation of teachers and facilitators who offer online courses. The Consortium can help a university or ministry of education anywhere create their own online teacher professional development program, or can facilitate situations where expertise in a capital city is made available throughout a country.

Howard University
Howard University has for many years had close working relationships with countries throughout Africa and the Caribbean, and in the past four years has conducted 17 USAID or Africa-related projects for a total amount of approximately $2M.

Michigan State University
MSU is engaged in many projects to enhance connectivity, facilitate networking, and share information through the WWW. For the past five years, the African Studies Center and MATRIX: The Center for the Humane Arts, Letters, and Social Sciences have spearheaded the African Internet Connectivity Project with activities throughout sub-Saharan Africa.

Prince George's Community College
Prince George's Community College has created and implemented innovative distance education programs for underprivileged institutions in Africa and Europe and has designed a successful distance education program for its own faculty, which could easily be adapted to an international setting.

2.2.3. Private Sector Partners

IBM

IBM has worked with EDC over the last five years on the Reinventing Education Grant Partnerships, which works with school partners throughout the world to develop and implement innovative technology solutions that can spur and support fundamental school restructuring.

Intel

The Intel® Teach to the Future program is a worldwide initiative to help teachers effectively integrate the use of computer technology into classroom curriculum to improve student learning and achievement; the program has been successfully implemented in countries.

Sun Microsystems

Sun Microsystems is a leading provider of open network computing solutions to schools and colleges around the world, powering academic research and high performance computing systems, campus administration, digital libraries and student instruction systems.

Advanced Network & Services (ThinkQuest)

Advanced Network & Services has designed, launched and deployed one of the world's leading online learning programs for elementary and high school students and teachers through the ThinkQuest website and the ThinkQuest Internet Challenge.

2.2.4. Resource Institutions

Centro Peruano de Audicion, Lenguaje y Aprendizaje (CPAL)

CPAL is a private, non-profit institution devoted to the education, treatment and rehabilitation of children, adolescents and adults who suffer from difficulties in audition, language and learning. CPAL is a Center of Competence for the IBM Latin America Early Learning Program and trains teachers from Peru, Argentina, Paraguay, Uruguay, Venezuela, and Mexico.

Council for Basic Education

The Council for Basic Education (CBE), develops and establishes programs that support teachers, administrators and policymakers to reform and improve the quality of education offered in their countries, states, and districts.

EarthWalk Communications

EarthWalk is a premier provider of technology software and services integrating mobile wireless computing to Web-enable the classroom. EarthWalk's state-of-the-art distance

learning and communications platform can be used as a bridge to enable teachers and schools to communicate via chat, email, and telephone.

I*Earn

I*Earn focuses on developing action-oriented global partnerships between educators and students that lead to enhanced learning, improved exchange and training programs, tangible products, and meaningful community service activities. I*EARN's unique Internet-based content now serves 400,000 educators and students in nearly 100 countries with 80 ongoing collaborative projects in 29 languages.

International Literacy Institute

ILI provides scientific leadership in training and development in basic education and literacy for children, youth and adults, with a special emphasis on developing countries. ILI, with funding from USAID, created the University Development Linkages Program which linked ILI/PENN with Nigeria, South Africa, Botswana, and Tunisia

INCRE

INCRE has established experience and expertise in several areas of Learning Systems Activities, including 1) teacher training; 2) curriculum development; and 3) installation of IT networks and management information systems. INCRE has conducted thousands of hours of training in the educational uses of computers, the integration of computers in different subject areas (K-university), and educational uses of the Internet.

INNOTECH

The Southeast Asian Ministers of Education Organization's Regional Center for Educational Innovation and Technology (INNOTECH), located in the Philippines, is dedicated to using technology to improve basic education, teacher education and training, and empowering learning communities.

Instituto Technico y de Estudios Superiores de Monterrey

The Monterrey Institute of Technology is the largest private university in Latin America. The Virtual University, one of ITESM's innovative higher education programs, helps students worldwide to generate knowledge and develop skills.

IREX

The International Research & Exchanges Board (IREX) builds human networks by facilitating communication between researchers and professionals in the US and the countries of Central and Eastern Europe, the Baltics, the NIS, Asia, and the Near East.

Media Bridge

Media Bridge is a small, minority-owned production company in Washington D.C. It has worked on many Discovery Channel television programs.

MIT Media Lab

The MIT Media Lab has a long tradition of developing technologies for learning and community development. Media Lab researchers have developed educational

technologies used by millions of people (especially children) around the world, and have implemented pilot projects in diverse geographical, economic, and cultural settings.

NIIT
NIIT is a global leader in technology-based training solutions, with extensive experience in providing courseware management softwares, support services, systems integration, and online multimedia courseware development services.

Omar Dengo Foundation
The Omar Dengo Foundation has experience in education, technology and development projects. Its areas of expertise include educational technology, teacher training and development, and on-line learning and digital production.

Pacific Resources for Education and Learning
For the past 10 years, PREL has worked with distance learning and training, interactive website development, distance learning needs assessment, and governance issues pertaining to technology and basic education.

Real World Productions
Real World Productions expertise includes project planning, curriculum development, staff training, and media production in audio, video, print, multimedia, and IT.

SchoolNet/Namibia
SchoolNet Namibia is a non-profit organization dedicated to extending information, education and communication technology to all Namibian schools and educational institutions, using the Internet.

University of Pittsburgh
The International Institute for Studies in Education at the University of Pittsburgh creates learning communities and cooperates with governmental and non-governmental entities around the world to encourage equitable educational access across regions, language, and gender.

World Computer Exchange
World Computer Exchange works to keep used computers out of landfills by giving them new lives and helping overseas schools bridge the global digital divide for youth.

World As A Classroom
WAAC works at the grassroots level to accelerate instructional and learning processes and improve educational quality in developing nations by enhancing the performance of their teachers

World Education
World Education (WE) runs international literacy programs for out-of-school youth and adults. World Education's expertise includes using information technology to improve instruction and to develop learning materials for adult education.

World Links
World Links Program is an independent organization initiated by the World Bank. Its principal objective is to provide developing country schools with sustainable solutions for mobilizing technologies, skills, and educational resources to prepare students and teachers to enter the Information Age.

World Space Foundation
Since 1999, the WorldSpace Foundation has developed an innovative and successful set of digital technology audio and multimedia services for developing countries.

2.3. Staff

2.3.1. Full time staff

Alexander Romiszowski has acted as Project Director through this period. He holds a doctorate in Educational Technology applied to Mathematics Education and is was previously professor of Instructional Design, Development and Evaluation and Director of the Training Systems Institute at the School of Education at Syracuse University. He has taught Master's and Doctoral courses in instructional development, computers in education and training, and educational development project management since 1986. He has also taught at the University of São Paulo in Brazil where he coordinated a research group on Educational Multimedia and Interactive Languages, the University of Concordia in Montreal, and Middlesex Polytechnic in London.

Steve Dorsey is Deputy Director. He holds a Master's degree in International Relations with an emphasis in International Development and African Studies from Brigham Young University. He has broad experience in the design, development, implementation, and monitoring and evaluation of education technology activities in USAID supported countries and institutions. He has worked with Ministry officials, school directors, teachers and students in providing assessment, orientation, training and technical guidance for educational technology activities in formal and non-formal education in primary and higher education.

William Wright has degrees from Harvard, Middlebury College, and the University of the South (Sewanee). He designed in 1983 a national rural network, BreadNet, that became one of the early teacher networks in the U.S. Later he led the legislative and regulatory efforts that set up the "e-rate," which helps bring affordable access to the under-served. Internationally, in his work in China, Vietnam, Nepal, Angola, and Zimbabwe Mr. Wright has worked with the highest levels of government and with leaders in rural villages. With the MIT Media Lab's Junior Summit (1998) he directed connectivity for a project that connected teams of children from 139 countries, many in the developing world.

Rosemary Lombard is a Research Development Assistant. She has a Bachelor's of Science in Communication from New York University and has also worked in Senegal, developing communication materials for health, micro-credit and education projects.

2.3.2. Part time staff

Andrea Bosch has worked consistently over the last ten years to support gender equity though technology based programs and has also conducted research to determine the efficacy of educational technology projects and schooling for girls. She currently advises the World Bank how to expand and integrate ICTs into the education sector. She has spearheaded the use of technology for early childhood development in Bolivia, South Africa and Nepal, and is implementing the use of radio for teacher training in Nepal. She has published a manual on how to design and implement formative evaluation of media materials and is a talented multimedia producer.

Steve Anzalone Dr. Stephen Anzalone is Director of Research and Evaluation at the MCL center. His current responsibilities include co-direction of the Center's project with the World Bank to support the development of distance education in Africa and work on EDC's technology activities for USAID projects in Haiti and Honduras. Dr. Anzalone is currently working on a USAID sponsored workshop on technology in Pakistan.

Bob Spielvogel is EDC's Chief Technology Officer and directs technology planning and implementation for the Education Development Center. His work involves strategic planning and supervision of EDC's internal and external network, WWW, and online systems for use by projects throughout EDC and coordinating internal planning for information and communications technology. A primary component of his project work at EDC involves designing and conducting a wide range of evaluations and case studies for educational systems that utilize technology to improve teaching and learning.

2.4. The Proposed Strategies and Technical Focus

2.4.1 Educational Leadership

Building educational leadership in the use and applications of technology is a core component of using IT for educational development. The strategy in this area is composed of two basic points:

Training: While the types of technologies and applications may vary, the opportunities for educational administrators, teachers and others to learn builds support and increases the chances for sustainability. Training is also important to build expertise in new areas of the global economy, and in the complex design and management of projects that include a technology component.

Centers of Excellence: Regional or country-based Centers of Excellence serve as a means to demonstrate and study innovative programs. These centers may also serve as

production houses for digital materials that will become textbooks, CD-ROMs, videos, or web-sites or as training sites.

2.4.2 Classroom Applications of Technology

One of the ways to improve educational quality is to introduce distance education or IT-based solutions directly into the classroom. Research suggests that when designed strategically, radio, TV, video or computers in the classroom can make a significant impact on learning gains for both boys and girls, and in many cases, can reduce equity gaps.

Virtual secondary: All over the world, available capacity in public and private secondary schools is severely limited. For girls and other marginalized populations, this situation is even more dire and even high-achieving girls drop out due to responsibilities related to childcare, signs of puberty, and marginalization. As subject matter becomes more specialized, teacher shortages increase and they become less prepared to teach subjects well. IT solutions which emphasize delivering quality secondary courses virtually can help overcome some of these problems.

Virtual tertiary: While a priority in only a few AID countries, computer-based solutions to challenges at the tertiary level have been well tested. In countries where tertiary or vocational education is a priority, the EDC Team will be able to assist Missions make choices and implement cutting-edge solutions.

Broadcast applications: The worlds of radio and TV are changing as quickly as other technologies. With the onset of digital production, and now, the prospect of digital delivery and reception, broadcast applications are as vibrant as ever. Partnerships with the WorldSpace Foundation and private organizations pave the way to make use of these technologies and test their applicability.

Online project-based learning. Online project based learning offers the potential to improve learning gains through improved pedagogy. Multimedia curriculum materials developed through AED in support of teacher professional development in Guatemala and Uganda have demonstrated that teachers quickly experience learning gains when engaged in project-based learning activities.

School to school connectivity: Closely related to project-based learning opportunities are school-to-school connections fostered through technology-based communications. This type of application is immediately rewarding for the participants and lays the foundation for more complex uses of the Internet and related technologies.

2.4.3 Teacher Development

Teacher development is an area of great potential for IT. Teachers have a greater capacity for self-instruction than young students, have a demonstrated need for new

materials and support in teaching techniques and subject matter expertise, and have systems of preservice, inservice and ongoing training that can be strengthened and utilized Possible applications include:

Virtual teacher training: Virtual teacher training allow teachers to engage in the learning process without leaving their schools and/or communities. This has implications for hands-on learning as well as overcoming the theory/practice divide that consistently plagues teacher professional development.

Teacher connectivity: While it is often thought of as a first step to a development activity, often simply connecting teachers can make a difference. If teachers are using computers in resource centers, this may help them focus on key areas of concerns and keep costs down and also help them use technology to create and share work and case studies from students in K-12 classrooms. Teachers then compare cases to understand the impact of different expectations, curricula, pedagogy, and assessment methods in shaping the quality of student work.

Teacher training in technology: Building teachers' capacity to use technology has an impact on whether they will benefit from it and whether others will use technologies. Often the biggest initial obstacle is the hardware or connectivity. When training occurs among teachers in school or resource center settings, communities of users can have access to computer-based technologies and software without the cost or difficulties often associated with computers.

Teacher resource centers: Resource centers offer another solution and have been tested through the AED LearnLink Project and through other teacher training initiatives around the world. They are sites where training can be organized, a WorldSpace receiver or an Internet kiosk can be housed, and other digital publishing and teaching equipment could be used.

2.4.4 Content Development

Materials and educational content development have changed dramatically over the past decade due to innovations in technology and decreases in costs. Desktop publishing, digital video, inexpensive high quality printers, and software for digital editing and multimedia development now all have inexpensive and easy to use applications.

Multimedia content development. Assumptions that you can use software off the shelf are overrated. In some cases, content partnerships are useful and people can use software or slightly adapted programs across borders. However, multimedia content development is relatively easy to learn and can play a role in workforce development. When this strategy is undertaken, other accompanying training and methods of quality control are important. Beyond specifics of the technology, training is needed in pedagogy and instructional design, designing effective materials for girls and isolated groups, and formative and summative evaluation methods.

Digital video applications: The potential for digital video applications to impact evaluation, community access, materials development and teacher training is practically endless. Because digital video uses the digital format, clips can be extracted and used within other materials or on its own as a training or evaluation tool.

Editing/ production training: Editing and production systems have largely become digital over the past decade. Because pieces can be cut and pasted easily within video and audio, adaptation and repurposing materials across borders and over time is inexpensive and easy.

2.4.5 Systems Development

Creating improved educational systems and networks is critical for the effective implementation of IT solutions. Some proposed new systems include:

Community Telecenters: Community telecenters, a growing phenomenon in the developing world, present an interesting option for strengthening education.

IT career centers and school-to-work: The pervasive growth of the global IT industry is creating increasing demands for skilled IT workers and models to meet this demand. Even in developing countries where IT penetration is not as thorough as in many parts of the developed world, there is a shortage of skilled IT workers to support private sector and government initiatives.

Hand-held technologies: The new wireless technologies of handheld computers and the new generation of cellular telephones opens up other possibilities. We will track innovations in these and other kinds of technologies, such as voice recognition, solar power, wind-up PCs, smart cards, and others to ensure that options suited for developing country application are tested through our efforts.

Educational Management Information Systems: Finally, EMIS systems provide a unique avenue for strengthening education in developing countries. Often, the lack of timely and reliable educational statistics cripples planning and reporting. Many educational leaders do not know with any accuracy how many teachers and students are being served by their systems. They also are often not able to report with accuracy the impact of their efforts to their own governments or to international donors who are interested in how their assistance is being applied.

2.4.6 Cross-cutting issues: Gender and marginalized populations

As dot-EDU develops proposals for Missions and begins to negotiate specific projects, some cross-cutting issues must be addressed. One of these issues involves how to ensure that all activities work towards decreasing equity gaps and improving the status and opportunities of women and girls, disabled populations, and others who might be

traditionally excluded from new opportunities. Some applications of IT that offer new opportunities include:

- **Assessing causes of marginalization**: Review key reasons that girls and others are excluded in a particular region or around a particular subject matter, including language use, traditional practice, and competing responsibilities;
- **Attending to materials development:** Craft and train others to design and evaluate educational materials so that positive female role models are included, activities are relevant and female participation is regular and engaging;
- **Training:** Train women leaders in the use and application of technology
- **Participation:** Monitor and increase participation rates through the careful design of programs;
- **Extending access:** Take extra precautions to extend technological access to girls and other populations and attempt to accommodate the obstacles that marginalized populations often encounter, including opportunity costs, difficult schedules and travel challenges, perceptions of danger, and competing childcare responsibilities;
- **Conducting evaluation:** Integrate formative and summative evaluation systems into technological solutions and disaggregate data so that there is ongoing feedback about how and how much girls and other populations are participating, using technologies and benefiting from them.

2.5. Likely Early Activities

The first Missions to show interest in forming agreements with dot-EDU have been the Missions that are already involved in some way in the utilization of IT for Education, particularly those Missions that have been involved in LearnLink over the last few years. Examples of Mission s in this category include. Guatemala and Namibia, Other missions, for example Mali, have turned to dot-EDU to continue other ongoing Educational IT initiatives. In the case of Mali, the major University has, with USAID support, recently been networked and has installed computers across the campus. The current need is for training of both staff and students in the effective educational use of the newly available IT infrastructure.

Further activities, beyond attending to the requests of those Missions already "on board", will depend on the success of marketing and publicity initiatives. These have been undertaken initially by USAID who has undertaken to make the first contacts and, as it were, open the door. This initiative was launched by means of information posted on the USAID website and a personal email directed to the Mission Directors and Education Officers. There have been a few exceptions to this rule in the cases where dot-EDU staff members had prior personal contacts with specific Missions and already knew the key persons, or could obtain personal introductions. This has been the case in Namibia, Senegal, Uganda and Brazil, for example.

However, the bulk of the marketing effort during the first quarter of the project has been planned and driven by USAID in Washington. Details of these activities are presented in later sections as specific projects and initiatives are discussed.

3. Project Start-up Activities

3.1. Meetings with dot-EDU partners and DOT-COM partners

3.1.1. Contacts with the dot-EDU partners

All the dot-EDU partners were invited to EDC to participate in a formal launch of the project. This took place in mid-October at very short notice. Nevertheless, over half of the partner organizations were represented at the meeting. The dot-EDU staff presented the proposed methodology of operation. There was much discussion to define the exact roles and relationships of the partner institutions to dot-EDU, to USAID and to each other. Many of the participating institutions are already active in many overseas countries, sometimes already in collaboration with USAID and often with established contacts with USAID Mission staff. Care was taken to explain the USAID policy regarding the promotion and marketing of DOT-COM in general and dot-EDU in particular. It was requested by some participants that the general principles discussed at the meeting be written down and circulated. A list of key contacts at each institution and their respective emails was generated (see Appendix 2.1.)

Another result of the meeting was to identify the need for more detailed information concerning the specific capabilities of each of the partner institutions. Although each institution had furnished capability statements and supporting documentation during the process of preparation of the proposal, this material was not prepared in a consistent manner. There was a need to organize and complement the existing information. The first step was a planning meeting, held on October 17th at EDC at which an initial strategy was worked out. The required information categories were identified in a brainstorming session and these were then organized as the dimensions of a "skills matrix" (see meeting report – Appendix 2.1.)

The next step was to analyze all the partner information available in-house. This was noted on a master "matrix" that identified which of the skills category cells had specific useful information. This master matrix was to designed to act as a multi-dimensional storage and access "front-end" tool that would allow one to see sat a glance where to look for more detailed descriptions of specific skills, experiences and capabilities. A copy of the first draft of this matrix included in Appendix 2.1. The presence of an X mark in a given cell, at this stage, only indicated that some evidence of the presence of the given skill/capability was on record. It would still be necessary to access this information to assess the relevance of this to a given project requirement. Similarly, at this stage, the absence of an X mark did not signify that the given partner did not have any skills or competencies in that category, but simply that we did not have any information available. The immediate function of the matrix was therefore to guide the process of collecting further information form the partners.

This further information was collected in a number of ways. Some of the partner institutions were visited by one of the dot-EDU staff. Others were invited to meetings at the EDC. In the case of geographically more distant partners, or when several people at different locations had to be interviewed, teleconferences were used. After about one month of this process, there were still many gaps in our information, On November 29th. A general email was sent to those partners who still had an incomplete dossier at the EDC (see Appendix 2.1.).

Since the beginning of this process it had been the intention to build an electronic database to store and access the partner information. Several options had been considered. The task of building and maintaining the database was seen as not inconsiderable and there were some doubts expressed as to the probable return on the invested effort. One solution that was considered and then discarded was to create a database into which the partners themselves would input the necessary information and would then maintain it updated. At about the end of the period of this report, when it was seen that the other DOT-COM awardees were performing similar data collection activities and were independently working on the design of databases, it was decided that it made more sense to do this centrally through the DOT-COM secretariat. This process of database design and development is still in progress.

Another parallel activity, also requested at the inaugural launch meeting, was the design of a project website (www.dot-edu.org). This website was initially conceived to serve the needs of the partner institutions. However, it was then felt that the detailed skills and capabilities information, if it was to be written and organized in a manner that would help to plan projects and select specific partners, would be too sensitive to place on the WWW. With the decision to place this information in the joint database being designed by the DOT-COM Secretariat, the website was simplified and now serves a general information function, not only for the partner institutions but also for prospective client institutions.

3.1.2. Contacts with the DOT-COM partners.

The three DOT-COM partners have formed a joint Secretariat. This organ has assumed some coordinating and technical functions (e.g. the database mentioned above). IT is also developing a common set of DOT -COM marketing materials (described further in 3.2. below). It also holds regular DOT -COM management meetings where the directors and other key staff of all three awards may share information and views on issues of common interest.

