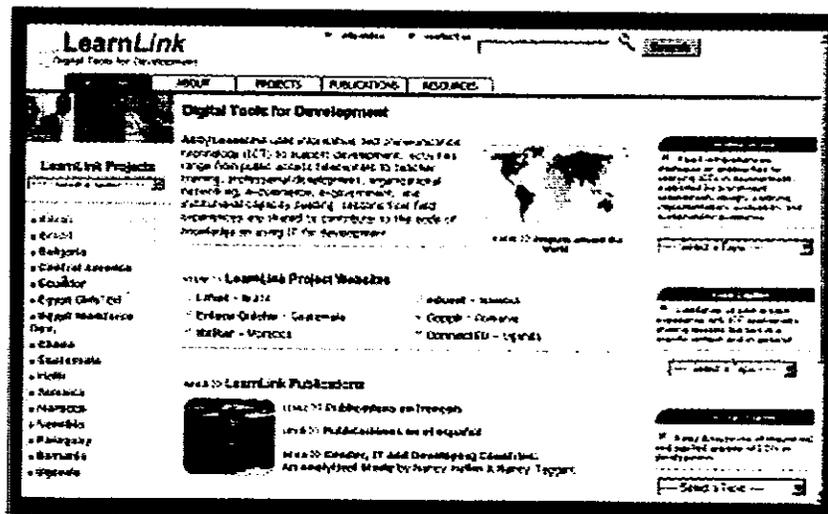


Quarterly Report

October 1 – December 31, 2001



LearnLink
Linking people to learning technologies for
sustainable development



LearnLink

Global Communications and Learning Systems
USAID Contract No. HNE-I-00-96-00018-00

Quarterly Report
October 1 — December 31, 2001

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Project Background

The Global Communications and Learning Systems Project (LearnLink) is funded by the Human Capacity Development Center in USAID's Bureau for Global Programs, Field Support and Research and other USAID Bureaus, Offices, and Missions. LearnLink was initiated to 1996 to develop strategies, guidelines, models, and tools for strengthening learning systems in developing countries through the application of communication and educational technologies. A sub-goal is to create sustainable communication and educational technology programs in developing-country institutions.

Expected Results of Project

The results of this contract relate directly to the implementation of field services performed under Task Orders. These results include:

Intervention models and tools based on state-of-the-art strategies to increase the impact of educational and communication technologies within learning systems. The tools will include:

- ◆ Assessment tools for defining the appropriate application of educational and communication technologies within learning systems
- ◆ Institutionalization strategies and guidelines for establishing the sustainable use of educational and communication technologies within learning systems
- ◆ Monitoring and evaluation strategies and tools for observing the impact of educational and communication technologies within learning systems
- ◆ A system for the collection, demonstration, and exchange of information and innovations on the use of educational and communication technologies within learning

Task Order 1

Administration of the Core Contract

A. Core Deliverables **Publications**

- ◆ Preparation of folders of LearnLink materials for distribution
- ◆ Drafting, layout, and printing of the "Fall 2001 Newslines" newsletter
- ◆ Drafting of the Jamaica and Haiti One-Sheets and Country Papers

- ◆ Initiation of Pagemaker layout of French and Spanish translations of LearnLink Summer '01 Newslines
- ◆ Filling requests for the previously produced Gender Book and Executive Summary. Approximately four requests per week are received from countries around the world.
- ◆ Adding a PDF file of the Egypt Girls' Education Final Report and One Classroom Schools Case Study in the "News" feature to the LearnLink web site and posting the PDF version in the Egypt program activities page
- ◆ Writing and editing of five articles for the January - March 2002 issue of TechKnowLogia, available online at www.TechKnowLogia.org:
 1. The DOTCOM Alliance: Digital Opportunity - USAID's New IT Initiative by Mary Fontaine.
 2. Configuration of School Technology Strategies and Options by Eric Rusten.
 3. Pedagogical Uses of Web-Based Chat: A Pilot Activity in Brazil by Eric Rusten et al.
 4. Open Source Software: No Free Lunch? By Eric Rusten and Kurt Moses.
 5. RiverWalk-Brazil: Virtual Journey, Real Learning by Eric Rusten et al.
- ◆ A count of visitors to the Gender page of the web site was added and found to yield 116 visitors during December 13 - 31, 2001.
- ◆ HTML versions of country papers were created and posted. All one sheets are available in HTML and PDF versions.
- ◆ The Summer '01 and Fall '01 Newslines issues were posted in PDF format, and Word copies of the Fall '01 Newslines were sent to French and Spanish translators for layout in Pagemaker and online posting in PDF.
- ◆ Obtained estimates for reprinting LearnLink print publications produced during the prior 3-4 years, comparing bids, and reviewing prior printing accounts.

Monitoring and Evaluation Activities by Evaluator Eduardo Contreras-Budge, PhD

TO1: Evaluation and other TO1-related tasks:

- ◆ In ongoing research for assessment, monitoring, and evaluation (AM&E) guidelines and instruments, Eduardo Contreras-Budge renewed a focus that will be continued during 2002 on:
 - a) enhancing the AM&E section of the final versions of the six models of use; and
 - b) preparing for specific field task orders which will demand evaluation as they are completed next year.

- ◆ Continued posting of selected annotated Internet resources about IT and development issues and projects on LearnLink's website.
- ◆ Continued online discussions on telecenter movement perspectives and learning/evaluation proposals for Telelac's Technical Advisory Group (telelac-asesor closed list).
- ◆ Produced a document on social and technological infrastructure conditions for viable telecenters, based on oral presentations at two regional telecenter meetings attended last quarter. Document is noted in <http://www.tele-centros.org/comunidad/Boletin2.html> and is available under <ftp://ftp.chasquinet.org/pub/docs/PANEL.doc>.
- ◆ Completed review (started last quarter) and substantially corrected some twenty Spanish language translations of LearnLink One Sheets and Country Papers, as well as assessed an online Spanish version of the Gender and IT paper.
- ◆ Advised Noreen Janus, in tandem with Steve Dorsey, on Latin American countries, projects, persons and situations that would interest USAID and its LAC Bureau—an activity that will be continued.

TO Paraguay involvement:

The much-awaited "DHL Project Box"—long overdue—finally arrived here in late October. This pre-paid box contained all the remaining technical, contractual and administrative records for the Task Order, as well as supporting documents, photographs, newspaper clippings, videotapes, and several CD-ROMs that summarize the project's progress and achievements.

The contents of the box were essential for evaluative work and report of lessons learned for Paraguay. Although LearnLink's Resident Advisor submitted an adequate final report by mid-year, it was in Spanish and did not fulfill all the TO requirements of lessons learned to be shared elsewhere.

Thus, a substantial part of this quarter's time was spent organizing the materials and the reports (one affects the TO itself; other components are best addressed as TO1 work and products) and then writing my own evaluation and lessons learned report for the Paraguay TO. Almost completed, it will be submitted internally in January 02. Details will be forthcoming then.

TO