In addition to administrative matters, these meetings have been occasionally used for the purpose of planning and implementing joint responses to requests for proposals, as in the case of the drafting of a concept paper on possible DOT -COM initiatives in Pakistan and in the case of the drafting of a paper on the socio/political impact of IT connectivity in country such as Afghanistan. Further information on DOT -COM Secretariat activities are available in separate quarterly reports.

3.2. Meetings with USAID Bureaus

Meetings with all the USAID Regional Bureaus were scheduled during the month of October. Each of these meetings had a similar format:

- an initial presentation, by USAID, of the overall project, its special characteristics and the potential benefits (both technical and administrative) to the Missions;
- presentations by each of the three DOT-COM awardees of their role in the overall project and the specific approaches, interventions and project categories that they expect to implement – these presentations included case studies of similar projects or interventions successfully implemented in the past and case scenarios of possible future projects – all these examples firmly rooted in the reality of the region that was being addressed;
- a questions / answers session to allow the participating Regional Bureau staff to clarify any doubts and voice any concerns, or indeed express their enthusiasm.

In general, although some specific technical concerns were raised in some of the meetings, the general reaction of the Regional Bureau staff was very positive. It was felt that many of the Missions in each of the Regions addressed would have great interest in supporting one or more DOT -COM initiatives. In the case of some Missions, the extent of interest and acceptance may be lower due to the specific Strategic Objectives not directly including IT or, specifically on the case of dot-EDU, education. This was emphasized particularly in the case of LAC, given that most of the larger countries in the region have relatively small amounts of funding and in many cases none of the available funding is earmarked for supporting educational projects.

The dot-EDU presentations had predicted this and addressed this concern by stressing that the focus of dot-EDU was not exclusively on the formal education systems, but on the implementation on learning systems in whatever context, including many that do figure in the Strategic Objectives of most Missions. One example discussed was the need for effective and widely distributed HIV-AIDS education and information to rural and marginalized urban communities – this figures in the objectives of many Missions that do not formally support "education" projects. Similarly, most rural and urban economic development initiatives inevitably include a training component – often a very significant part of the whole. The presentations attempted in all cases to illustrate with cases and examples how a dot-EDU initiative may support these Mission activities. A copy of the PowerPoint presentation slides used in the meetings with the Regional Bureaus is included in Appendix 2.2.

In addition to the presentations to the Regional Bureaus, a special presentation was made to the Women in Development (WID) group of USAID. This meeting had a similar structure to the Regional meetings, but with cases and examples specially selected with the interest of the audience in mind. Just one general DOT -COM presentation was prepared, with sections for each of the three awardees. A copy of the slides of the special PowerPoint presentation for this meeting is included as Appendix 1.2.

3.3. Promotional Strategies and Materials

Some aspects of the promotional strategies implemented in the first quarter – USAID contact with Missions, dot-EDU website, presentations to Regional Bureaus – have dreport on is progress on the development of contacts with Missions by direct initiatives of dot-EDU personnel and progress on the development of dot-EDU promotional materials.

Direct contacts with Mission Directors or other key personnel were made by all the key dot-EDU staff, taking advantage of prior knowledge in other projects, travel opportunities or mutual acquaintances. The USAID advice of avoiding totally "cold" calls was observed, contacts only being made with those missions where there was some form of prior introduction to "open the door." These contacts have included:

- Benin, Ghana, Malawi, Namibia, Sudan, Guatemala and Haiti (Steve Dorsey);
- Angola, Uganda and South Africa (Bill Wright);
- Bolivia, El Salvador, Peru and Viet Nam (Andrea Bosch);
- Mozambique and Brazil (Alex Romiszowski).

Some of these contacts are beginning to bear fruit at the end of the first quarter. Guatemala is already negotiating a project (see section 3.1. below). Namibia and Brazil have expressed strong interest in initial meetings and have requested specific ideas and proposals for a project. Peru and Viet Nam have expressed initial interest and this is being followed up. The dot-EDU Activity Matrix (Appendix 2.4.) summarizes the situation at he end of the quarter.

Promotional materials have developed jointly with the DOT-COM Secretariat. A standard folder that included basic information on all three awards has been designed and the dot-EDU content for this folder has been produced (see Appendix 2.3.). In addition to this standard "short introduction," dot-EDU started to plan a more ambitious and complete package of promotional materials. At the end of the quarter, this was not yet complete, as priority was given to the development of the Website, as described above in section 3.1.1.

3.4. DOT-COM Management and Coordination

The management and coordination of DOT -COM activities during this first semester was handled by Alex Romiszowski, ably assisted by all the key DOT-COM staff members. As the nature of this type of project involves all staff members in frequent travel to Missions or elsewhere, it is essential that management and coordination is a freely shared function. This seemed to work perfectly well throughout the period. Both management and technical duties were undertaken by all the core staff.

Internal meetings were held frequently but on an irregular schedule, only when required, the bulk of communication being handled adequately via email. Weekly progress

meetings were scheduled with USAID contact person, Stephen Tournas, but these also were held only as necessary. It is expected that as projects get under way and new project opportunities are exploited it will be necessary to meet more regularly as a team, or even to schedule regular meetings of sub-groups involved in specific projects or activities. Overall control of marketing and follow-up activities was aided by the use of an Activity Matrix, showing the status all active and prospective contacts with USAID Missions. This dot-EDU Activity Matrix is updated on a weekly basis. An example of this matrix taken from late November 2001 is included as Appendix 2.4.

4. Associate Awards

4.1. Building on LearnLink activities

As mentioned earlier, much of the initial interest from the field came from those Missions that were, or had been involved in Learnlink during the last few years. As Learnlink is nearing the end of its lifecycle and there are no further funding possibilities, these Missions immediately perceived the dot-EDU project as an instrument for continuing and indeed extending the work that was already being performed through Learnlink. The two Missions that expressed immediate interest were Namibia and Guatemala. Of these two, the negotiations with Guatemala have progressed more rapidly. At the close of the quarter, a project document had already been jointly developed and a provisional budget estimate was prepared. This documentation is in the Mission in Guatemala under final analysis. It is expected that the project will be approved and will commence during the second quarter. A copy of the technical proposal for this project as sent to the Guatemala Mission for approval (Proyecto "Enlace Quiché") is included in Appendix 3.1.

Progress has been slower in the case of Namibia, but discussions are continuing and it seems likely that a similar Learnlink-extension project will in time be implemented. Some other Learnlink participant Missions have been approached and it is expected that other requests for projects of this nature will be requested.

4.2. Activities in Other Countries

The general level of interest expressed by other countries was reported earlier in section 3.3. Some countries have gone beyond the point of just talk, however, Notable among these is Mali. A request was received to respond to the need for IT training in the University of Mali. This University has recently installed a wide area network and is currently installing an IT infrastructure in all academic departments. This ongoing project is supported by USAID. The USAID Mission requested dot-EDU to propose a training and capacity building project for staff, faculty and students of the University to enable all concerned to make the best possible use of the technology infrastructure now available. The original request received from the mission has undergone several iterations of technical modification, has been technically approved by Mission personnel and is currently in the stage of budget preparation. This is essentially a University-to-University project with a small element of specialist educational IT services added. The current technical proposal for this project is included in Appendix 3.2.

4.3. Activities executed jointly through dot-COM

In addition to the activities described above, initiated directly by DOT-COM or by Missions entering into contact with DOT-COM, there have been joint activities involving the preparation of papers (for conferences or internal USAID meetings) or jointly prepared proposals requested specifically by USAID in response to a request received or opportunity perceived.

One such activity during this first quarter was the joint preparation of a paper on the role of IT and connectivity for or against the democratic process of government in nations in turmoil or at war. This paper was prompted specifically by the situation in Afghanistan. This was a relatively small task, involving voluntary contributions to an online brainstorm session, from which a short paper was crafted.

A bigger, more time consuming and mainstream activity was the joint preparation of concept papers for a possible project in Pakistan to be undertaken as part of USAID's Global Development Alliance (GDA) initiative. This work commenced in November, with joint activities of the three DOT-COM core partners, to prepare a relatively short and compact concept paper. This generated a request, in December 2001, for a more elaborated and specific project proposal document.

The dot-EDU contribution to this was a fairly long and detailed proposal adapted from a project idea previously suggested to DOT-COM by the WorldLinks Foundation. This was submitted to the DOT-COM Secretariat who was entrusted with the coordination of the contributions from the three awardees. At the end of the quarter, this process was not complete, although it was already obvious that what will be required is a less detailed and complex response than the one dot-EDU has proposed. This simplified response was still in the process of preparation at the end of the first quarter of the project.

5. Pilots and Case Studies

There is little concrete activity to report under this heading. The topic of Pilot Projects was raised and discussed on several occasions. The general consensus, at this time was that Pilot Projects should be undertaken where they may act as "catalysts" for full-blown projects. In other words, it was not considered appropriate to launch Pilot Projects just because it "seemed a good idea" or "we have local approval for the pilot," Rather, the idea of a true "Pilot" project is to spearhead a full-blown project that is trying to get off the ground and needs just that "shove" at the initial stages. This implies that the selection and design of the Pilot Projects should be in close synchronization with the planning of the longer term, locally financed, project to follow. As the rate of progress on identifying real local interest and resources for a long term project was rather slow in this first quarter, it seemed premature to get too involved and committed to specific plans with regard to Pilots.

Nevertheless, ideas were brainstormed and concrete suggestions for Pilot projects were made. A short list of suggested Pilot project opportunities, generated by Andrea Bosch towards the end of November 2001, is presented in Appendix 4. Several other ideas were suggested by other dot-EDU staff. However, for the reasons mentioned above, no concrete steps were taken to implement any of these. Another reason for holding back was that it was soon realized that the available funds for Pilot projects are very restricted and, if one would wish to implement several Pilots during the year, as opposed to just one, the nature of these projects would have to be much more modest than some of the ideas being suggested. Also, significant support from partners as cost-share, or from local collaborating institutions would have to be sought in order to eke out the Pilot project funds.

6. Looking Ahead to the Next Quarter

As the USAID Administrator has reminded us, this Washington-based mechanism should, above all, strive to provide excellent service to the missions. We will continue our "rapid-response" approach to dealing with the missions as we work with parters to shape final program descriptions and move toward having associate awards put in place.. Since enouraging discussions are underway, we expect to have associate awards set up in Guatemala, Mali, Rwanda, Namibia, and the Dominican Republic. We will also, as a team, identify pilot projects that are innovative and consistent with the goals spelled out in the RFA. Some of these pilots will address issues related to gender equity. At least one other pilot or case study will work in the area of exploring the use of IT as a way to help teachers, students, and community members increase their understanding of HIV/AIDS.

In the next quarter we also plan to develop a web site and a brochure to help the missions learn more about the dot-EDU cooperative agreement – including the steps for setting up an associate award. We have compiled capability statements from our partners. Those will be available on the web site. But having this information on the web and on paper will not be enough. We will need to determine a strategy for contacting the appropriate people in missions that are likely places for carrying out the work of dot-EDU.

APPENDICES

Appendix 1

DOT-COM Alliance – brochure and PowerPoint presentation

DOT–COM Alliance

Digital Opportunity through Technology and Communication Partnerships

DOT-COM is a global alliance of partners collaborating with USAID to increase digital opportunity.

Through the Leader-with-Associates cooperative agreements, USAID Missions can develop their own Associate Awards with the three Leader Award grantees and their partners. These awards are a joint venture between USAID (G/HCD and G/WID) and the DOT-COM partners to take a leadership role in bridging the digital divide in USAID-assisted countries and in promoting women's full participation.

DOT-COM builds on the principles of USAID's Leland Initiative in Africa, the U.S. Internet for Economic Development Initiative (IED), and the Digital Opportunity Task Force (DOT Force) of the G8 to foster an appropriate policy and regulatory environment, extend information and communication technology (ICT) access to the under-served, and promote ICT applications across sectors, particularly for the participation of women.

dot-GOV – The DOT-COM program for telecommunications and e-commerce policy and regulatory reform. Examples include assessments and workshops on the telecommunications and e-commerce policy environment; assessments of gender equity within the information and ICT sector; assistance to governments preparing telecom legislation or in strengthening the regulatory authority; and assistance in developing policies and regulation to promote ICT access for the under-served.

The prime grantee for dot-GOV is Internews Network, Inc. The sub-grantees are: Center for Democracy and Technology; Computer Frontiers, Inc; Associates in Rural Development, Inc; Center for Institutional Reform and the Informal Sector, Univ. of Maryland; and the Center for International Development and Conflict Management, Univ. of Maryland. The resource partners are: Information Society Project, Yale; Program in Comparative Media, Law and Policy, Oxford; Covington & Burling; Development Informatics; Aguirre Intl; Natl. Council of Negro Women; Vital Voices Global Partnership; Bridges.org.

dot-ORG – The DOT-COM program for extending ICT access to the under-served. Examples include assessments and pilot activities for Missions on how to incorporate ICT in their programs in education, democracy & governance, environment, health, and economic growth; systems of community ICT access; assistance in using ICT for crisis intervention, distance training, environmental surveillance, and telemedicine; and solutions for off-grid and wireless access. Gender equity is a priority throughout.

The prime grantee for dot-ORG is the Academy for Educational Development (AED). The sub-grantees are the Education Development Center (EDC), Research Triangle Institute, and Winrock International. Resource partners include 66 organizations for various response roles: 16 for-profits, including Intel, Avaya, PriceWaterhouse Coopers, SRI Intl, IBM and Sun Microsystems; 11 universities, including Bowie State, Howard, Johns Hopkins, MIT Media Labs and the Univ. of North Carolina Kenan Institute; 30 non-profits, including the American International Health Assn., ARD, Bellanet, geekcorps, PEOPlink, Science Applications for Development, VITA and World Resources Organization; and 5 foundations including Asia Foundation and the Greenstar Foundation.

dot-EDU – The DOT-COM program for ICT in learning systems. Examples include Internet/ICT and multi-media CD-ROM technology use to increase the reach and quality of programs in basic education, teacher training, workforce development, and higher education; and applications of Internet/ICT for learning systems in countries suffering the effects of civil unrest, natural disasters, or HIV/AIDS.

The prime grantee for dot-EDU is the Education Development Center (EDC). The sub-grantees are AED, Concord Consortium, Howard Univ., Michigan State Univ. and Prince George's County Community College. The resource partners are: Intel, IBM, Sun Microsystems, Advanced Network Systems (ThinkQuest), World Education, World Links, World Space Foundation, World Computer Exchange, World as a Classroom, Univ. of Pittsburgh, Real World Productions, Pacific Resources for Education and Learning, Omar Dengo Foundation, NIIT, MIT Media Lab, Media Bridge, Monterey Institute of Technology, I*EARN, Earthwalk Communications, Council for Basic Education, Centro Peruano de Audicion, Lenguaje y Aprendizaje (CPAL), the International Literacy Institute/UPENN, Intercultural Center for Research in Education (INCRE), INNOTECH, and the International Research and Exchange Board (IREX).

Agency contacts for DOT-COM include:
dot-GOV, Edward Malloy, emalloy@usaid.gov; dot-ORG, Brian Bacon, bbacon@usaid.gov; dot-EDU, Stephen Tournas, stournas@usaid.gov; private sector collaborations across awards, Elizabeth Range, erange@usaid.gov; gender issues across awards, Macol Stewart, mastewart@usaid.gov., and for information on the overall DOT-COM program, Anthony Meyer, ameyer@usaid.gov.

USAID

DOTcom Alliance

Digital Opportunity through Technology and Communication Partnerships

DOTgov DOTorg DOTedu

IT: For Development: The potential to change everything

DOT-COM

Digital Opportunity through Technology and COMmunication

DOTcom Digital Opportunity Through Technology and Communication Partnerships — USAID — AED — EDC — and partners

DOT-COM Structure

- Three Cooperative Agreements
  - dot-GOV: POLICY (Internews)
  - dot-ORG: ACCESS and APPLICATIONS (AED)
  - dot-EDU: LEARNING SYSTEMS (EDC)
- Secretariat Housed in dot-ORG
- Relevant Sectors
  - Economic Growth
  - Education
  - Democracy and Governance
  - Women in Development
  - Telecommunications/E-Commerce Policy

DOTcom Digital Opportunity Through Technology and Communication Partnerships — USAID — AED — EDC — and partners

How DOT-COM Works

- "Leader with Associate" Cooperative Agreements
- Leader Awards funded by Global Bureau Center for Human Capacity Development and the Office of Women in Development
- Associate Awards negotiated without further competition by missions or operating units (similar to IQC task orders)
- Sub-grantees and Resource Organizations accessed through the prime

dot-GOV POLICY

DOTcom Digital Opportunity Through Technology and Communication Partnerships ..... AED ..... EDC ..... and partners

Focus and Purpose of dot-GOV

- Focus
  - regulatory and policy framework to bridge the digital divide
- Purpose
  - reform and restructuring telecommunications and Internet policies so that populations, including underserved minorities, women and the rural poor, have access to ICTs for economic development
- Method
  - creating, building, and empowering domestic coalitions of governments and stakeholders who develop and implement policies that increase Internet access

The Internews dot-GOV Consortium

- Key staff: Dr. George Sadowsky, Senior Technical Advisor, Dr. Sarah Tisch, Chief-of-Party
- Six Core Partners:
  - Internews – local capacity with media law, regulation, and electronic media (Dr. George Sadowsky)
  - Center for Democracy & Technology – domain names mgmnt, encryption and cyber crime policy reform, regulatory frameworks (Jim Dempsey)
  - Computer Frontiers Incorporated - Internet and IT implementation and training, gender issues in ICT project design (Barbara Keating)
  - Associates for Rural Development - telecommunications policy and regulatory reform (Brad Johnson)
  - Institutional Reform and the Informal Sector International Research, Univ.of Maryland – ecommerce, trade policy (Dr. Thierry van Bastelaer)
  - Center for Int'l Development and Conflict Resolution, Univ. of Maryland - ICT policy development and impact assessment (Dr. Ernest Wilson)

The Internews dot-GOV Consortium

- Nine Resource Partners
  - Information Society Project (Yale Law School) – legal and networked consultative discussions
  - Programme in Comparative Media Law and Policy (Oxford University) - enabling legal environments
  - Covington & Burling (law firm) - telecommunications regulation, spectrum management, universal service, rate rebalancing
  - Development Informatics – distance education
  - Aguirre Int'l - education, training, workforce readiness (LAC region)
  - National Council of Negro Women – distance education, African women's access to ICT
  - Vital Voices Global Partnership (nonprofit) – gender issues and economic development
  - Bridges.org (not for profit) – community-based assessments

The Internews dot-GOV Consortium

- Private sector partnerships: leveraged through the joint Internews-CDT Global Internet Policy Initiative including:
  - Markle Foundation
  - AOL/Time Warner Foundation
  - Knight Foundation
  - General Electric
  - Microsoft, Inc.
- Consultants with specialized technical expertise:
  - Mr. John L. Mack (telecommunications policy and regulatory reform)
  - Mr. Gerard Waldron (communications law)
  - Dr. Beth Novick (FCC regulations, e-rate, broadcast satellite regulation)
  - Mr. Darrell E. Owen (telecommunications, Internet, and e-commerce)
  - Ms. Jody Westby (global legal framework for e-commerce)

dot-GOV Analytic Framework

- The Policy Development Cycle
  - Assessment and e-readiness
  - Consultation, strategy and planning
  - Expert assistance: drafting laws and regulations
  - Consultation and implementation
  - Training and training materials
  - Impact studies
- Important Aspects of Implementation Strategy
  - Contribute to goals of global significance
  - Emphasize local staff, local needs, local requirements
  - Collaborate with partners from industry and the non-profit sector
  - Build networks and alliances
  - Build local capacity
  - Highlight Women, Minorities and the Under-Served

dot-ORG ACCESS and APPLICATIONS

DOTcom Digital Opportunity Through Technology and Communication Partnerships — AED — EDC — and partners

Access Goals

- **Expand connectivity for voice and data**
  - Provide sustainable public access services
  - Extend infrastructure's perimeter
  - Improve "last mile" and "off grid" connectivity
- **Promote useful applications**
  - In e-governance, e-commerce, gender, etc.
  - Create development-oriented applications
  - Foster growth of local content and services
- **Build end user capacity**
  - Develop skills among under-served or priority-target populations
  - Enhance advanced IT sector professionals' skills

DOT-COM Secretariat

- **Hosted by dot-ORG, operates as triumvirate**
- **Facilitates coordination of dot-GOV/ORG/EDU activities**
- **Provides point of contact for collective activity**
- **Promotes internal information sharing**
- **Synthesizes and disseminates experience, lessons learned, and successful strategies for external audience**

DOT com Digital Opportunity Through Technology and Communication Partnerships — AED — EDC — and partners

Illustrative Access Options

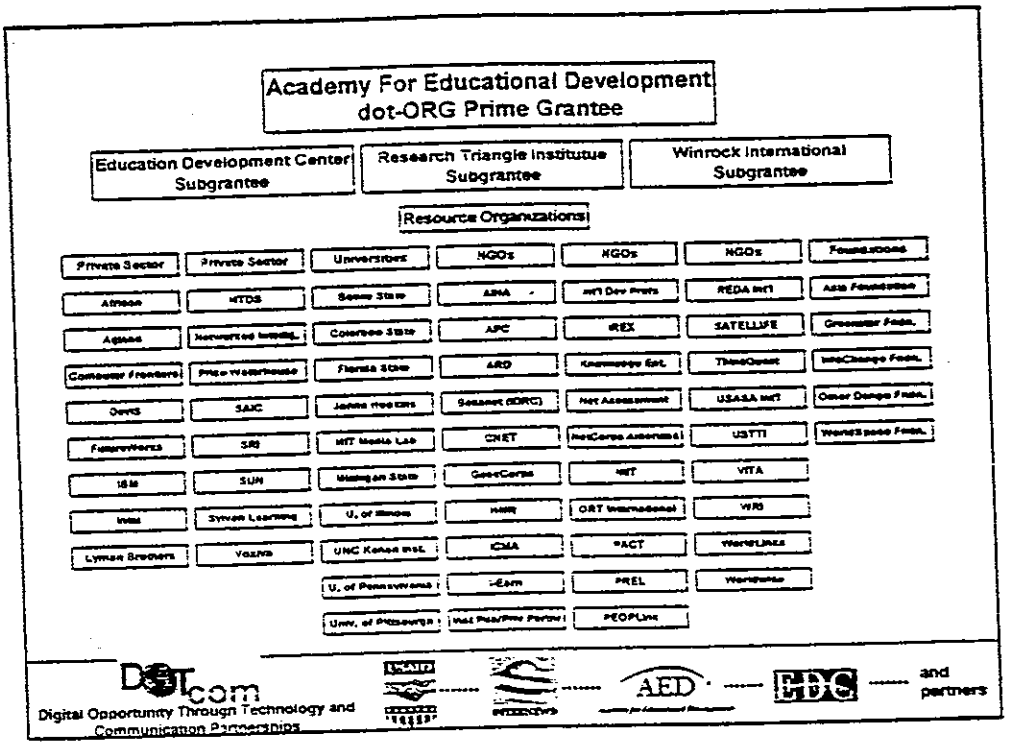
- **Expand access**
  - Extend infrastructure
  - Promote local access
  - Ensure ISP/telecenter business viability
  - Demo "off grid" solutions
- **Build user capacity**
  - Train users
  - Build user communities
- **Help develop local content**
  - T&TA to local content providers
  - Foster local applications
- **Development applications**
  - E-governance
  - E-commerce
  - Telemedicine
  - Gender
  - Agriculture
- **Knowledge-sharing**
  - Partnerships with other donors, private sector
  - Online knowledge resource
  - Synthesize lessons

DOTcom Digital Opportunity Through Technology and Communication Partnerships — AED — and partners

The dot-ORG Team

- Strategy of providing broad range of partners to meet varying mission needs
- Comprehensive expertise across application types
- Regional experience
- Proven track record (on-the-ground experience) in development contexts
- Highly responsive
- Can provide a team tailored to the specific need

DOTcom Digital Opportunity Through Technology and Communication Partnerships — AED — and partners



dot-ORG: Gender

Health/Safety

- Philippines Dept. of Health TOT produced multimedia programs for midwives and lab technicians
- Romanian social workers provided with online and CD-ROM based professional development and networking access
- Virtual fora inform 800 participants from 54 countries about HIV/AIDS and violence against women
- Health web site provides critical women's health information in Eurasia

DOTcom
Digital Opportunity Through Technology and Communication Partnerships
USAID
AED
EDC
and partners

dot-ORG: Gender

Economic Development

- Electronic learning networks promote women's economic development and employment in Belarus
- Online mentoring and ICT training support women entrepreneurs in Egypt and Cameroon.

Legal/Human Rights and Advocacy

- Women's Networking Support Programme promotes gender-aware Internet design, implementation, and use and enabled NGOs to actively participate in reviewing the Beijing Platform for Action

dot-ORG: Access in Africa

- **E-commerce**
  - Cameroon: women entrepreneurs use the Internet for marketing
- **Local content development**
  - Eastern/Southern Africa: healthcare providers produce online training materials
- **Networking**
  - Online conference for government, NGOs, private sector to examine HIV/AIDS impact in SSA
- **Access**
  - Ghana: NGOs establish fee-for-service telecenters

dot-ORG: Access in ANE

- **Distance training**
  - Philippines: DOH develops multimedia training and distributes to local offices
- **E-governance**
  - India: Government creates e-governance infrastructure to train staff and inform citizens
- **E-commerce**
  - Bangladesh: Local firms use Web catalogues and transaction processing to sell products
- **E-commerce**
  - Egypt: NGO/private sector partnership uses telecenters for workforce development

DOTcom Digital Opportunity Through Technology and Communication Partnerships — AED — EDC — and partners

dot-ORG: Access in E&E

- **Access**
  - Bulgaria: Created network of 10 local entrepreneur-run telecenters with prepaid Internet vouchers to local development workers
- **E-governance**
  - Eastern Europe: Local Government Information Network facilitates exchange of information
- **Distance training**
  - Romania: uses Internet to provide professional in-service training
- **E-commerce**
  - NIS: Electronic learning networks provide women with entrepreneurial and computer skills

DOTcom Digital Opportunity Through Technology and Communication Partnerships — AED — EDC — and partners

dot-ORG: Access in LAC

- **Access**
  - Haiti: Local ISPs set up secondary city telecenters
- **Distance training**
  - Latin/Central America: Femica and Lacun build capacity with computer-based in-service training
- **E-commerce**
  - Guatemala: Chamber of commerce offers members training in IT strategy
- **E-governance**
  - Paraguay: Municipality-run telecenter offers computer training and government information.

dot-EDU
LEARNING SYSTEMS

Digital Opportunity Through Technology and Communication Partnerships
AED ..... and partners

dot-EDU Implementing Partners

Education Development Center (EDC)

Private Sector
- EarthWalk Communications
- IBM
- Intel
- Sun Microsystems
- ThinkQuest

Universities
- Howard
- Michigan State
- M.I.T Media Lab
- Prince George's County Community College
- UPENN I.L.L
- UPITT

U.S. PVOs
- Academy for Educational Development (AED)
- Classroom Connects
- Concord Consortium
- Council for Basic Education
- I*EARN
- Media Bridge
- Real World Productions
- World As a Classroom
- World Computer Exchange
- World Education
- WorldLinks
- WorldSpace Foundation

Regional Institutions
- CPAL
- INCRE
- INNOTECH
- IREX
- Monterey Institute
- NIIT
- Omar Dengo
- PREL
- SchoolNet/ Namibia

DOTcom Digital Opportunity Through Technology and Communication Partnerships — AED — EDC — and partners

Goal and Purpose of DOT-EDU

- **Goal**
  - to assist developing countries to strengthen learning systems to improve quality, expand access, or enhance equity through carefully planned applications of digital and broadcasting technologies
- **Purpose**
  - to provide training and technical assistance to support USAID Missions in developing and implementing technology-assisted applications related to learning systems consistent with their S.O.s and results frameworks
  - to conduct pilots and prepare knowledge products to be shared with USAID and others

DOTcom Digital Opportunity Through Technology and Communication Partnerships — AED — EDC — and partners

Analytical Framework

- "Big Ideas"
  - More about "education" and "learning" than "technology"
  - Technology alone rarely brings about substantial learning gains
  - Technology can serve as a catalyst for change and a critical component in a comprehensive program to improve access, equity and quality
- Five Key Areas for Technology-assisted Improvement
  - changes in student learning outcomes across gender
  - teacher professional development
  - educational administration
  - community links
  - self-evaluation and monitoring

DOTcom Digital Opportunity Through Technology and Communication Partnerships ..... AED ..... EDC ..... and partners

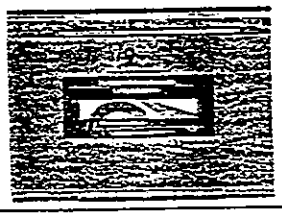
Missions with Girls' Education SOs

- Africa
  - Benin
  - Ethiopia
  - Ghana
  - Guinea
  - Uganda
  - Zambia
- ANE
  - Egypt
  - Morocco
- LAC
  - Guatemala
  - Haiti
  - Honduras
  - Peru

DOTcom Digital Opportunity Through Technology and Communication Partnerships ..... AED ..... EDC ..... and partners

Menu of IT Options

- **Educational leadership**
  - training for administrators
  - centers of excellence
- **Classroom options**
  - virtual secondary and tertiary
  - broadcast applications
  - online project-based learning
  - school-to-school
- **Teacher development**
  - virtual teacher training
  - teacher-to-teacher networking
  - teacher resource centers
- **Content development**
  - multimedia curriculum
  - digital video
  - digital production/editing
- **Systems development**
  - community learning centers
  - school-to-work centers
  - handheld devices
  - EMIS



DOTcom Digital Opportunity Through Technology and Communication Partnerships — AED — EDC — and partners

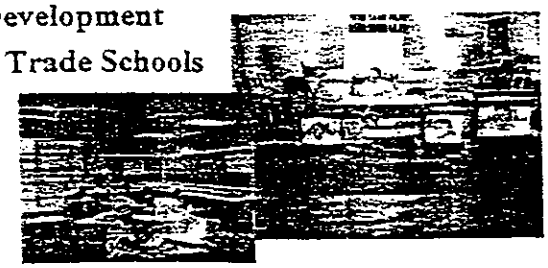
Illustrative Techniques to Engage Girls

- Assessing key causes of marginalization
- Crafting materials development
- Changing and extending training
- Increasing participation, through enrollments and in learning processes
- Extending access
- Monitoring and evaluation

DOTcom Digital Opportunity Through Technology and Communication Partnerships — AED — EDC — and partners

Illustrative Pilot Domains

- Computer-assisted Pre-service Teacher Training
- Centers of Excellence in Educational Multimedia Production
- Strategic Leadership for Utilizing Technology
- Teacher Professional Development
- Virtual Secondary and Trade Schools



DOTcom Digital Opportunity Through Technology and Communication Partnerships ..... AED ..... EDC ..... and partners

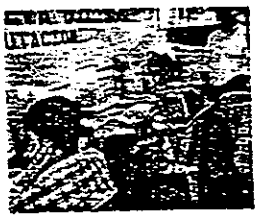
Africa

- Guinea
  - Application of Interactive Radio Instruction designed to improve gender equity, with digital production and editing, reaching over 800,000 primary school students with 1.5 hours of weekly instruction
- Namibia
  - the National Institute for Educational Development and selected training centers developing and implement computer-assisted teacher training resources
- Uganda
  - the Institute for Teacher Education, Kyambogo, developing an enhanced multi-media version of curriculum for application in selected Primary Teacher Colleges

DOTcom Digital Opportunity Through Technology and Communication Partnerships ..... AED ..... EDC ..... and partners

LAC

- **Brazil**
  - Learning Technologies Network (LTNet) connecting Brazilian and US educators to shared experience
- **Dominican Republic**
  - Ministry of Education needs strategic planning assistance to make use of over 300 computer centers currently equipped but sitting idle



- **Guatemala**
  - Pre-service teachers in selected *Escuelas Normales* receiving computer-assisted training to develop Mayan language literacy

- **Honduras**
  - *Educatodos* basic education program reaches older, out-of-school students at local centers and work sites with IRI and supplemental text (60% female)

DOTcom Digital Opportunity Through Technology and Communication Partnerships ..... AED ..... EDC ..... and partners

ANE

- **India**
  - girls' education and women's empowerment in Uttar Pradesh could benefit from computer-assisted approach

- **Morocco**
  - computer-assisted teacher training and online teacher-to-teacher connections boosting learning gains and morale
- **India**
  - Cisco Networking Academies sensitizing materials to gender concerns and reaching out to female students

- **Pakistan, Afghanistan and region**
  - explore new ways to use technologies to support women and girls in crisis situations

DOTcom Digital Opportunity Through Technology and Communication Partnerships ..... AED ..... EDC ..... and partners

Appendix 2

2.1. Documentation on "Contacts- with- Partners" activities

2.2. PowerPoint presentation of dot-EDU to the USAID Regional Bureaus

2.3. Promotional material for the DOT-COM Secretariat

2.4. Example of dot-EDU Activity Matrix

11-30-01 version

Dot-EDU Partner E-Mail Contact List

Partner:	Main contact:	Other contacts:
Concord Consortium	bob@concord.org	
Howard	Wpatterson@howard.edu	
Mich St.	Mark@h-net.msu.edu	Mark@mail.matrix.msu.edu
Prince George's	Pughmb@pg.cc.md.us	
AED	Sdorsey@aed.org	
IBM	willner@us.ibm.com	
Intel	Peter.broffman@intel.com	Wendy.hawkins@intel.com
Sun	Thomas.chesney@east.sun.com	
ThinkQuest	Belarian@thinkquest.org	
MIT Media Lab	Mbest@media.mit.edu colin_maclay@harvard.edu	Mres@media.mit.edu,
ILI	Wagner@literacy.upenn.edu	
World Education	Jmacneil@worlded.org	
WorldLinks	Sam@world-links.org	
Classroom Connects	jhouse@classroom.com	
Council for Basic Education	Mbaker@c-b-e.org	
I*EARN	ed1@us.iearn.org rblackman@us.iearn.org	Zbreslar@mis-inc.com
EarthWalk Communications	Peggi@earthwalk.com	Brianh@earthwalk.com
World Computer Exchange	Timothy@worldcomputerexchange.org	
Real World Productions	Sleigh64@aol.com	
Media Bridge	Smitheo@aol.com	
World As A Classroom	Bpgrg@bellatlantic.net	
Univ of Pittsburgh	Mmcclure@pitt.edu	
WorldSpace	Asundsmo@worldspace.org	Lslifer@worldspace.org
Monterey Institute	Jadieck@campus.ruv.itesm.mx	
INCRE	Incre@igc.org	
Omar Dengo Foundation	Fodmail@rad.fod.ac.cr	
CPAL	Postmaster@cpal.edu.pe	
SchoolNet/Namibia	Iyaloo@hotmail.com	Joris@schoolnet.na
INNOTECH	Ching@seameo-innotech.org	Linda@seameo-innotech.org
NIIT	Ldangelo@niit.com	
IREX	Rcronin@irex.org	
PREL	Raok@prel.org	

Technical Advisory Group

John Mayo	Jmayo@garnet.acns.fsu.edu
Pedro Hepp	phepp@iie.ufro.cl
Linda Roberts	LindaGRoberts@earthlink.net

REPORT ON THE BRAINSTORM MEETING AT EDC, WEDNESDAY 17 OCTOBER 2001.

(These notes are prepared to document our thoughts - please complete and correct any errors. Also, they are being circulated to a wider audience - all further suggestions are welcome. Romi)

1. BACKGROUND TO THE DISCUSSION.

The overall feeling (EDC and USAID) regarding the outcomes of the series of meetings held with the regional representatives (Africa, ANE, E&E, LAC) on Monday and Tuesday was very positive. However, in terms of specific feedback from the USAID participants, there were more requests for further information than specific suggestions of feasible projects. The information requests included:
(a) clarification of the types of project activities that could be implemented, the process of contracting for these services and the costs;
(b) clarification of the specific capabilities of the different Implementing Partners that are included in the dot-COM Alliance.
These requests were addressed partially during the meetings, but it was stressed that this information would be required on a regular basis when making contact with specific missions in specific countries. It should be documented in some easily usable form.

2. BASIC AGENDA FOR THE DISCUSSION.

Three forms of basic information have been suggested as means of addressing the above needs:
(a) Print - a packet of basic information in the form of brochures and reference materials that may be sent or given physically to contacts in the missions or elsewhere as an intoduction to each of the LWA's and how they will operate.
(b) Online - a website that presents the same information but in greater detail and in an updatable form, with more information on the specific goals of the LWA's and the capabilities of the prime and associated partner institutions, that may serve as a basis for serious analysis of the possibilities and planning of potential projects, both by the dot-COM and the USAID field staff;
(c) Database - a set of quantitative data and decision making tools that could support the detailed planning of specific projects.
Prior to this week's meetings, the dot-EDU team had already started to work on models for (b) and (c) . The object of today's meeting was to seek closure on this work and also to address the form that item (a) may take.

3. PRINTED PROMOTIONAL MATERIAL FOR DOT-EDU.

In discussion of item (a), we agreed that two types of printed material should be produced as a priority:
- a descriptive (conceptual) brochure, not unlike the content of the powerpoint presentation used this week, summarising the key goals and purposes of the award, the manner in which projects will be implemented, the types of projects envisaged, etc;
- a procedural leaflet, that will present in clear language (possibly in the form of FAQ's) the steps to be taken to initiate a project.

It was suggested that the structure of this material could be based on similar material that was developed and used by the LearnLink project (**Steve - could you comment on this and maybe bring samples of what exists in Learnlink to tomorrow's meeting?**).
Timeline: draft content to be prepared in time to be presented and analysed / modified at the next meeting with Stephen Tournas next Tuesday, October 23.

4. THE DOT-EDU WEBSITE.

In discussion of item (b) - the website - Bill presented a proposed overall structure for the components of a dot-EDU website. This has already been communicated to Bob Spielberger in order to address the task of getting the website online, and some comments have been received. The structure proposed is summarized below. In the ensuing discussion it was suggested that the SKILLS MATRIX component should not be included (reasons: complicated to put online and update; information unnecessary and too sensitive to be placed on a "public" website. However, "there should be a place for each of the 20 or so dot-EDU partners to put up their capability statements ..... we want to give them a template (or just example) so they won't go on forever....also we don't want to put up the entire proposal, but an executive summary".

EXHIBIT 1. SUMMARY OF PROPSED STRUCTURE THAT WAS EMAILED TO BOB.

(Wording for web site in bold and notes to the developer in square brackets)

DOT-EDU Partners [title page on web site]
Summary of DOT-EDU proposal to USAID [link to summary -- not entire proposal. I will attach in next email]
How we will work with USAID [link to statement that I will write (for Mike) telling that it is important not to have "freelancers" -- and how this is a "demand-driven" process]
List of partners and capabilities [Bob can we set it up so that partners paste in a one-page capability statement?]
A skills matrix (individuals) [Bob, this will be fields in a database or forms -- all to appear on web]
(ROMI'S NOTE: WE HAVE ALREADY DECIDED TO EXCLUDE THIS ITEM FROM THE WEBSITE)
Archive of discussion [Bob, this will be listserv archived on web. I can serve as moderator and add names.]

COMMENTS: (1) This structure is still up for detailed analysis and suggestions; (2) The skills matrix component, if created at all, will be separated out as a separate "private-access" component to be used by dot-EDU core personnel when project planning and team-building and as a tool for decisions between alternative implemetation partners for a given project. See further discussion of this in the next paragraph; (3) We did not get to discuss the usefulness of the listserv (comments?)

5. A DOT-EDU SKILLS MATRIX.

The initial idea for the development of a skills matrix was suggested prior to this week's meetings and was motivated by consideration of the task of managing a large group of institutions composed of a variety of experts with different skills and experiences that may be relevant to specific future projects. The need was reinforced to some extent by the requests for more detailed information voiced by several of the USAID regional office staff who participated in this week's meetings. On the other hand, the nature and ultimate use of a skills matrix has to be set against the cost and effort of its creation and the ease and value of its later use as a decision making tool. I had earlier prepared a model structure for a skills/experience documentation tool. This had already been shared in part with Bill and Bob. Bob's IT reaction was that it would be difficult and expensive to put up and keep updated on the proposed dot-EDU website (a cost of $2000 was estimated). Today's discussion also questioned whether the information (to be honest and therefore accurate and useful) should be posted in a publicly acessible website. Therefore, the following discussion focuses on the pro's and con's of creating a skills-matrix as a separate database to be used as a tool for overall management of project resources and selection / allocation of specific resources to specific projects. The suggested content and structure of a possible skills documentation tool is presented below, at the end of this document. I precede this with a summary of today's discussion of this tool, in order to maintain the flow of the arguments (the reader may refer to the example at the end if need be).

The overall philosophy behind the tool is to create a questionnaire that would collect quantitative data on the capabilities and strengths of the partner institutions (at institutional and also individual expert levels). The data collected should be structured so as to allow the extraction of institutions (or individuals) that match a predefined profile of skills/experience relevant to a given project/assignment. This is not unlike the task of identifying magazine readers with specific profiles in order to target the marketing of specific products and services. The difference is in the form of profile. In this case, the generic profile can be summarized as follows:
- WHAT activities or functions are you capable of performing in a given proposed project?
- WHERE (in what contexts, world regions, etc.) have you successfully executed these functions / activities?
- HOW have you typically executed these activities (skilled in using which methodologies, media, technologies, etc.)?

Each of these three questions are broken into detailed multiple-choice specific items, so that any institution or person completing the questionaire may be matched against the requred ideal profile for a given assignment in a given proposed project.

The structure of such a database is well known and many software application packages exist to manage and use the resultant information. The cost of the exercise is effectively limited to the time of data input, and that can be largely distributed by requring the completion of an electronic or optically readable questionnaire and thus populating the database structure automatically. However, the "garbage in / garbage out" principle always applies - what will be the validity of the raw data and therefore the reliability of the resultant information? So the discussion focussed on the ultimate value of the exercise. The major comments made were:

- Institutions will tend to tick all the boxes, so there will be no discriminatory value in the ensuing information;
- If the questionnaire is completed by individual staff members, the information may be reliable, but the quantity of data and effort of formfilling may be excessive and probably will not actually happen in practice;
- In any case, the real-life process of assigning project activities to personnel tends to be delegated to the selected institutions, so the detailed information collected at individual levels may not get to be used;
- A possibly more viable approach would be to complete one questionnaire per institution, and to build in discriminatory power by asking for the institution to respond to each question in a quantified manner (e.g. to indocate for each specific question the NUMBER of staff members who have performed / are skilled in the specific activity or function);
- However, although this may have some validity and practical value, will our partner institutions all perform such a formfilling exercise diligently, given that they have already submitted general capability statements and no one is offerring any guarantee of work on a project at this point in time;
- Maybe the skills matrix idea is not a practical as it appeared at first and should be abandoned?
- Or maybe the basic idea can be adapted by using the systematic structure of the form presented below as the basis for organizing, editing and, if necessary, completing the capability statements already on file, asking for supplementary data where this is not yet available, organizing and presenting this data in a user-friendly way, but without any attempr at the creation of a quantitative project planning tool - basically, the result would be a much more standardized and complete capability starement for each partner, that may serve for publicity and promotion, a more informative and user-friendly website presentation of the dot-EDU overall capabilities and to some extent an initial "gross" identification of the more suitable institutions for a given proposed project.

FINAL COMMENTS.

1. BASICALLY, THIS IS WHERE WE GOT IN OUR DISCUSSION. NO FINAL CLOSURE OR DECISION AS YET. MAYBE WE CAN TAKE THIS FURTHER TOMORROW., CONSIDERING THE ALTERNATIVES IN THE CONTEXT OF THE SPECIFIC PROJECT OPPORTUNITIES (MAL;AWI AND OTHERS) THAT ARE NOW BEGINNING TO PRESENT THEMSELVES. IN ANY CASE, WE SHOULD AIM TO REACH CLOSURE ON ALL THE ISSUES PRESENTED IN THIS SUMMARY PAPER BY THE END OF THIS WEEK, SO AS TO PRESENT A CLEAR PLAN TO USAID NEXT WEEK AND THEN IMPLEMENT IT.

2. WHAT FOLLOWS IS THE SUGGESTED CONTENT AND STRUCTURE ORIGINALLY DEVELOPED FOR THE SKILLS MATRIX. The "WHAT" items have been derived principally from analysis of the DOT-EDU proposal document. The "WHERE" items have been derived from analysis of the nature and structure of the USAID missions and the countries in which they operate. The "HOW" items are derived principally from the author's (Romi's) view of the "nature of the game" - the paradigms and theories that are currently popular and provenly successful in technology-based education contexts, the variety of approaches that may be requires to address the variety of probable projects to be implemented, etc....

3. This third category of questions is clearly the most "fuzzy", most unlikely to be responded by all in a uniform way, and therefore most likely of lowest practical value in the initial project planning and task allocation process. A POSSIBLE SIMPLIFICATION, THEREFORE, WOULD BE TO CREATE A QUESTIONNAIRE FOR ONLY THE "WHAT"AND "WHERE" COMPONENTS. This would result in a simpler, shorter and possibly more practical instument. Also, reducing the three major dimensions to only two, would permit the visual reorganization of the questionnaire into tabular, matrix-like, form, allowing respondents to place one mark in a cell at the intersection of "WHAT we have done" and "WHERE we have done it". O.K. ALL FOR NOW. ANY FEEDBACK?

EXHIBIT 2. INSTITUTIONAL AND/OR INDIVIDUAL SKILLS/EXPERIENCE MATRIX

(possible relevant dimensions for project planning, staff recruitment/selection, etc.)

WHAT – have you done / are your strengths?

ACTIVITIES

Teacher education (pre-service / in-service)
Teaching materials design/development (print / A-V / M-M / etc.)
Use of technology in teaching (enhancing conventional education / innovation / cost-effectiveness)
Distance education systems (correspondence / telecourses / self-instruction / virtual schools)
Development and implementation of new courses / curricula / institutions / systems
(Other - specify ...)

FUNCTIONS

Strategic planning and macro-design
Tactical planning and implementation
Project management and control
People skills / training / development / team-building.
Program and project evaluation
(Other - specify ...)

WHERE - have you practiced these skills?

CONTEXTS

Basic formal education systems (primary / secondary)
Post-secondary education systems (vocational-community / academic-university)
Informal community-based education and self-development systems
Technical and professional (initiation / continuing) education systems
Industrial / commercial / corporate training systems
(Other - specify ...)

REGIONS

Africa
Asia and Near East
Europe and Eurasia
Latin America and Carribean
(Other - specify ....)

LANGUAGES

English
Spanish
French
Portuguese
(Other - specify ...)

HOW - the methods, media, technologies, paradigms and/or theories you typically employ?

TECHNOLOGIES

Learning packages (printed text / graphics /audio-visual)
Mass communication systems (radio / television / newsprint)
Digital interactive (CAI / electronic multimedia / hypermedia)
Digital online resources (databases / Internet / WWW)
Collaborative work/learning environments (synchronous / asynchronous)
(Other - specify ...)

METHODOLOGIES

Performance-based (tutorial / drill & practice / job-aids / performance support systems / etc.)
Knowledge-based (content mastery / schema-theory / knowledge construction / etc.)
Cognitive-skills-based (cognitive apprenticeships / situated cognition / metacognitive skills / etc.)
Learning-skills-based (collaborative learning / learning-to-learn / problem-based learning / etc.)
Human-capabilities-based (group dynamics / adult learning principles / accelerated learning / etc.)
(Other - specify....)

Dot-EDU PARTNERS - CAPABILITIES AND EXPERIENCE MATRIX

THE PARTNERS	WHAT? (PROJECT TYPE)					WHERE? (REGIONS)					HOW (MEDIA / TECH.)				
	Teacher Ed. (pre/in serv.)	Inst. Materials Production	New Technology Solutions	Dist. Ed. / Virtual Schools	Curriculum Development	Asia & Near East	Europe & Eurasia	Latin Amer. & Carib.	Africa	North America	Print (text /graphics/photo)	Audio (radio/tape/teleconf)	A-V (video/TV/videoconfer)	Multimedia (CD-ROM/CAI)	Internet (WWW/groupware)
SUB-GRANTEES															
Academy Educ. Developmt. (AED)															
Concord Consortium		X	X	X	X	X	X			X			X	X	
Howard University					X			X	X	X					
Michigan State University				X	X				X				X	X	X
Prince George's County Com. Coll.	X			X	X				X	X			X	X	X
RES. PARTNERS															
IBM															
Intel	X		X		X	X	X	X						X	X
Sun Microsystems															
Adv. Network Sys. (ThinkQuest)															
Centro Peruano... (CEPAL)															
Council for Basic Education	X			X		X	X			X					X
Earthwalk Communications	X		X							X				X	X
I*EARN	X				X	X	X	X	X	X					X
SEAMEO - INNOTECH	X	X				X					X		X	X	
Intercultural Ctr. Res. Ed. (INCRE)	X	X	X		X			X		X		X		X	

Internat. Literary Institute / UPENN	X	X								X	X		X		X
Internat. Research Exchange (IREX)	X		X	X	X	X	X			X					
Media Bridge															
MIT Media Lab.		X	X	X	X	X				X					X
Monterey Institute of Technology															
NIIT		X				X				X				X	
Omar Dengo Foundation															
Pacific Resources for Ed. & Learning		X		X		X				X					X
Real World Productions															
University of Pittsburgh															
World as a Classroom	X	X							X	X				X	X
World Computer Exchange			X			X		X	X						
World Education		X			X	X	X	X	X	X				X	X
World Links															
World Space Foundation			X			?		?	X	X		X		X	

From : William Wright <wwright@edc.org>
To : bob@concord.org,Wpatterson@howard.edu,Mark@h-net.msu.edu, Mark@mail.matrix.msu.edu,Pughmb@pg.cc.md.us,Sdorsy@aed.org, willner@us.ibm.com,Peter.broffman@intel.com,Wendy.hawkins@intel.com, Thomas.chesney@east.sun.com,Belarian@thinkquest.org,Mbest@media.mit.edu, Mres@media.mit.edu,colin_maclay@harvard.edu,Wager@literacy.upenn.edu, Jmacneil@worlded.org,Sam@world-links.org,jhouse@classroom.com, Mbaker@c-b-e.org,ed1@us.learn.org,Rblackman@us.learn.org, Zbreslar@mis-inc.com,Peggi@earthwalk.com,Brianh@earthwalk.com, Timothy@worldcomputerexchange.org,Sleigh64@aol.com,Smitheo@aol.com, Bpgrg@bellatlantic.net,Mmcclure@pitt.edu,Asundsmo@worldspace.org, Lslifer@worldspace.org,Jadieck@campus.ruv.itesm.mx,Incre@igc.org, Fodmail@rad.fod.ac.cr,Postmaster@cpal.edu.pe,Iyaloo@hotmail.com, Joris@schoolnet.na,Ching@seameo-innotech.org,Linda@seameo-innotech.org, Ldangelo@niit.com,Rcronin@irex.org,Raok@prel.org, Jmayo@garnet.acns.fsu.edu,phepp@lie.ufor.cl,LindaGRoberts@earthlink.net
CC : stoumas@usaid.gov,mlaflin@edc.org,alexromi@edc.org,abosch@edc.org, sanzalone@edc.org,rspiel@edc.org,rlombard@edc.org,mhoney@edc.org, gkleiman@edc.org,vguilfoy@edc.org
Subject : dot-EDU partners: An update and request for information
Date : Thu, 29 Nov 2001 13:32:50 -0700
Attachments : dot-EDUcapeexamples.doc (40k), 10193.txt (8k)

To dot-EDU partners in the DOT-COM initiative:

As most of you know, EDC is the prime grantee -- for learning systems -- in the USAID DOT-COM initiative, which has the purpose of increasing digital opportunity. The attached file and web site http://www.usaid.gov/info_technology/dotcom/ give more details. Those who were not able to attend last month's meeting of partners may have questions about the next steps. I'll give a brief explanation here and get back to you with more information later. I also need to ask you to send Rosemary Lombard <rlombard@edc.org> a short capability statement (using the attached examples as a model) so we can let USAID missions around the world know more about who can do what in our impressive group of partners. Please also let her know who the main contact should be for your organization.

What happens next?

There are three different awards (called cooperative agreements) under DOT-COM: one for policy, one for access, and the third (ours) for education and learning systems. The core learning systems award (called dot-EDU) is tightly budgeted for five years (staff, limited travel to shape projects, and so on). There is a small amount for pilots, but most of the funding for associate awards has to come from the budgets of USAID in-country missions.

Therefore our next step is to help education officers in the in-country missions understand the DOT-COM mechanism -- and help them shape IT-and-education ideas that would meet that mission's strategic objectives. So that is where we are now. We are working closely with the USAID Washington office and talking to the education officers in missions around the world. If you have good contacts, please let us know. However USAID has urged our partners *not* to set up meetings with or talk to missions about DOT-COM or dot-EDU until we have a clear, coordinated plan.

What we need from you:

We may need to contact you as specific requests come in from USAID. For example, very soon we will need to know which of our partners are doing work in Pakistan -- and which of our university partners have someone who can handle IT training (at a university) in French.

But for now, please send to Rosemary Lombard <rlombard@edc.org>:

-- a 1-2 page capability statement (see attached examples)
-- your web site
-- the name and email of the prime contact for your organization
-- the name and email of the prime contact for your organization

Thank you. Let me know if you have questions.

Bill Wright

—
William Wright
Education Development Center, Inc.
(202) 466-0540, ext 216
—

Resource Partners' Database:

The principal goal of this database is to enable us to quickly sort through our resource partners to identify those with a defined set of skills and experiences to meet the needs of specific project opportunities. We need to keep the amount of data describing each resource partner to a bare minimum. Databases have a way of taking on a life of their own and quickly growing into massive beasts, we should take care not to make this more complex than needed to meet our needs.

There would be four main access screens:

- Data entry screen for partners to add and maintain their data.
- Query screen used by DOT-COM staff to search for partners with specific skills and experiences.
- Report screen
- Administrative screen used by web site and database managers to modify and fix the database.

The following will address the first three of these database function.

1. Partner Data Entry:

The partners' data will focus on information about institutional capacity not on individual staff capacities within institutions.

There will be three main data entry levels or categories each with a set of specific data fields as shown below that can be accessed sequentially or via an index.

I. **Basic institutional & contact information:**
   A. Institution Name
   B. Address
   C. URL
   D. Type (NGO, for profit development organization, corporation, educational, foundation, multilateral – a drop down selection menu)
   E. Name & title of principal contact person for DOT-COM work
      1. Phone number
      2. Cell phone
      3. Fax number
      4. e-mail
   F. Name & Title of Secondary contact person for DOT-COM work
      1. Phone number
      2. Cell number
      3. fax number
      4. e-mail
   G. DOT-COM Affiliation (check box):
      1. dot-GOV

2. dot-ORG
3. dot-EDU

H. Brief institutional bio (3 to 5 sentences)

II. **Programmatic Information**:

A. In the last three years we have worked for USAID as a contractor or grant recipient:

1. never
2. rarely (1 – 10 times)
3. often 11 or more times

B. Which of the following thematic fields of activity has your organization worked in and is recognized internationally as having superior expertise: (Below or next to each of these areas of work there could be a mechanism to allow the resource partners to reference a URL where their work in a specific area could be reviewed, or to upload reports describing examples of their work in this field and capability statements. At the bottom of the list of specified fields of work, 5 open fields would be provided to allow partners to enter areas of work that is not mentioned. Before entering their programmatic information, partners would select either doe-EDU or dot-ORG. The following are the Programmatic areas of expertise for dot-ORG. The EDU team will add categories specific to EDU work. We may want to limit number of areas of expertise or provide some way for the partners to rate their experience.)

Dot-ORG Categories:

1. Design and establish community access telecenters.
2. Develop and implement e-commerce applications for small scale businesses and entrepreneurs.
3. Develop and implement e-government applications including procurement and service systems.
4. Create computerized voter registration and record systems.
5. Develop, either from scratch or by repurposing existing face-to-face delivered content, on-line professional development modules for delivery via the web, CD-ROM and hybrid systems.
6. Develop and run business development training activities (either face to face or on-line) designed to help telecenter owners sustainably manage their telecenters.
7. Design and carryout e-readiness assessments for telecenters.
8. Design and carryout national connectivity and telecommunications assessments.
9. Design and carry out monitoring and evaluation strategies for assessing IT and development programs.
10. Design and implement ICT training programs.
11. Design and carryout ICT gender initiatives.
12. Design and develop sustainable virtual communities and electronic networks.
13. Design and develop ICT and Agriculture projects.
14. Design and develop ICT applications to enhance health programs

15.

III. **Geographic Experience and Language Information:**

A. Which regions has your organization worked in for more than two weeks over the three years? (Selecting a region will then bring up a country list from which to make a second level of selections. The country lists will only include countries where USAID has program activity.)

1. Latin America & the Caribbean
   a) Country list
2. Africa
   a) Country list
3. Asia & the Near East
   a) Country list
4. Europe & Eurasia
   a) Country list

The combination of region and country categories will enable us to search for partners that have either worked in a specific country in a certain technical area or worked in a region in that technical area.

B. Among your staff, which language skills are represented: (this will likely be presented as one column listing the languages followed by two columns for check boxes under "fluent" and "knowledgeable." Below the columns there will be 3 to 5 open fields for people to type in less commonly spoken languages.

1. Fluent: Spanish, French, Portuguese, Hindi, Urdu, Arabic,
2. Knowledgeable: Spanish, French, Portuguese, Hindi, Urdu, Arabic,

Query System: The query system will only be available to DOT-COM staff. Logging in will require an ID, password and the selection one of the following: dot-GOV, dot-EDU, dot-ORG. This last step will be used to select the database from which the query will be made.

I. There can be two main query systems.

A. One could be a simple keyword search system accompanied by options for organization name only, brief report. Included with each organization that is returned is a button to ask that the full report be presented.

B. The second system would be comprised a series of drop-down menus or selection groups from which users would select items to search for.

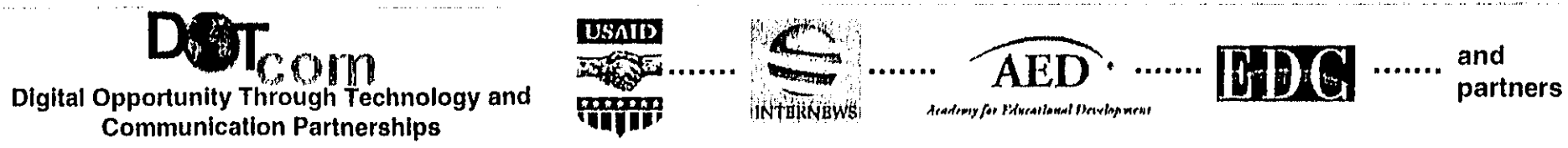
1. Country Experience
2. Primary area of experience
3. Secondary area of experience

Followed by the selection of one of the 3 options for reporting levels (name only, brief report and full report).

Report Screens: Users can select from among the following two levels of reports:

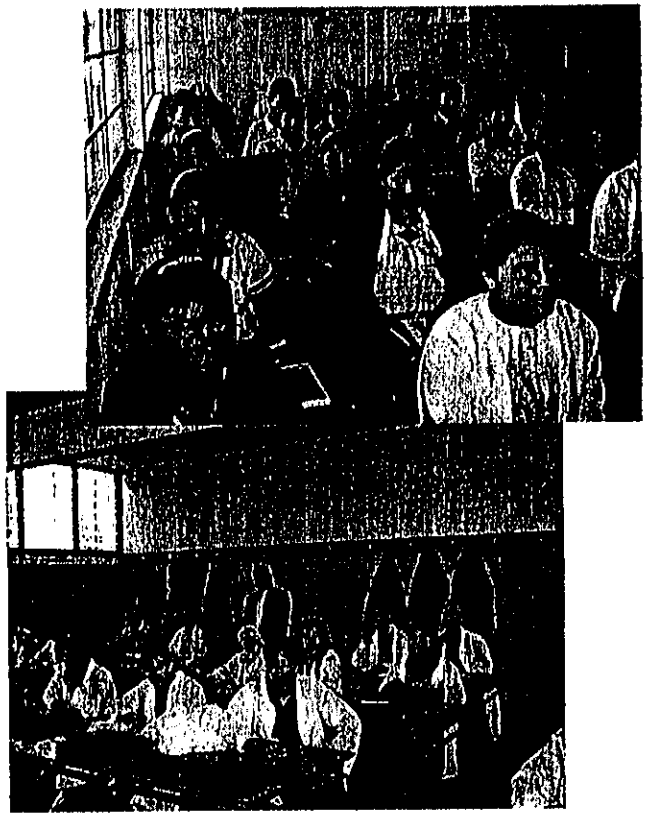
I. Institutional name only with contact information.
II. Brief Report (presented as multiple rows):
    A. Institution name
    B. Contact person, phone/e-mail
    C. Institutional bio
    D. Regions and country list
    E. A button to request the full report which would list all items in the Partners form.

Leader with Associates (LWA) Cooperative Agreements to Increase Digital Opportunities for Developing Countries



Goal and Purpose of DOT-EDU

- **Goal**
  - to assist developing countries to strengthen learning systems to improve quality, expand access, or enhance equity through carefully planned applications of digital and broadcasting technologies
- **Purpose**
  - to provide training and technical assistance to support USAID Missions in developing and implementing technology-assisted applications related to learning systems consistent with their S.O.s and results frameworks
  - to conduct pilots and prepare knowledge products to be shared with USAID and others



DOTcom
Digital Opportunity Through Technology and Communication Partnerships

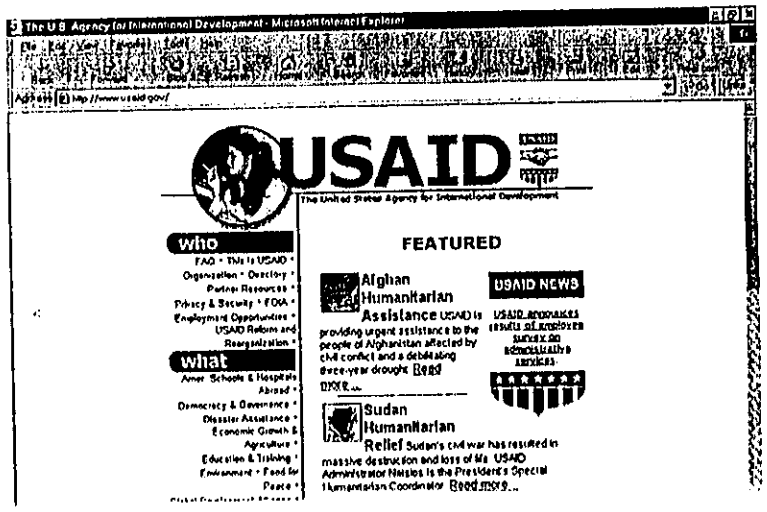
USAID ..... INTERNEWS ..... AED Academy for Educational Development ..... EDC ..... and partners

Analytical Framework

- **"Big Ideas"**
  - More about "education" and "learning" than "technology"
  - Technology alone rarely brings about substantial learning gains
  - Technology can serve as a catalyst for change and a critical component in a comprehensive program to improve access, equity and quality
- **Five Key Areas for Technology-assisted Improvement**
  - changes in student learning outcomes across gender
  - teacher professional development
  - educational administration
  - community links
  - self-evaluation and monitoring

Fit between USAID & DOT-EDU

- **Approximately 25 USAID offices, Regional Bureaus or Missions have education programs and strategic objectives**
- **Common areas of focus in these programs include:**
  - education sector/policy reform
  - primary education support
  - secondary or higher education support
  - curriculum and textbook support
  - girls' education
  - teacher training
  - nonformal education
  - community participation
  - education and technology

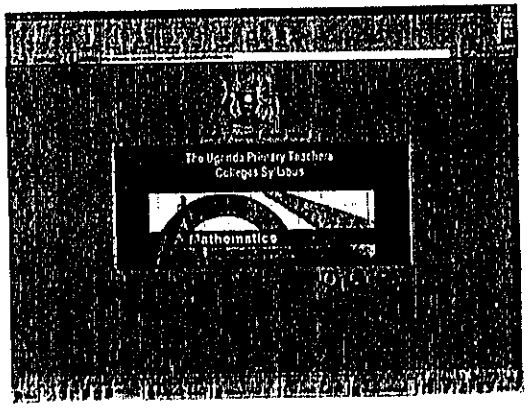


DOTcom
Digital Opportunity Through Technology and Communication Partnerships

USAID ..... INTERNEWS ..... AED Academy for Educational Development ..... EDC ..... and partners

Menu of IT Options

- **Educational leadership**
  - training for administrators
  - centers of excellence
- **Classroom options**
  - virtual secondary and tertiary
  - broadcast applications
  - online project-based learning
  - school-to-school
- **Teacher development**
  - virtual teacher training
  - teacher-to-teacher networking
  - teacher resource centers
- **Content development**
  - multimedia curriculum
  - digital video
  - digital production/editing
- **Systems development**
  - community learning centers
  - school-to-work centers
  - handheld devices
  - EMIS



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Illustrative Pilots

- Computer-assisted Pre-service Teacher Training
- Centers of Excellence in Educational Multimedia Production
- Strategic Leadership for Utilizing Technology
- Teacher Professional Development
- Virtual Secondary and Trade Schools

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Implementing Partners

[redacted]

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Digital Opportunity Through Technology and Communication Partnerships

USAID ..... INTERNEWS ..... AED Academy for Educational Development ..... EDC ..... and partners

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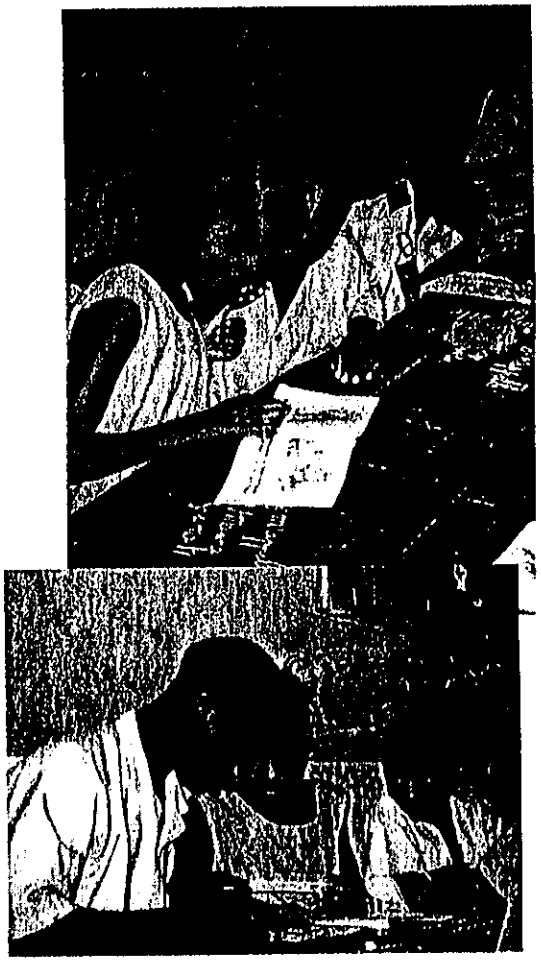
Sample Activity

- **Guinea**
  - **Situation:** poor educational quality, particularly for girls and rural students
  - **Response:** USAID created FQEL Project to address teacher development, materials development, and policy reform.
  - **Role of Technology:** With EDC support, 1.5 hours of radio-delivered instruction (IRI) weekly, using digital production and editing, broadcast via central government short-wave and some local radio stations & received on wind-up radios
  - **Results:** 20,000+ teachers trained in use of IRI; 800,000+ students participating in weekly broadcast; improved attendance, achievement and gender sensitivity

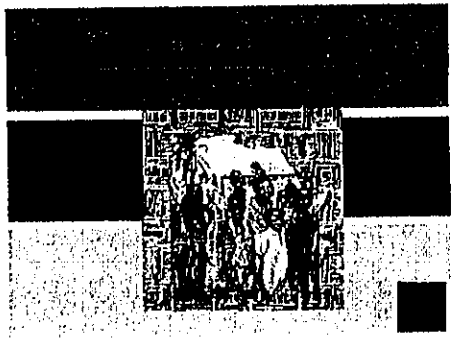


Sample Activities

- **Guatemala, Morocco, Namibia, Uganda**
  - **Situation:** Increasing primary school enrollment, and in some cases the effects of HIV/AIDS epidemic, raising demand for more and better qualified teachers
  - **Response:** USAID funds pilot computer-assisted teacher training activities to develop consistent, high quality, self-instructional materials
  - **Role of Technology:** With AED support, existing training programs and materials are enhanced via digital materials production; pedagogical innovations are introduced via multimedia
  - **Results:** Host institutional capacity created for digital materials production; thousands of pre-service teachers receive technology training and self-paced instruction; approaches adopted system wide

Potential Opportunity

- **Mozambique**
  - **Situation:** 40% literacy; 30% completion rate at primary level; 6% completion rate at secondary level; .2% completion rate at tertiary level; girls and rural areas neglected; 20% attrition of teachers due to HIV/AIDS
  - **Potential Response:** Government proposes program to increase primary attendance by 50% and completion by 100%; raise secondary attendance 200% and completion 400%; incorporate distance education
  - **Proposed Role of Technology:** Establish multi-purpose, community-based telecenters using VSAT; ensure teacher/student access for distance learning opportunities
  - **Intended Results:** Improved student attendance, retention and completion; larger numbers of trained teachers



Important Implementation Procedures and Protocols

- This is a "demand-driven" instrument
- USAID Missions, not EDC, make the calls about who will implement their activities
- Access to USAID Missions and personnel must be coordinated through DOT-EDU management and DOT-COM Secretariat - NO DIRECT MARKETING WITHOUT PRIOR APPROVAL
- Opportunities will be provided for partners to gain exposure and for USAID to learn about partners
- "Match" may be required for Associate awards

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dot-EDU	LEARNING SYSTEMS
dot-ORG	ACCESS AND APPLICATION
dot-GOV	POLICY AND REGULATION
DOT-COM SECRETARIAT	COORDINATING ACTION AND SHARING INFORMATION

DOT-COM ALLIANCE

The DOT-COM Alliance is a global network of partners that collaborates with USAID to increase digital opportunity for the under-served.

"Digital Opportunity through Technology and Communication" (DOT-COM) is an alliance of three cooperative agreements to promote information and communication technology for development.

DOT-COM activities cross all sectors, including education, economic growth, women in development, agriculture, trade, health, environment, and telecommunications/e-commerce policy. The three DOT-COM cooperative agreements provide expertise and services in policy, access, and learning systems.

The DOT-COM award for policy ("dot-GOV") provides assessments, training and technical assistance on telecommunications and electronic commerce policy and regulatory reform. The DOT-COM award for access ("dot-ORG") provides pilots, technical assistance and institutional support to increase access and use of communication technology by the under-served. The DOT-COM award for learning systems ("dot-EDU") provides pilots, technical assistance and institutional support for the use of information and communication technology (ICT) in learning systems. Gender equity and collaboration with private sector ICT firms are emphasized throughout DOT-COM. The Global Bureau Center for Human Capacity Development (G/HCD) and the Office of Women in Development (G/WID) fund the core DOT-COM awards.

DOT-COM Background

The DOT-COM program provides USAID access to fifteen grantee institutions and over 75 resource partners who work on ICT-for-development issues. Building on the strategies of the African Leland initiative and the worldwide Internet for Economic Development Initiative, DOT-COM provides USAID missions with a broad set of tools to participate in a global effort to bridge the digital divide.

How DOT-COM Works

Three "Leader with Associates" cooperative agreements have been awarded to implement the USAID DOT-COM Alliance. "Leader" refers to the core award vested with central funds. "Associate" refers to awards associated with the Leader award which are negotiated by the missions or operating units funding the Associate award. Each DOT-COM Leader with Associates award has a prime grantee with sub-grantees and resource partners who are named below. Collaboration with sub-grantees and resource partners can be accessed through the prime. The three DOT-COM awards are linked to work cooperatively through the Secretariat housed in the dot-ORG award. The expected value of the Leader awards is $15,000,000 of core funds over five years. Missions and regional bureaus will contribute additional funds for DOT-COM Associate awards. ICT firms are emphasized throughout DOT-COM. The Global Bureau Center for Human Capacity Development (G/HCD) and the Office of Women in Development (G/WID) fund the core DOT-COM awards.

Draft dot-EDU One-Sheet for Marketing Material

dot-EDU
Applying IT in Learning Systems

dot-EDU assists developing countries in extending access, improving quality, and enhancing equity in learning systems for under-served populations through carefully planned applications of digital and broadcasting technologies.

GOALS AND OBJECTIVES

dot-EDU develops and implements learning systems pilots and applications to bring the power of Internet and IT technologies to bear on improving the reach and quality of educational and training systems. In formal, non-formal, and informal settings, dot-EDU applies IT to enhance systems that provide basic education and the institutions that support it, including teacher training colleges, curriculum development centers, and community-based organizations.

APPROACH

dot-EDUundertakes pilots and provides technical assistance and institutional support for the use of IT in learning systems. Through training, technical assistance, knowledge products, and pilot projects, dot-EDU assists USAID Missions in developing and implementing technology-assisted applications related to learning systems consistent with the SOs and results frameworks.

AREAS OF ACTIVITY

Activities demonstrate the potential of the Internet and related IT to increase the reach and quality of basic education programs, teacher training programs, workforce development programs, and higher education programs, including:

- Promoting education leadership through training for administrators and establishing centers of excellence;
- Designing classroom applications for online project-based learning and school-to-school communication;
- Professional development for teachers through virtual teacher training and teacher-to-teacher networking;
- Content development, including multimedia curricula, digital video, and digital production/editing;
- Systems development, including community learning centers, school-to-work centers, and EMIS;
- Creating teacher resource centers that provide Internet, CD-ROM, and desktop publishing capabilities;
- Assistance in networking schools and teachers and developing school-to-school programswithin and between countries to improve educator access to worldwide or regional information exchange and data-gathering programs;
- Developing low-cost, IT-based interventions in countries suffering civil unrest and high impact from HIV/AIDS;
- Establishing centers of excellence for the production of interactive, multi-media instructional materials in national and indigenous languages;
- Developing distance learning programs using CD-ROM, the Internet, and broadcast media for teacher professional development and certification;
- Assisting the introduction of computers into schools as a teaching tool;
- Producing and implementing strategies to increase community access to learning opportunities at school-based IT resource centers; and
- Facilitating developing country participation in distance education opportunities at the higher

DOT-COM ALLIANCE
dot-EDU Activity Matrix

AFR	Contact	Legacy	Status	Follow-up
Angola	Keith Simmons (MD)		Filippo Nardin (Angola Education Assistance Fund/Citizens Energy) to try to meet with Keith Simmons in Luanda next week.	WW
Benin	Carole Boire Georgette Pokou	Leland LL (access)	e-mail sent	SD
DRC	Marty Schulman	IRI	e-mail sent; interest in connecting NGOs	SAT
Eritrea	Carol Horning	Leland		
Ethiopia	Ned Greeley Aberra Makonnen	Leland IRI	e-mail sent (see Sudan); Tom Tilson and WorldSpace	SAT
Ghana	Avril Kudzi Lisa Franchette Greg Witala	Leland LL (access) IED, EDDI	e-mail sent	SD
Guinea	Natasha deMarcken	Leland IRI	e-mail sent; interest in programs on teacher shortages; consider other SOs i.e., natural resources	
Kenya			Interest in rural access	
Lesotho				
Madagascar	Steve Haykin	Leland EDDI	e-mail sent	SAT
Malawi	Sarah Wright Namal Perera	Leland	Steve Dorsey to e-mail Sarah; Joe Cohen to see if mission interested in Zambia model for HIV/AIDS orphans	SD
Mali	Dennis Bilodeau Jo Lesser	Leland IED	e-mail sent; Jo interested in radio education; Dennis interested in university partnership for TOT and other IT-mediated teacher training; timing issues to be resolved	SAT
Mozambique	Timothy Born	Leland IED, EDDI	Interests in disaster recovery, centralization/decentralization, connectivity to secondary cities; Romi to visit Mission?	Romi
Namibia	Catherine Miles	LL	e-mail sent; IT strategy completed, possible LL follow-on; SD spoke w/ Barbara Keating?	SD
Nigeria	Melinda Taylor Ravinder Aulakh	IRI, EDDI Leland	e-mail sent to Melinda (a TAACS); $100M program; Intel a player	SAT
Rwanda		Leland, EDDI	Looking for appropriate contact; BBacon visiting soon for dot-ORG	
Senegal	Patrick Fine (Dep)	Leland IED, EDDI	e-mail sent	SAT
Sierra Leone				
Somalia			Looking for appropriate contact; perhaps Ned Greeley?	
South Africa	Don Foster-Gross FSNs	Leland IED, EDDI	e-mail sent; conf call w/ ML and Romi to Don F-G; Intel has programs; Romi to visit?	AB
Sudan	Ned Greeley		Ned investigating radio and distance learning for use in conflict-ridden areas; new RFA for education	SD

Last printed 22/11/01 10:47

Swaziland				
Tanzania				
Uganda	Sarah Mayanja David Bruns	Leland LL ('til 3/03) IED	e-mail sent; interest in virtual secondary school pilot	WW
Zambia	Kent Noel	Leland IRI, EDDI	e-mail sent; interest in teacher training, HIV/AIDS	SAT
REDSO/ESA	Gerry Cashion			
RCSA	Patrick Fleuret (MD)	Leland	e-mail sent	AM

LAC	Contact	Legacy	Status	Follow-up
Bolivia	Jorge Velasco	IRI ECD, math, health	Looking to verify appropriate contact—Andi?	AB
Brazil	Janice Weber (MD) Nina Lentini	LL	Romi spoke w/ Janice Weber (MD) & Nina Lentini (esp. GDA); expecting call back. Eric Rusten had briefed mission on dot-ORG	Romi
Dom. Republic	Elena Brineman (MD) Neici Zeller	Luis Rodriguez	e-mail sent	SAT
Ecuador		LL (access)	Looking for appropriate contact	
El Salvador	Todd Sorenson		Looking to verify appropriate contact—Andi?	AB
Guatemala	Julia Richards	LL IED	e-mail sent; Julia wants a LL follow-on ASAP, program description possibly to be completed via e-mail	SD
Guyana		IED	Looking for appropriate contact	
Haiti	Elzadia Washington	LL (access) IED	e-mail sent	SD
Honduras	Diane Leach John Helwig	IEQ2	e-mail sent referring to earlier contact from Steve Anzalone; interests in virtual HS, Center for Excellence; reply of thanks received—no immediate interest expressed	SAT
Jamaica	Terrence Tiffany	LL IED	Looking for appropriate contact	
Nicaragua	Danielle Roziewski		e-mail sent; reply of thanks received—no immediate interest expressed	SAT
Panama	Leo Garza (MD)		e-mail sent	AM
Paraguay		LL (access)	Looking for appropriate contact	
Peru	Walter Twanama		Andi spoken with Walter; focused on primary ed; Peruvian government forming IT unit	AB

ANE	Contact	Legacy	Status	Follow-up
Bangladesh		IED	Looking for appropriate contact	
Cambodia			Looking for appropriate contact	
Egypt	Michelle Ward-Brent	IED LL	e-mail sent; reply of thanks received—no immediate interest expressed	SAT
India	Madhumita Gupta	IED	No action yet taken	AM
Indonesia		IED	Looking for appropriate contact	
Jordan		IED	Looking for appropriate contact	
Lebanon	Jon Breslar (MD)		e-mail sent	AM
Morocco	Jim Bednar (MD) Monique Bidaoui	LL IED	e-mail sent; mission unlikely to tap dot-EDU	AM
Nepal			Looking for appropriate contact	
Viet Nam	Marc Rasmuson (Rep)		e-mails sent; possibility of work in HIV/AIDS, women in IT, teacher training with private sector (Intel) involvement	AB
WB/Gaza			Looking for appropriate contact	

E&E	Contact	Legacy	Status	Follow-up
Bulgaria	Nora Ovcharova	IED	No action yet taken	
Poland			Looking for appropriate contact—Romi?	
Romania	Corina Mararu	IED	No action yet taken	

Romi=Alex
SD=Steve Dorsey
WW=Bill Wright
AB=Andi Bosch
AM=Tony Meyer
SAT=Stephen Tournas

Appendix 3

3.1. Draft proposal for Guatemala

3.2. Draft proposal for Mali

3.3. Drafts of concept paper and possible proposal for Pakistan

Proyecto "Enlace Quiché"
dot-EDU
February 2002 – January 2004

About the DOT-COM Alliance and dot-EDU

USAID, through the DOT-COM Alliance, will increase digital opportunities for developing nations bringing the potential for information and communications technologies (ICTs) to transform the way people live, learn, and work. Nations that harness these technologies can look forward to expanded economic growth, improved human welfare, and stronger democratic governance.

Three cooperative agreements have been put in place to help USAID missions use information technologies to achieve their objectives: one award for policy (dot-GOV), one for access (dot-ORG), and one for education and learning systems (dot-EDU). Education Development Center, Inc. (EDC) is the award recipient for the cooperative agreement that helps with IT and learning systems. A number of resource partners, including the Academy for Educational Development (AED), bring enormous talent to this alliance. Our partners include those with substantial experience at using information technology to improve learning systems. See http://www.usaid.gov/info_technology/dotcom/ for more background on the initiative and the capabilities of the partners. We also list the core partners and describe their capabilities at the end of this document.

Background and Summary

The dot-EDU activity proposed for Guatemala will build on a LearnLink project started in 1996. In Guatemala, LearnLink is using IT tools to improve the knowledge and teaching of Mayan languages, and is preparing future teachers in the Quiché region of Guatemala to teach in the local languages of K'iche' and Ixil. The project strengthens both the student teachers' Mayan language skills and their computer skills. Four teacher-training high schools in El Quiché now house educational technology centers where students participate in a pre-service education program. Each center has up to 12 computers with software and supporting peripherals (printers, scanners, and a CD writer), as well as a digital camera, TV/VCR, video camera, cassette recorder, and a photocopier. At the centers, the young student teachers learn basic computer literacy, multimedia production, and Mayan language skills. After school hours, the centers are open to in-service teachers and other community members to use the IT tools. Multimedia games on CD have been developed for practice in distinguishing similar sounds in K'iche' and Ixil, and two books have been digitized: Gramatica Pedagogical K'iche' and Escribiendo K'iche'.

Purpose and Objectives

The goal of dot-EDU is to help developing countries strengthen learning systems in order to improve quality, expand access, and enhance equity. This will be carried out through carefully planned applications of digital and broadcasting technologies.

Proyecto "Enlace Quiché"

dot-EDU: Guatemala

February 2002 – July 2003

About the DOT-COM Alliance and dot-EDU

USAID, through the DOT-COM Alliance, will provide digital opportunity for developing nations bringing the potential for information and communication technology (ICT) to transform the way people live, learn, and work. Nations that harness these technologies can look forward to expanded economic growth, improved human welfare, and stronger democratic governance.

Three cooperative agreements have been put in place to help USAID missions use ICT to achieve their objectives: one award for policy (dot-GOV), one for access (dot-ORG), and one for education and learning systems (dot-EDU). Education Development Center, Inc. (EDC) is the award recipient for the cooperative agreement that focuses on applications of ICT for learning systems. A number of resource partners, including the Academy for Educational Development (AED), bring enormous talent to this alliance. Our partners include those with substantial experience at using information technology to improve learning systems. See http://www.usaid.gov/info_technology/dotcom/ for more background on the initiative and the capabilities of the partners. We also list the core partners and describe their capabilities at the end of this document.

Background and Summary

The dot-EDU activity proposed for Guatemala will build on the activities of the LearnLink project. Since early 2000, LearnLink has been using ICT tools to improve the knowledge and teaching of Mayan languages, and is preparing future teachers in the Quiché region of Guatemala to teach in the local languages of K'iche' and Ixil. The project strengthens both the student teachers' Mayan language skills and their computer skills. Four teacher-training high schools in El Quiché now house educational technology centers where students participate in a pre-service education program. Each center has 12 or more computers with software and supporting peripherals (printers, scanners, and a CD writer), as well as a digital camera, TV/VCR, video camera, cassette recorder, and a photocopier. At the centers, the young student teachers learn basic computer literacy, multimedia production, and Mayan language skills. Outside of school hours, the centers are open to in-service teachers and other community members to use the ICT tools. Multimedia games on CD have been developed for practice in distinguishing similar sounds in K'iche' and Ixil, a Mayan clip-art CD has been produced, and Mayan grammar books have been digitized.

Purpose and Objectives

The goal of dot-EDU is to help developing countries strengthen learning systems in order to improve quality, expand access, and enhance equity. This will be carried out through carefully planned applications of digital and broadcasting technologies.

The purpose of the activities:

- To provide training and technical assistance that will support USAID Missions. We will help them develop and implement technology-assisted applications, which are related to learning systems. This, of course, must be consistent with the Mission's strategic objectives and results frameworks.

- To conduct pilot projects and prepare knowledge products. These activities will result in an improved understanding, strategic planning, and implementation of technology-assisted educational applications in developing countries.

The single most important action is to align technology investments with explicit goals for achieving improved performance on key teaching and learning indicators. Guatemala is at the point of implementing systemic programs of technology-introduction into schools. Direct leadership development and management is required to ensure that these efforts are not ends unto themselves. Enthusiasm over ICT in schools must be tempered with strategic and an experience-based review of the educational context into which ICT will be introduced and the goals which it supports. It is imperative to remember that the benefits derived from these tools are not inherent in the tools themselves but rather in how they are used.

Specific Activities for dot-EDU in Guatemala

Parameters:

- Funding: $900,000.00

- Timeframe: February 2002 through July, 2003 (18 months)

Result 1: Improved access to bilingual education technology centers for bilingual educators, students, parents, and the community at large throughout El Quiché and neighboring areas.

- LearnLink has created four technology centers in El Quiche. Under dot-EDU we propose to create up to five new bilingual education technology centers in and around El Quiché through which we expect to expand the reach and relevance of the materials piloted under LearnLink. The new centers would be installed in teacher training (normal) schools, as in the existing four, in addition to other community/education institutions such as applied teaching schools, primary schools, municipalities, NGOs, etc. This will be accomplished by creating a set of selection criteria and a process followed by visits and selection. Selection criteria will include: potential for the greatest impact on the largest number of people, use for educational material creation, use for bilingual material production, use by students and teachers, community access, existing computer equipment and sustainability strategy. For each center, an appropriate in-kind contribution from the host institution will be negotiated, including building, electrical installations, and furniture. Each institution interested in receiving support from Enlace Quiché

will prepare a proposal showing the equipment and support they need and how they will use it. From these proposals, the best will be selected according to the resources available. Enlace Quiché will purchase and install the equipment (which could vary from a few multimedia accessories to a full center) and provide initial training for center personnel. Training will include topics such as designing materials that most effectively meet educational and cultural goals, equipment and network installation, maintenance, and management; structuring training sessions in software for end-users; developing effective community outreach campaigns, and guidelines for long-term sustainability possibilities.

- Enlace Quiché will provide ongoing technical support for up to 10 centers (5 current including Ixcan + 5 additional). The center managers will be recruited and hired by the host institutions. Enlace Quiché will assist the institutions in this process, as well as provide training in how to builds self-sustainability. Other forms of assistance provided by Enlace Quiché could include: limited monthly subsidy for expendable supplies (paper, toner, etc.); periodic equipment purchases (accessories, books, CDs, videos, etc.); continued integration of technology and Mayan language/culture into curriculum (organization of materials creation projects); development of relevant virtual communities in centers with Internet connectivity; development of an Intranet; training sessions for center personnel (center manager, computer instructor, other teachers); supervision of centers' functioning. A key element of this support will be building the centers' capacity for community access and sustainability strategies. Strategies could include public-private partnerships, fee-for-service structures for community access, issuing vouchers to target groups that might not otherwise take advantage of community access options.

- Internet connectivity will be provided to the 10 centers where costs permit. Enlace Quiché will pay for installation costs and provide basic training. Enlace will also provide a limited subsidy for Internet monthly costs during the first few months of use. However, before installing Internet, the center must show capacity to pay the recurrent costs.

Result 2: Increased impact of digital technologies on educational systems

Result 2.1. Increased usefulness of materials created under LearnLink

- With help from dot-EDU partners, we will formatively evaluate and revise materials that children and teachers have created so far for primary literacy programs so that they will be optimally useful to schools and teachers throughout the region. The constructivist (learn-by-doing) approach to education that was incorporated in the LearnLink phase of this project has allowed students to become creators – not consumers – of information. They have done research on their own communities and cultures and produced materials that others can use. This is an "active-learning" approach that helps them learn because what they are doing has purpose and meaning. Furthermore, they have learned to use the tools of the information age. In the upcoming dot-EDU phase of the project, this can be taken a step further. The materials they developed – with some reworking on the basis of formative evaluation and with the addition of teachers' activities – can become a part of the teacher-training curriculum and can be added to the bilingual reading materials used in the primary school classrooms. Experts can help

shape materials so that they are consistently at the right reading level, meet educational goals of the Ministry of Education, and are useful in the teacher-training centers, as well as classrooms. This (in conjunction with Result 5) will allow the dot-EDU project to strengthen teacher preparedness in bilingual education methodologies.

Result 2.2. Increased capacity to create new materials

- Enlace Quiché will form partnerships with relevant institutions to teach and coordinate the creation of Mayan language/culture educational materials in digital format. Possible partners include: URL Linguistic Institute, DIGEBI, ALMG, OKMA, Cholsamaj, etc. These partnerships will be structured so as to ensure the long-term sustainability of the materials creations projects begun by Enlace Quiché: Mayan language learning methodologies, digitizing books, creating interactive learning games, building up the Mayan language vocabulary database, developing a spell-check unit, creating a Mayan clip-art CD, developing a computer training manual within Mayan cultural context, developing multimedia children's books, etc. Once the formal partnerships are formed, strategic plans will be developed in collaboration with each partner, outlining specific projects to be undertaken and support provided by Enlace Quiché in the form of equipment, training sessions, etc. These plans will include sustainability strategies that will permit the institutions to continue creating digital materials, even after the end of Enlace Quiché.

Result 2.3. Improved materials for early childhood education

- Students have also developed early childhood materials in the form of audio stories for young children. However, a complete methodology for designing and developing early childhood audio-led strategies has been developed in Spanish, Quechua and Aymara under USAID-funded projects, and this methodology could be quickly and easily adapted so that it incorporates the LearnLink materials. With a few days of training, this would allow them to be immediately useful to caregivers and pre-schools in El Quiché. In this way, the students will not only have the satisfaction of having developed the materials, but will see them purposefully and successfully used by the wider community.

Result 2.4. A network of teacher training centers that allows teachers to learn from each other, as well as from experts

- With help from dot-EDU partners, set up a network of teacher training centers. Since the early 1980s, teacher networks have evolved – ones that allow for continued professional development and professional support. In some cases rather inexpensive e-mail "list server" tools, when used with properly-trained moderators, can produce better results than expensive video-conferencing equipment. A community of learners can emerge. With help from experts (including those who evaluated the World Bank's school network and other such programs) those at the teacher training centers can communicate with each other and with experts from outside of Guatemala. Dot-EDU experts can also help set up a network of classroom or community center teachers and assist in the training of moderators. The network set up and support will include periodic

face-to-face meetings and workshops.

Result 2.5. Increased institutional capacity in the education sector to use ICT efficiently

- Enlace Quiché will provide technical support to the local education sector, improving the efficiency of their work and fostering their understanding of the benefits of ICT in the education system. This will be accomplished through consultations with local education offices about their processes, and an analysis of how ICT may enhance their efficiency. Dot-EDU may provide basic equipment (e.g., one computer and printer for up to five municipalities' education supervision offices (CTA), and dial-up Internet connectivity where possible). This support will be provided in municipalities where local systems demonstrate a willingness to adapt their processes to its constructive use, are open to providing staff for training, and guarantee long-term technical support and purchase of toner, paper and other supplies to ensure the continued use of this equipment.

Result 3: Human capacity development improved throughout El Quiché and neighboring regions, building a cadre of education technology specialists and technically-knowledgeable professionals.

- With logistical support from Enlace Quiché, short-term training sessions will be offered via INTECAP or similar institutions in the centers to the community at large. This will help bolster the technical knowledge of the Quiché community and provide them with critical professional skills. Training topics could include: computer repair and software installation; graphic design and desktop publishing; advanced software application use; video and photography techniques; journalism, investigative research techniques, educational materials creation, etc.

Result 4: Inclusion of Education Technology in national education policies and curriculum of local teacher-training schools.

- The project will work with Education Ministry entities such as SIMAC/DICADE and Innovación Educativa to legalize a teacher-training curriculum that would lead to a title such as "Bilingual Rural Teacher with orientation in Educational Technology."

- The project will work with technology-equipped bilingual teacher-training schools to integrate technology in the official curriculum so that the students will graduate as "Bilingual Rural Teacher with orientation in Educational Technology."

Result 5: Improved gender equity.

- dot-EDU's gender in technology specialist will help the project set up indicators that will measure the number of girls who learn ICT skills. If these indicators are set up in advance it is more likely that there will be an increase in the number of girls taking part in ICT activities (that tend to be dominated by boys). This will help the mission with its objective of implementing educational strategies that enhance gender and cultural pluralism.

Result 6: Research and information dissemination, providing lessons learned, results, and outcomes on Enlace Quiché's efforts in bilingual education technology integration to the Guatemalan education sector on a national level, as well as informing USAID worldwide.

- Enlace Quiché will conduct an evaluation of student and teacher improvement in Mayan language literacy and cultural sensitivity as a result of its efforts in the bilingual education technology centers through the use of a pre- and post-test survey instrument. Data obtained from the survey will be compiled, analyzed, and reported to the education sector at large. This activity will be carried out with a carefully selected partner, such as DIGEBI or MEDIR.

- Enlace Quiché will continue to share its knowledge, experience, and lessons learned by expanding and promoting the project web site (www.enlacequiche.org.gt) and developing a comprehensive lessons learned report that, in addition to text, will include a multimedia CD-ROM.

- Project personnel and key stakeholders will participate in conferences and other events, nationally and internationally, in which project materials and lessons learned can be shared.

Result 7: A well-administered and well-documented project.

- Enlace Quiché will use a logical framework planning system, involving project staff and key partners in the planning process.

- Enlace Quiché will implement a formal process of internal and external monitoring and evaluation. This will include systematic documentation of actions and impacts, which will provide the basis for quarterly reports, and project final report.

Capabilities of Partners

EDC

The Education Development Center (EDC), a not-for-profit institution established in 1958, leads a partnership of institutions that provide all of the capacities that will be needed to implement dot-EDU with vision and efficiency. EDC has assisted developing countries since 1962 when it implemented the Africa Primary Science and Africa Primary Mathematics projects, and has twice led large consortia in the management of international learning technology projects for USAID's Global Bureau.

EDC is an experienced and successful manager of large international projects that provide technology services to education in developing countries. EDC implemented the Radio Learning Project and its successor, the Learning Technologies for Basic Education project from 1985-1995, heading a large consortium that, like dot-EDU, included the Academy for Educational Development as a major partner and worked in more than twenty countries. EDC has also worked on major

bilateral education projects using technology in a central role: in Papua New Guinea we implemented the Radio Science Project that looked at ways to teach discovery-based science on the radio, demanding a radical methodological departure from the earlier use of radio instruction in mathematics and language. EDC has continued this path of breaking the mold in its international work: in Bolivia, Costa Rica, Guinea, Nigeria and Haiti, for example, we developed a strategy that integrates technology into mainstream classroom instruction and teacher training strategies, and in Zambia, Ethiopia and Honduras EDC is are using technology in a central role to deliver instruction in community learning centers where there are no trained teachers or classrooms. Yet another blend and strategy for technology is being used in Nepal for in-service teacher training.

EDC is recognized as national leader in both innovation and practice, applying digital technologies to teacher training, the professional development of educational leaders, the design of new curriculum content, classroom learning, community learning centers, and evaluating the work of others also working in this field.

AED

The Academy for Educational Development (AED) is a private, nonprofit service organization with 1000 employees and 40 years of experience in development assistance. At present, AED is conducting 49 long-term projects in 33 countries. Short-term technical assistance is provided to some 60 countries each year.

AED has been designing applied ICT projects throughout the world for a variety of development Global Communications and Learning Systems (LearnLink) tasks through the USAID-funded project. This seven-year activity was designed to increase the impact of information, education, and communication technologies within learning systems. With support from USAID Missions, Bureaus, and Offices, and in collaboration with in-country public and private institutions, LearnLink has been implementing activities to link individuals, groups, and organizations, improve their capacity to access resources, and meet learning needs. Concurrently, LearnLink gathers lessons from these experiences and informs USAID of best ICT practices.

Core Partners under dot-EDU

EDC's core partners in dot-EDU are: Academy for Educational Development, the Concord Consortium, and three universities which have been active internationally in applying technologies to education: Howard University, Michigan State University, and Prince George's County Community College.

Also at the core are four private sector, for-profit organizations active in establishing projects and capacities in many USAID-supported countries as well as in richer countries: IBM, Intel, Sun Microsystems and ThinkQuest.

Our wider group of resource institutions includes many with specific niches: the Massachusetts Institute for Technology's Media Lab for its work with centers of excellence; the International

Literacy Institute and World Education for their focus on technology for literacy, community-based learning and adult education; WorldLinks, the Council For Basic Education and I*Earn for their work in classroom applications and in connecting schools digitally; technology focused organizations like EarthWalk Communications and the World Computer Exchange, which provide hardware and systems solutions in developing countries; Real World Productions, Media Bridge, and World As a Classroom, all minority-owned companies that specialize in multimedia production for classrooms; the University of Pittsburgh for its work in providing online resources to countries recovering from conflict; and WorldSpace for its capacity to reach teachers and learners via satellite radio.

Estimated Level of Effort Over 18-month Period

Position	*Number of persons*	*Days per person*	*Total days*
EDC staff (home and in Guatemala)	4	15	60
AED Home Office Financial Manager	1	14	14
AED Home Office Coordinator	1	169	169
Project Director (AED employee)	1	338	338
International Consultants	2	20	40
Center Coordinator (local hire)	1	345	345
Center Administration Assistant (local hire)	1	323	323
Curriculum Specialist (local hire)	1	345	345
Curriculum Assistant (local hire)	1	323	323
Materials Creation Specialist (local hire)	1	345	345
Computer Training/Technical Assistant (local hire)	2	323	646
Administrative Assistant (local hire)	1	390	390
Bilingual Secretary/Receptionist (local hire)	1	390	390
Local Consultants (local hire)	5	35	175
Project Interns (local hire)	5	70	350

Partnerships

Under this Cooperative Agreement, the dot-EDU team will work with the following potential international partners, including NGOs, universities, and private-sector entities:

- Education Development Center, Inc. (for training in setting up an effective network of teacher training centers – and for evaluating materials for language instruction)
- Academy for Educational Development for computer-assisted teacher training

Within Guatemala, the project will work with the following potential local partners and projects:

- INTECAP

- URL Linguistic Institute
- DIGEBI
- ALMG
- OKMA
- Cholsamaj
- Municipalities in which Centers are located
- Education Ministry entities such as SIMAC/DICADE and Innovación Educativa
- MEDIR
- iEARN-Guatemala

DRAFT

University of Mali, University-to-University Partnership Project. dot-EDU: January 2002 – September 2003 (VERSION #5).

1. BACKGROUND AND CONTEXT

1.1. Background on the University of Mali

As part of its Special Objective Information & Communications (InfoComm) of "Improved access to, and facilitated use of information", USAID Mali is providing the University of Mali with an Internet-enabled computer network. The connection of the University of Mali is being undertaken in three phases: Phase I consisted of the supply and installation of equipment for the wireless connection of each University department. Phase II is for the supply and installation of computers, printers and associated peripherals in an Ethernet network configuration in three facilities (one for teachers and researchers, one for students, and one secured room for the servers at each department). Phase III is devoted to training for network administrators and managers, trainers and users. This grant is part of Phase III.

The University of Mali was created in 1996 as an effort to bring together under one administrative structure a number of formerly-separate schools of higher learning. It consists of 11 institutions, including the Rectorate, scattered within 1-5 km from each other around the capital city of Bamako, as listed below (the French names and acronyms are shown in italics):

- Department of Medicine, Pharmacology and Dentistry – *Faculté de Médecine, Pharmacie et Odonto-Stomatologie (FMPOS)*
- Department of Science and Technology - *Faculté des Sciences et Techniques (FAST)*
- Department of Liberal Arts and Social Sciences - *Faculté des Lettres, des Arts et des Sciences Humaines(FLASH)*
- School of Engineering – *Ecole Nationale d'Ingénieurs (ENI)*
- Department of Education – *Ecole Normale Supérieure (ENSUP)*
- Department of Law and Economics – *Faculté des Sciences Juridiques et Econonomiques (FSJE)*
- School of Public Administration – *Ecole Nationale d'Admininistration (ENA)*
- Department of Business Management – *Institut Universitaire de Gestion (IUG)*
- Rural Polytechnical Institute – *Institut Polytechnique Rural (IPR),* located about 60 km from Bamako, with an Annex in Bamako
- Institute of Higher Training & Applied Research – *Institut Supérieur de Formation et de Recherche Appliquée (ISFRA)*
- Rectorate
- National Center for Scientific and Technological Research – *Centre National de Recherche Scientifique et Technologique (CNRST)*, which is not part of the University but was included in this project to provide an internet gateway to researchers.

1.2. The Context for the Project

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To implement the University of Mali Connection to the Internet program, two committees have been created: a Steering Committee, which is chaired by the Rector of the University and includes one senior representative of each department, is the decision-making body. A Technical Committee, which also includes a representative of each department, oversees all technical aspects of the project, including user name and domain sub-names assignments, user access assignments, user directory allocations, configuration issues, etc. The University Wide Area Network (WAN) is managed by two administrators who have just completed a Windows 2000 training course and are now following the network installation and configuration. In each institution, two Local Area Network (LAN) managers (who also completed a Windows 2000 training course) are responsible for the operation of the network. They will follow the network installation and configuration in their respective department.

Phase II is presently under way and each department will shortly have an internet access room for teachers and one for students, in addition to a room for servers, only accessible to the system managers. Under this Phase, 240 PC's are distributed among the 11 University institutions, according to the number of teachers and students in each institution as follows:

Institution	# of teachers	# of PC's in teachers' room	# of students	# of PC's in students' room
Department of Medicine, Pharmacology and Dentistry (FMPOS)	105	5	2927	30
Department of Science and Technology (FAST)	47	4	1900	25
Department of Liberal Arts and Social Sciences (FLASH)	54	4	3918	35
School of Engineering (ENI)	73	4	736	22
Department of Education (ENSUP)	83	4	728	10
Department of Law and Economics (FSJE) & School of Public Administration (ENA)	45	4	6595	35
Department of Business Management (IUG)	29	3	912	16
Rural Polytechnical Institute (IPR)	85	5	900	20
Institute of Higher Training & Applied Research (ISFRA) & National Center for Scientific and Technological Research (CNRST)	13	3	66	7
Rectorate	40	4	0	0
TOTAL	574	40	18,682	200

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This procurement action is part of Phase III and will provide assistance to the University of Mali through a University-to-University partnership.

As the University of Mali is the only public University in the country, it does not have any exposure to the use of information technology (IT) in an academic environment. Given the experience of U.S. Universities in this field, a University-to-University partnership will allow the Malian institution to accelerate the appropriation of IT and better prepare Mali, one of the least developed country in the world, to better integrate the information age. Mali University will benefit from the U.S. comparative advantage in terms of IT applications and the U.S. University (ies) will benefit from an exposure to the challenges of information technology in a developing country. Exchange and internship programs could be developed in both ways.

Mali has had a full internet connection since 1997, funded under the USAID Leland Initiative and USAID Mali Special Objective for Information and Communications. Since that time, the IT private and associative sectors have grown. Although local firms or associations would not be able to conduct all the activities envisioned under this grant, local resources exist in Mali, particularly for computer maintenance and training. The proposed project will use these local resources, when appropriate, in order to strengthen their capacity and provide a wide and cost-efficient training program.

In order to ensure sustainability of this program, the dot-EDU partner institutions and their consultants will transfer their skills to internet user groups that are to be created or strengthened. Some student internet clubs already exist in a number of departments and could serve as a basis or an example for conducting activities.

The project will, in all specific task areas, pay particular attention to issues of gender equity. Culturally relevant factors that may impact equity of access or full participation will be taken into consideration in the design and delivery of training programs and materials. Every effort will be made to encourage and support both sexes equally in the training sessions and user groups. The design and implementation of pilot projects will seek to create technology-based solutions that may help top overcome or diminish existing inequities.

2. SUMMARY OF THE PROPOSED PROJECT

The goal of dot-EDU is to help developing countries strengthen learning systems in order to improve quality, expand access, and enhance equity. This will be carried out through carefully planned training, supervision, technical assistance and project management interventions, focused on the use of the technological infrastructure that is being implemented and utilizing that same technological infrastructure as a key instrument in the training, control and management systems to be implemented.

2.1. Goals of the Project

The proposed project will provide training and technical assistance that will support the University of Mali staff and students in the effective utilization of the IT infrastructure that has been and is being installed as a result of the InfoComm project, the Leland Initiative and other

implementation activities previously supported by USAID. The program will aim at enhancing the capacity of the University of Mali to effectively manage and provide reliable information technology services to the faculty members, researchers and students. The principal goals of the project are to provide:

- Technical and organizational support to the WAN administrators and LAN managers
- Internet training for users
- Internet training of trainers
- Training in web page development
- Training in integrating IT into academic curricula
- Support to user groups

The program will be tailored to the University of Mali specific needs, in terms of scheduling and location of courses, conditions for access to internet rooms, enrolling of participants, etc. The dot-EDU consultants and training staff will work closely with the WAN administrators and the Project Coordinator who will be the principal counterparts at the University.

2.2. Principal Actions

The project will pursue the achievement of these goals by means of the following actions:

- To provide ongoing technical support and assistance to IT network managers and technicians in the day-to-day operation and maintenance of the University IT network.

- To provide ongoing technical and pedagogical assistance to students and faculty in all departments who will be setting up and using online discussion and collaborative work environments to act as performance improvement tools in the day-to-day departmental work related to teaching/learning, administration and research.

- To develop the knowledge and skills of selected faculty members from selected academic departments in the area of distance education and e-learning, in order to enable them to utilize the available IT infrastructure as an effective teaching and learning tool, developing online versions of selected course units, implementing online learning activities in regular on-campus courses, developing WebQuests and other forms of student-driven collaborative web-based learning, etc.

The single most important action is to ensure that the technology investments that have been made are used effectively for achieving improved performance on key teaching and learning indicators. Enthusiasm over IT for its own sake, or as a subject of study in the university, must be balanced by the use of IT as a means for achieving the end-goals of the University and its several departments. This balance will be achieved through an experience-based review of the educational contexts into which IT will be introduced in specific academic departments and the departmental goals which IT is expected to support. It is imperative to remember that the benefits derived from these tools are not inherent in the tools themselves but rather in when, where and how they are used. Therefore, an important extra (enabling) activity of the proposed

technical assistance will be to analyze, in the initial stages of the project, the relative potential benefits that IT interventions may bring to each of the academic departments. This will lead to the selection of specific departments for the implementation of pilot IT-for-education projects and the overall design of these projects. As the mainstream training activities of end-users and trainers proceed, a second enabling activity will involve the selection of specific faculty members from the departments previously identified as bases for pilot projects. Finally, as the project proceeds into the final stages of faculty development, a third enabling activity will be the monitoring and evaluation of the pilot projects to be developed by the selected faculty members as part of their training and implemented by these same faculty members in the selected academic departments.

Other important actions will focus on the expansion of outreach programs and services to the broader community who would benefit from participation in university extra-mural programming services. These outreach actions will utilize the university IT infrastructure being installed, in combination with other existing communication infrastructure such as digital radio transmission. Involvement in the development of outreach programs and services will not only increase the contribution of the University of Mali to the broader community, but will also serve as an opportunity for University faculty and students to obtain practical experience in the use of Information and Communication Technologies in support of learning and teaching at a distance as in conventional campus-based courses.

3. THE PROPOSED dot-EDU PARTNERS

3.1. About the DOT-COM Alliance and dot-EDU

USAID, through the DOT-COM Alliance, will provide digital opportunity for developing nations bringing the potential for information and communication technology (ICT) to transform the way people live, learn, and work. Nations that harness these technologies can look forward to expanded economic growth, improved human welfare, and stronger democratic governance.

Three cooperative agreements have been put in place to help USAID missions use ICT to achieve their objectives: one award for policy (dot-GOV), one for access (dot-ORG), and one for education and learning systems (dot-EDU).

The Education Development Center, Inc. (EDC) is the award recipient for the cooperative agreement that helps with ICT and learning systems. A number of resource partners, including the Academy for Educational Development (AED), bring enormous talent to this alliance. Our partners include those with substantial experience at using information technology to improve learning systems.

See http://www.usaid.gov/info_technology/dotcom/ for more background on the initiative and the capabilities of the partners. In the paragraphs that follow, we list the principal dot-EDU core partners and their capabilities. In the following subsection, we present more detail on the partner institutions that are proposed for this project and describe their capabilities and strengths as they apply to the goals outlined above and the specific project activities presented later in this document.

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The Education Development Center (EDC), a not-for-profit institution established in 1958, leads a partnership of institutions that provide all of the capacities that will be needed to implement dot-EDU with vision and efficiency. EDC has assisted developing countries since 1962 when it implemented the Africa Primary Science and Africa Primary Mathematics projects, and has twice led large consortia in the management of international learning technology projects for USAID's Global Bureau.

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3.2. Partnerships for this Project

Under this Cooperative Agreement, the dot-EDU team will work with the following potential international partners, including NGOs, universities, and private-sector entities:

- Education Development Center, Inc. (for overall project planning and management and for specialized training in setting up effective university-based IT-for-education projects, design and development of online courses, etc.);
- Academy for Educational Development for computer-assisted teacher training in selected IT end-user skills;
- Michigan State University, MATRIX Center for the Humane Arts, Letters and Social Sciences Online and the African Studies Center for onsite training and technical support related to all the eight areas of project activity and especially to the achievement of Results 1, 2, 3, 4 and 6.
- Howard University (Graduate School. Medical School, other units);
- Prince George's Community College;
- WorldSpace Foundation.

Within Mali, the project will work with the following potential local partners and projects:

- Steering Committee and Technology Committee of the University of Mali;
- Technical and other specialist staff already employed at the University of Mali;
- UCAD, Senegal – a relatively "local" institution that Michigan State University has successfully used as a source of Francophone network engineers and maintenance specialists ;
- Other institutions to be identified, including private sector IT firms who can provide training and ensure sustainability.

3.3. Areas of Contribution of each of the Partners.

Michigan State University

Michigan State University through MATRIX: The Center for the Humane Arts, Letters, and Social Sciences OnLine and its African Studies Center has over five years of experience in linkage programs with West and Southern African universities to develop IT capacity for academic purposes. These collaborations have involved workshops both in the US and in a range of African countries, on-going technical assistance, bi-national and bi-lingual user groups, and on-going collaborations in the development of digital content in English, French, and African languages. Additionally, MSU has a robust relationship with the University of Mali around agricultural issues and a strong commitment to assisting in the nation's development. President Konare was awarded an honorary degree by MSU in 2000, and MSU's President, Peter McPherson, just completed a visit to Mali to renew the university's pledge to broaden our engagement in collaborative projects.

As a leader in developing the Internet in the Midwest and one of the first American universities to be fully wired, MSU has extensive experience in network management on the university level and in the development of local area networks within university systems. MSU also supports user access to the Internet for a wide-range of centers and organizations off campus, including independent school districts spread throughout the state of Michigan. MSU is already sharing this expertise in an ongoing collaborative program with l'Universite Cheikh anta Diop (UCAD) in Dakar. MSU is working to assist in the development of UCAD's campus network and is advising on all aspects of network policy including daily management, backups, maintenance, replacement strategies, and user services.

MSU also has extensive experience in providing introductory Internet training that focuses on the needs and interests of university faculty and advanced students. Our training programs are geared towards a university cliental, but are customizable for specific faculties. We provide trainers and training material in English and French as well as ongoing support through email help lists and a web-based bulletin board.

MSU's approach to IT work with African universities focuses squarely on "training the trainers." We provide training material for training, and provide them with content that they can use in their own departments. On-going support is available through user groups, email and chat-based help-lines, and a web-based bulletin board.

IT research and training centers at MSU have conducted workshops throughout the world on the development of academic web pages. At present, MATRIX hosts and/or mirrors sites for nearly one hundred international scholarly societies and has trained web masters for universities in Senegal, Ghana, Nigeria, South Africa, and Zambia. We have experience conducting training in both French and English, and host websites in both languages as well as German, and Japanese. MATRIX also hosts and supports bilingual sites.

MSU has taken a cautious approach to on-line learning. Most of our attention has been focused on using IT to enhance existing classes, although we are now developing virtual university

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courses as well. While we have the capacity to work with faculty across the University of Mali in utilizing IT in their classes, we have particular experience and interest in partnerships with the faculty in the Liberal Arts, Social Sciences, Natural Sciences, Agriculture, and Education. Under this project, MSU will make available to the University of Mali online courses and course material developed and utilized at MSU for translation to French and local modification and adaptation.

As a land-grant university, outreach is a central component in MSU's mission. We are currently running a project in South Africa that illustrates how universities can use their IT capacity to establish better links to their communities. We would be interested in incorporating an outreach component in this project at the University of Mali. We are committed to using IT to serve the entire population. Thus, much of our IT training work in West Africa over the past two years has focused on women and women's organizations. In this project, we would draw upon on our experience in designing training materials that reach women as well as men, and feel strongly that involving Malian women and their organizations in this training will have a strong and lasting benefit both for the participants

Howard University

The mission of Howard University as a comprehensive, research-oriented, predominantly African-American university is to provide an educational experience of exceptional quality at reasonable cost to students of high academic potential. Particular emphasis is placed upon providing educational opportunities for African-American men and women and for other historically disenfranchised groups.

Howard University has an ongoing relationship with over sixty African universities through its project entitled "Collaborative Africa-America Graduate Schools." This program, funded by the United States Agency for International Development through the Association Liaison Office, has under development bilateral or multilateral advanced degree programs involving over thirty United States universities and African universities in twenty-four countries. Through past performances and present expertise Howard University is capable of providing project management personnel, technical network personnel, faculty and graduate assistants for this project.

The principal Howard University collaborators for the University of Mali, University-to-University Partnership Project will be Dean Orlando Taylor and Dr. Wayne Patterson. Both Dean Taylor and Dr. Patterson, have extensive experience in post-graduate education of African students, as both have served for the past six years on the Executive Committee of Deans for the USAID ATLAS project (Advanced Training in Leadership and Skills), the successor of the AFGRAD project. In addition, Dr. Patterson is fully bilingual in French and English, and has founded, directed and taught the computer science program for seven years in a French-language university.

Howard University is particularly interested in capacity development at universities internationally. In consequence, through this project, we are willing to explore the possibilities

that credit towards either or both of a Graduate Certificate or a Master's degree could be offered for the learning experiences being offered through this project.

Howard University has developed curriculum outlines for use in faculty development with numerous universities. It has, for example, been prepared for use in Malawi and the Dominican Republic, as well as for a network of MSIs (Minority-Serving Institutions) in the United States. It is based on a series of 12 week-long modules. These modules may be used for graduate credit. Some examples of the modules are Introduction to Educational technology, Online Instruction, Library Information Technology, Ethical and Legal Issues: Privacy Security, Intellectual Property, Website Design and Management, Network, Management and Planning, and Multimedia Approaches. Another project, under the leadership of Provost Don Coleman, a revamping of the engineering curriculum at South African technikons has been carried out with instructional materials developed. This project has been funded by USAID/TELP.

The individuals which have expertise to contribute to this project represent but are not limited to the following academic units, **School of Education, Department of Systems and Computer Science, University Libraries, Information Systems and Services,** Ralph Bunche Center. Howard University established an International Affairs Center in 1993 to serve as a focal point for the University's many and varied international activities and interests. Substantial financial support was provided by the W. K. Kellogg Foundation, which made the Center one of only 10 Kellogg-supported Centers of Excellence in the United States. The mission of the Ralph J. Bunche International Affairs Center is to make available--and to insure the Center's long-term capacity to make available--to Howard University students, faculty and senior administrators, as well as certain constituencies beyond the University, valuable international affairs support, services, information and opportunities, and in so doing to help Howard University produce for America and the global community a never-ending stream of valuable international affairs knowledge, ideas and, especially, individuals fully prepared to make positive contributions to national and international society.

Howard University has for many years had close working relationships with individuals and institutions internationally, with its longest-standing linkages with many countries throughout Africa and the Caribbean. In the past four years, Howard has conducted 17 USAID or Africa-related projects. To give one example, under the leadership of Dean Orlando Taylor and Dr. Wayne Patterson, Howard has conducted a series of forums designed to develop relationships between American and African universities with the objective of their developing joint post baccalaureate degree programs. These symposia, which began last year, have resulted in the participation of 40 American institutions, and 46 African institutions in 21 countries. This project is funded by ALO/USAID. The project has now developed a formal linkage with the Association of African Universities. Furthermore, less than two years after the project's initiation, more than ten collaborative programs have been established between American universities and African universities. Another benefit has been the creation of regional programs involving university partnerships in Africa.

Howard University is particularly well suited for this activity, given its expertise in all of the areas that are necessary for the successful implementation of this project. That is, since the developmental needs at the Université de Mali are not only in the area of technology needs in

education, but also in areas such as online instruction, network development and management, and Internet and World Wide Web usage, the team implementing this project must have a diversity of experience. Howard is able to provide these services, both at the senior and junior levels, in French and onsite at the University of Mali.

Management Systems International, Inc.

Management Systems International, Inc. (MSI) was founded in 1981 with a corporate commitment to improving public sector management and fostering entrepreneurship in the United States and abroad. MSI's goal is to help programs and organizations better serve the public by becoming more productive, accountable, results-oriented and creative. The firm's core expertise is in the fields of policy implementation, institutional development, monitoring and evaluation, and training. MSI has extensive experience applying this expertise to the solution of problems in the fields of democracy and governance, education, small enterprise development, environment and natural resource management. The firm also has special expertise in assisting organizations to incorporate gender considerations into management and development programs.

Underlying all of MSI's technical work are certain values and approaches that MSI has been committed to from the outset. These include:

Specialization: MSI has chosen to grow by diversifying its clients rather than its technical focus. The firm has defined a relatively narrow range of expertise and stuck to doing what it knows best.

Products and Systems: MSI has sought to develop and refine effective products and systems that address a wide range of client needs. Every project is viewed as an opportunity to apply and improve these products and systems, and the firm undertakes projects only when it feels it has something special to contribute.

Professional Collegium: MSI is not a "body shop." The firm is owned by employees and, since the founding of the firm in 1981, 80% of our work has been performed by the same 60 individuals. No professional is sent to the field without first being integrated into the firm.

Sensitivity to Process: It is a basic belief underlying all of MSI's work that each project presents countless opportunities to improve the effectiveness of individuals, groups and institutions. As a firm all of whose principals either come from or have lived for many years in developing countries, MSI approaches the issues of institution-building and empowerment with a conviction that is grounded in the heart as well as the mind.

Management Approach: As a management firm, MSI's focus is on improving performance and achieving results. Seven basic principles guide this approach: focus on objectives before procedures; strive for simplicity; build on what exists; emphasize the use of teams, with team-building as an intended by-product of all consulting efforts; encourage decisions based on evidence and objective feedback; use systematic management tools and common terminology to

force clear and effective communication; and encourage contact with consumers and beneficiaries.

Strategic Planning

The strategic planning and performance measurement techniques MSI has developed, tested and installed seek to combine conceptual rigor and broad participation. MSI's approaches encourage clients to think creatively about their options and about how they can best leverage available resources to produce optimum results. Making frequent use of participatory techniques such as retreats, task teams, surveys and focus groups, these approaches foster pragmatic planning and goal setting by encouraging clients to consider not only organizational mandates but also their institutional capacity, the environments in which their programs must operate, and their potential to reach for excellence in previously unexplored arenas.

MSI works with organizations of all sizes, tailoring the approach to the focus goals and partners. Following are examples of projects undertaken with larger organizations in need of the kind of strategic planning relevant to the scale and scope that the University of Mali will require.

MSI's work with the Federal Mediation and Conciliation Service (FMCS) began with a one-hour briefing on the GPRA's strategic planning and performance measurement requirements in September 1996. FMCS then asked MSI to provide expert guidance to its in-house strategic planning efforts. During 1997, MSI facilitated a series of staff workshops and meetings that helped FMCS define the broad outcomes and impacts expected to flow from its mediation, arbitration and alternative dispute resolution services and from the training provided to private sector firms and federal agencies. As a follow-on to those workshops, MSI assisted the strategic planning team at the FMCS to develop strong and practical performance measures. MSI helped the FMCS focus on the types of information for which it had no existing source and to identify ways of obtaining those kinds of data.

MSI provided a range of consulting assistance to the United Nations Development Programme in connection with the design and implementation of a comprehensive system of Results Based Management. This system, intended to build on lessons learned by other international agencies and national governments, included development of corporate goals and strategic areas of support; an array of situational indicators; procedures for monitoring the outputs and outcomes of individual operating units; systems for performance reporting and accountability; and a roll-out package of training and support materials. Subsequent work with UNDP included assistance in developing performance indicators for the organization's democracy and governance programs and support for the agency's 2001 Development Effectiveness Report.

Performance Measurement

When MSI helps a client develop a performance measurement system for an entire agency, or simply for one of its programs, the firm focuses on each of the steps in the process needed to produce information on program results. The first of these steps involves the identification of

measures, or *performance indicators,* that offer valid and reliable ways of assessing whether specific program or organizational objectives are being achieved. MSI has developed particular expertise helping organizations establish performance indicators that are practical and credible, as well as conceptually appropriate. The firm has led efforts to develop agency-wide performance indicators and data sets in the areas of economic growth and small enterprise development, environment and natural resource management, democracy and governance, humanitarian assistance, post-crisis transition, and management reform.

Data, whether from existing sources or from newly designed surveys or measurement instruments, are essential for the performance measurement process, but the collection of data is not the final step. To be useful to managers, performance data must be analyzed and the implications of that data must be laid out in actionable terms. MSI assists clients at all stages of this process, always with an eye to strengthening their internal capacity to ensure a continuing flow of information useful to a carefully identified array of stakeholders and managers. A key focus has been on developing performance measurement plans that set forth, in outline form, all of the actions that must be taken to ensure that performance information is available on a timely basis.

WorldSpace Foundation

WorldSpace Foundation (WSF) is a US-based 501(c)(3) nonprofit organization committed to the production and delivery of social development and education programs to communities in the developing world that are disadvantaged by poverty, illiteracy, geographical isolation, inadequate infrastructure. The foundation has exclusive access to 5% of the capacity on the geo-stationary satellites of the WorldSpace system. The satellites transmit directly to portable digital receivers equipped with satellite dishes the size of a teacup saucer. In addition to audio signals, the receiver - when connected to the computer by a special adapter - operates like a modem for the transmission of web-based multimedia (text, audio, still and dynamic images) data from the satellite to the computer.
A part of the necessary infrastructure is already in place. USAID in Mali already are working with WSF in other radio activities. Using this already existing infrastructure, the WSF will be able to test pilot distance learning and other outreach services developed by the University of Mali.

The benefits of including the WorldSpace Foundation as a partner in this project are:
increased outreach gained by the University of Mali to regions and localities that are currently not impacted by the University's activities;
increased impact of the project due to the possibility of immediate planning and implementing of pilot projects intended for future on-line delivery in a less technology-dependent but currently viable mode, that may evolve in time as the technology infrastructure develops;
increased variety and richness of the services offered at little additional cost due to the possibility of providing other already available materials, including courses and services produced in other WSF projects in other countries, the latest articles in major journals from around the world, training manuals, visual learning aids, and best practice guidelines.

Some possible areas for projects that would integrate both the WSF's broad-based radio-broadcasting services with less widely available multimedia services include:
outreach services for basic primary and secondary education, designed and developed within the Department of Education, as a means of providing practical hands-on experience for teachers-in training in the skills of lesson planning and learning materials preparation – the process of design and development of these services will strengthen the existing teacher training program in the University and the services themselves will benefit all children in the schools and facilitate the work and in-service development of already practicing teachers;
outreach services in the area of health, nutrition and medical support (including projects related to AIDS/HIV), designed for a broad audience in the community, linked to university programs in health and medicine that may use experience in the use these programs, together with feedback from the field, as input into more academically-related studies in the Department of Medicine, Pharmacology and Dentistry on how to address the nations key problem-areas in the health sector;
outreach services in the area of agriculture and rural development, designed and developed within the Rural Polytechnical Institute for broad community audiences, but also integrated, as outlined above, into the academic programs;
a basic module on the relevance, impact and use of information technology in modern society (and possibly another module on the basic concepts underlying computers and computing, networks and networking, etc.), that would be essential introductory modules to the training of University of Mali staff and students as envisaged in the present project, but could also serve as a basic introductory course to information technology for schools throughout the country.

4. SPECIFIC PERFORMANCE REQUIREMENTS AND STANDARDS

Performance Requirement 1:
Provide on-the-job technical and organizational assistance to the WAN administrators and LAN managers to ensure reliable internet services for the University of Mali, including daily technical management, user support, internet room access policies, training, advanced planning for maintenance, repairs and upgrades, establishment of an IT Helpdesk, etc.
Performance Standards for Requirement 1:
(1) The WAN and LAN administrators will have the practical skills, knowledge and competence to ensure operation and preventive and routine maintenance of the system, assistance to users, upgrades, an effective Helpdesk, etc.
(2) Procedures will be in place to ensure appropriate operation of the system and responses to user needs.

Performance Requirement 2:
Provide internet training for University users in all of the University departments, according to various needs, as previously determined in collaboration with the University of Mali. The training courses will be provided by local resources in each department and will take place until this activity completion date, according to an agreed-upon schedule.
Performance Standards for Requirement 2:
Up to 100 users per month will have the skills, knowledge and competence to use the Internet.

Performance Requirement 3:

Provide internet training of trainers courses in all the University departments. These trainers will be selected in collaboration with the University of Mali. Following the training, they will be delivering user training on a regular basis, so that courses are continuously available, as needed, following the completion of the grant. These courses will be provided by local resources in each department and will take place until this activity completion date, according to an agreed-upon schedule.

Performance standards for Requirement 3:

(1) By the end of this activity, up to 10 trainers in each department will have the skills, knowledge and competence to train University internet users to ensure sustainability of a continued training program for newcomers.

(2) By the end of this activity, each trainer will have trained up to 100 users.

Performance Requirement 4:

Provide training courses in web page development for selected University webmasters and develop a web site for the University of Mali.

Performance Standards for Requirement 4:

(1) Each institution will have up to 4 webmasters skilled, knowledgeable and competent in web page development who will be responsible for creating, maintaining and updating each department web site and the University of Mali web site.

(2) The University of Mali will have a user-friendly web site linked to each department web site.

Performance Requirement 5:

Provide assistance to selected faculty members to integrate information technology in their academic curricula. This will be a pilot activity to be implemented with a limited number of selected teachers. It will set an example and will raise interest in order to be duplicated. However, the pilots will only succeed in raising interest if the academic and departmental results are tangible, measurable and impressive. Therefore, special care must be given to the selection and design of projects that are capable of high levels of Return On Investment, selection of faculty members who show potential and interest in the specific projects and their objectives and not just in IT for its own sake, planning, implementation, management and formative evaluation of the pilot projects to ensure that they do indeed produce ROI and do not act as a de-motivator of interest due to under-performance and unimpressive results due to poor project implementation and execution (rather than any inherent limitations of the specific technologies employed).

Performance Standards for Requirement 5:

(1) Up to 5 faculty members in up to 4 selected academic departments of the University will have the skills, knowledge and competence to design and implement academic curricula related to their field, using information technology.

(2) Up to 4 new academic programs will have been designed with selected faculty members and will be implemented as pilot projects by the end of the proposed project.

(3) Up to 2 of the pilot projects undertaken under Performance Requirement 5 should include a distance-learning component aimed at the broader community of Mali with objectives aimed at the solution of major societal/educational problems through the employment of digital radio and other mass-media technologies capable of reaching and being utilized in remote regions with the currently available technology infrastructure.

Performance Requirement 6:
Promote the creation and sustainability of internet user groups in each department.
Performance Standards for Result 6:
(1) An internet user group will be active in each institution to ensure sustainability and creativity in the use of information technology in an academic environment.
(2) Each internet user group will have the skills and knowledge to organize itself to conduct activities in each department.

Performance Requirement 7:
Establishment of an Education and Information Technology planning, use and evaluation unit for the university. This unit will probably evolve from the already existing Technical Committee and already appointed WAN and LAN administrators, strengthened by the support services of the specialist trainers, web designers and other technical personnel to be trained through Performance Requirements 2, 3 and 4. The unit should serve all academic units that require IT support services in a manner that will be sustainable over time, well beyond the period of funding of this proposal
Performance Standards for Performance Requirement 7:
(1) This unit should be capable of providing continuing support of faculty in the use of new hardware and software, training and retraining, technical support and troubleshooting.
(2) It should also be able to offer assistance to faculty in all departments in the planning of technology-based innovations to their course curricula, teaching methods and information delivery systems.

Performance Requirement 8:
Research and information dissemination, providing lessons learned, results, and outcomes on the general process of introduction of IT utilization in the University of Mali and also on the specific results achieved by each of the pilot projects implemented during the project's lifecycle.
Performance Standards for Requirement 8:
(1) Each project activity seeking to implement technology-based innovations in the University of Mali should plan a research / evaluation component as an integral part of the project design.
(2) The results of each project activity should be appropriately documented and disseminated in a manner accessible to similar educational institutions in other countries, to USAID missions throughout the world and to other bodies engaged in the improvement of higher education.

5. PROJECT IMPLEMENTATION

(vTHIS SECTION IS YET TO BE FINALIZED ONCE THE PRECEEDING SECTIONS ARE APPRAISED, MODIFIED AND APPROVED BY USAID IN MALI).

dotcom Alliance

dotGOV dotORG dotEDU

Pakistan and DOT-COM Collaborating for Change

Proposed Information Technology Interventions

Concept Paper for USAID's Global Development Alliance

DOT-COM Alliance
dot-GOV, dot-ORG, and dot-EDU

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BACKGROUND

Recently, the Government of Pakistan enacted significant social and economic policy reforms. These included measures to alleviate poverty by improving human services, including education and health, devolving authority to elected councils at local governmental levels, empowering women (at least 33% of councils are women), and stimulating job creation and the economic development, including privatization. The US Government is providing assistance to Pakistan to support these changes, with an initial grant of $600 million, a commitment of at least $300 million in credits to encourage investment in Pakistan, and $100 million targeted for agriculture, education, women's empowerment and micro-credit activities. The Government of Pakistan, provinces, and local authorities require technical assistance to ensure effective implementation of the Government's policies and proper utilization of additional financial resources provided by the USA.

Local councils and district officials have little experience planning health, education, or micro-credit programs, levying taxes, or managing human and financial resources. The functions of local authorities and their relationship with the province are not well defined, the communications infrastructure is weak, and most local authorities lack the tools and technologies needed to govern efficiently or provide effective services to their constituents. Accountability and transparency, essential for successful decentralization, require adequate information and communication systems and supportive policies and regulatory mechanisms.

The National Government is privatizing industrial units, intends to privatize telecommunications, and should modify policies governing basic services such as electricity, gas, and water. To enable privatization of the telecommunications sector and foster the expansion of public access to computer and Internet technologies, well-defined policies and appropriate regulatory bodies are needed. For example, electronic signature laws to support on-line transactions, taxation for e-commerce, and policies to enable all levels of government to offer services via the Internet would be beneficial to economic growth and poverty alleviation. .

A major focus of the government's effort to improve the economy, create jobs, and increase productivity in both the government and the private sector is information technology (IT). Import taxes on computers and related equipment have been eliminated, and technology training and the use of IT in education, especially for women, is being encouraged. Fledgling efforts have been undertaken to link local health and education centers using technology. However, neither the health network in Sindh province nor the district-based education information centers in Baluchistan, for example—both initiated with international donor support—have proven sustainable. The government has not had the resources to maintain the local centers or provide guidance and support from the provincial level. Additionally, prior to the recent devolution of authority, in August 2001, local governments had little motivation to utilize this capability.

The education sector in many parts of Pakistan has deteriorated, giving way to the expansion of *madrassahs* (religious/Quranic schools), and needs to be revitalized. More that 40 percent of the children who enter primary school will drop out by the second grade. Most teachers are under-qualified and lack training, and some fail to show up in the classroom. Teacher training and professional development services are weak and unable to reach the majority of teachers. School management and supervision has been inadequate. The Government's decentralization of authority for education should make teachers and school management more responsible to the communities. Some

initiatives planned by the Pakistan Government that may benefit from technology-based assistance include introducing a National or Provincial Examination System; teaching English Language in primary schools and technology in secondary schools, improving resource allocation by mapping schools and other social services, and strengthening teacher capacity through training and providing classroom support with supplementary tools and materials.

DOT-COM

USAID's new Digital Opportunity through Technology and Communication (DOT-COM) program provides a unique constellation of resources to assist the government and people of Pakistan in addressing these concerns. The DOT-COM Alliance unites leading businesses and nonprofit organizations, each with significant experience and expertise in both IT and international development. Each Alliance team focuses on a key IT area: dot-GOV on policy and regulatory reform, dot-ORG on access and applications, and dot-EDU on education and learning systems. The proposed program of action integrates these three components to conduct mutually reinforcing activities, promoting IT regulatory reform and decentralization to clear the path for IT expansion and opportunities to strengthen civil society, improve education, and achieve fast-paced economic development. The three-year program would be conducted in two phases: (1) Based on the results of targeted surveys to identify "high impact" areas of opportunity, pilot activities will be conducted. The pilots will focus on either major urban areas and secondary cities throughout the country, or on Sindh Province, which has expressed interest, or on both. (2) Expanded activities will build on the successes of Phase 1.

dot-GOV - POLICY and REGULATORY REFORM

The Government of Pakistan (GOP) has taken significant steps toward increasing competition within the telecommunications sector by creating standards and providing access for ISPs, cable, radio, and wireless providers. Yet many constraints remain. For example, current legislation, such as the 1996 GOP Act for Reorganization of Telecommunication System, retains certain restrictive licensing and other controls that are applied arbitrarily. Although it provides licensing schemes and gate-keeping functions for radio and TV, the impact of phone rates and other tariffs may limit Internet use by underserved and isolated populations with limited income, as well as obstruct local language content on web-sites in Pakistan.

The dot-GOV consortium proposes to work with the GOP to formulate telecommunications policies that will expand use of the Internet for economic development and other objectives of the government and people of Pakistan, with particular attention to the needs of disadvantaged, underserved, and geographically and socially isolated elements of the population, including women. Areas of particular attention include:

- Transparency and predictability in business regulation.
- Privatization, competition, open networks, and universal service in telecommunications policy.
- Market-driven solutions, user-control, human rights protection, and limited government regulation of the Internet.

Our approach emphasizes a participatory, locally led process, bringing together key GOP staff, the Pakistan Telecommunications Authority (PTA), private sector investors, and telecom service providers, such as the Pakistan Telecom Company Ltd (PTC). Key activities include:

- Work with local experts and advocates to conduct an on-the-ground assessment of current telecommunications policy in Pakistan, including the competitiveness of the Internet industry sector, pricing structures, legal frameworks, and opportunities to expand access for the full range of stakeholders
- Conduct stakeholder discussions to identify an initial set of strategies for building local coalitions that review the impact of current policies within different governmental and geographic regions. These coalitions also would recommend policies for strengthening the PTA's standardization efforts and provide recommendations.
- Provide technical and legal expertise to local groups to assist them in developing information for policy makers, perhaps culminating in a multi-sectoral, national event on Internet policy, with recommendations for both administrative and legislative action.
- Help to create an effective, sustainable process for ongoing examination of the policy development cycle and its impact on reducing the digital divide in terms of language, gender, and access to disadvantaged groups (such as the disabled and refugees).

dot-ORG – ACCESS AND APPLICATIONS

The Government of Pakistan's efforts to decentralize policy and decision making, improve public services, and expand economic opportunities can be significantly enhanced by leveraging the power of information technology (IT). Currently, people in Pakistan's major cities have little access to computers and the Internet, and outside major metropolitan areas, computer and Internet access is even more limited. Where access does exist, few efforts to develop locally relevant content or applications that meet the needs of citizens, government agencies, or civil society organizations have been undertaken.

The dot-ORG component of the program proposes to collaborate with GOP staff, NGOs, and entrepreneurs to launch targeted interventions to increase public access to computer and Internet technologies, develop applications that support government decentralization, and utilize IT to expand economic growth. The proposed interventions would:

1. **Establish multipurpose public access telecenters** in primary and secondary urban centers. The telecenters would be built in existing facilities to enable easy access by large numbers of users. A primary function of the telecenters would be to provide citizens with distributed access to select government services. In collaboration with Pakistani government agencies, local entrepreneurs, and the DOT-COM private sector partners, e-government applications would be developed and piloted at the telecenters to support decentralization efforts. The telecenters also would be used as training facilities for government staff and teachers participating in the distance learning programs developed by the dot-GOV and dot-EDU Alliance partners. To ensure their sustainability, the telecenters would be established in partnership with local business and NGOs. A voucher program—similar to that pioneered in a USAID-funded project in Bulgaria, where entrepreneurs launched telecenters with subsidized usage provided to target groups—would be created to ensure equitable access for poor and underserved citizens. In conjunction with this market development strategy, localized content targeted to critical areas of need, including health, education, environment, agriculture and governance, would be developed in partnership with local organizations.

An important objective of the telecenters would be to provide public access to a free flow of information and enable more open communication. To avoid conflicts with local culture and religious concerns, the telecenters would use filtering software to block access to pornographic material. Establishing telecenters also will bring Internet services to underserved population areas, which could stimulate private sector IT companies to extend their services to these areas. This "seeding" effort should accelerate the process of providing larger scale access to computer and Internet technologies beyond the main urban centers.

To increase the impact of the telecenters on strengthening civil society, the project would collaborate with the Pakistani NGO Initiative to develop a virtual network or community of local and national NGOs. This effort would include a targeted face-to-face and distance training program to build the capacity of NGOs to leverage the power of IT to improve management and program implementation. In parallel training activities, locally relevant content and applications would be developed to expand the programmatic reach of the NGOs and improve broad public access to critical information about Pakistani development issues.

2. Conduct a major professional development activity that brings together the private and public sectors with non-governmental organizations and citizens to design and pilot a national IT career cluster training program. This activity would:

- Expand professional IT career opportunities by identifying core IT skill standards and career clusters for skills that are in demand in the global marketplace, thereby providing new employment and career opportunities in Pakistan;
- Build the skills that will provide Pakistan with a niche in the global market, related to the design, development, management and support of hardware, software, multimedia, and systems integration services;
- Build IT skills that improve work in all fields, including health, public services, agriculture, business administration, etc.; and
- Develop practical skill-building programs specifically designed for youth and adults with specific emphasis on the needs of women.

dot-EDU – LEARNING SYSTEMS

Learning systems in Pakistan suffer from a range of deficits. In the public education sector, the lack of government investment has led to declines in system infrastructure and a lack of trained human capital. Private educational institutions fare somewhat better, but they cannot satisfy the demands for affordable, quality education. The Government of Pakistan's recent steps to decentralize/devolve fiscal and program management authority for human services, including education, to the district level in August 2001 highlight the need and opportunity for targeted, technology-assisted interventions in the formal educational sector. Learning needs beyond the formal education sector also abound. Out-of-school youth and girls and women particularly lack opportunities to gain additional skills and knowledge to improve their situations.

The dot-EDU implementers of DOT-COM propose to launch targeted interventions to address education and learning system needs in Pakistan under the Global Development Alliance. These interventions include:

1) Establish a distance learning system for selected district educational officials. District officials have little or no experience with the new level of responsibility and authority given to them under the recent decentralization/devolution. Fiscal and program management skills can be built through traditional skill-building workshops, but these often require travel and time away from post and do not provide opportunity for follow-up. Distance learning approaches can overcome some of these limitations. Video, radio, and computer technologies can be used to "package" skills and introduce new channels for learning. Strategies to increase the participation of girls can be introduced.

2) Install the ED*ASSIST educational statistics system in the pilot districts. This will help ensure that educational data for planning and reporting purposes can be readily available and will enable the usefulness of such data to be demonstrated and shared with other districts outside the pilot area. ED*ASSIST is a software product developed by the Academy for Educational Development that has been developed and tested in a wide range of developing country settings and has proven invaluable in systems where data deficits have made educational planning and reporting especially difficult. The software is customizable and comes with a training and maintenance package.

3) Establish a computer-assisted teacher-training pilot in selected training institutions. The lack of trained teachers is a significant impediment to improved educational quality in Pakistan. A computer-assisted teacher-training pilot will demonstrate the power of distance learning approaches to improve the knowledge and skills of teachers. Intel, a dot-EDU partner, has begun translating its "Teach to the Future" program into Urdu and is exploring program applications for strengthening schools.

4) Establish a school networking pilot that promotes understanding and tolerance. Working with schools and community access centers, World Links, another dot-EDU partner (associated with the Word Bank Institute) will help integrate IT into education while focusing youth on topics and activities that promote understanding and tolerance.

5) Establish an Interactive Radio Instruction program for teaching English as a Second Language. Recent decisions by the Government of Pakistan include the decision to begin English instruction in early primary grades. However, English skills among teachers are lacking, and girls are often not included in the educational process. The Education Development Center is widely recognized as a global leader in Interactive Radio Instruction, a system that has the potential to reach broad audiences and provide quality instruction in English as a Second Language. These programs also will be used to demonstrate active learning strategies and introduce positive role models for girls.

6) Provide training on gender-sensitive materials development. To create text, audio, and other materials that better support the education of girls, dot-EDU will work with the other dot-COM partners to train girls and use telecenters as micro-publishing facilities where instructional materials can be produced at the community level for introduction into local schools.

PARTNERS

The following is a list of potential collaborating partners from the private sector, the Government of Pakistan, and the non-profit sector. Aside from The Asia Foundation, none of these potential partners have been contacted yet. However, they were carefully selected from the master lists of DOT-COM resource organizations on the basis of their past and current work in Pakistan and their general interest in the types of interventions described above.

Private Sector Partners:

- IBM
- Intel
- Cisco Systems
- Microsoft
- Sun Microsystems
- Futureworks, Inc.
- RTI
- Voxiva
- Thinkquest

Non-Profit Organization Partners:

- The Asia Foundation
- Winrock
- Geekcorps
- Greenstar Foudation
- Aga Khan Foundation
- USTTI
- Faran Education Society (Sindh)
- Society for Community Support (Balochistan/Sindh)
- Asian Development Bank
- UNDP
- Mohammed Ali Jinna University (School of Technology)...Karachi
- IDRC
- JICA
- DFID
- Government of Norway
- Government of Switzerland
- I*EARN
- World Links

Government of Pakistan Partners:

- Provincial Government of Sindh
- Ministry of Privatization
- Ministry of Communication
- Chief Executive's Task Force on Human Development (which includes the Ministry's of Education, Health, Finance, Local Government, Social Welfare, Environment and representatives from the four provincial governments)
- Pakistan Railways

Appendix 4

Ideas for Pilot Projects

Ideas for Possible Pilots

1) Intel Teach to the Future Case Study/ Project Set up in Viet Nam:

This activity would capture match through Intel and establish a way to use private/public partnerships for teacher training using IT.

Results:

a) One Case Study on 3 levels of maturity of the Intel Teach to the Future teacher training IT system (Viet Nam, Thailand, Pakistan). This case study would answer the following questions:

- How does the Teach to the Future system work with development goals in mind (teacher training for teachers in poorer communities, gender equity, improvements in quality)?
- How does the system strengthen the educational system where they are competing systems of education, particularly in countries like Pakistan?

b) Assessment of project set up and private sector collaboration around project set up. Intel is interested in joint collaboration with EDC through dot-edu. This effort should result in the creation of an active project in Viet Nam that serves as a demonstration for other countries.

Follow-up: contacts have been made. Intel is interested, USAID PSE contacted. If people agree to go forward, this pilot could be costed and a timeline set.

2) Gender sensitive desktop publishing capabilities: site undetermined.

This pilot would set up a system and provide training for recipients of training in IT to develop local gender sensitive materials for primary schools. It is thought that computers are expensive to use in primary schools, but the products of telecenters or computers in secondary schools or teacher training institutes should directly support local primary schools. This pilot would look for those appropriate connections and create the means for older students and community members to use their computer skills in gender sensitive and locally relevant ways. Training would bolster networking among international players in materials development and train teachers and secondary school students to develop more active and appropriate materials for primary schools.

The system could use project based learning techniques and include competitions among student groups.

Possible sites:

Dominican Republic, Senegal, Uganda, Morocco, Egypt

Results: A demonstration of how computer telecenters or school/teacher training labs can be used to support primary schools with a particular emphasis on gender equity.

Follow-up: review sites and find out if there is interest among them to cost-share.

3) Strengthening Local Educational Content for Schools in Senegal and Set up of Content creation site

This activity would provide training to local institutions working to create local content in Senegal. It would be designed to foster interest in support to a government unit and private organizations interested in creating local educational content and connecting to others around the world creating content in French.

Follow-up: discuss possibilities with Patrick Fine at USAID/Senegal, including cost-sharing.

4) IT Workshop for Education in Peru

Provide a 2-3 day workshop to help the new IT unit of the government understand options for ways to use IT for education.

Result: conversations with both the gov't and USAID/Lima as things develop in IT for education.

Follow-up: conversations underway with USAID/Lima. Decide on team of one of two people to conduct the workshop, if USAID is interested.

5) IBM Strategic Planning Tool for IT for Education

This activity would introduce the IBM strategic planning tool to regional partners that could use them in training local national partners.

Possible sites: Innotech in the Philippines, OLSET in South Africa, SchoolNet for Africa?, CIESPAL in Latin America?

Next steps: IBM is interesting in being private sector partner. Next steps include discovering interest among dot-edu and regional partners.

6) Virtual secondary

This activity would bring together several donors around the idea of using computers for the creation of a virtual secondary system that would augment and expand other forms of secondary education. The experience to date in this area would come to bear on how it was designed and issues such as the social conditions of learning, gender equity and particular subject matter, such as math and science, would be prioiritized.

Partners: EDC, AED, WorldLinks, Concord Consortium, SchoolNet/Africa

Donor collaboration: World Bank (Uganda)

Possible sites: Uganda, others?

Follow-up: investigate interest of USAID/Uganda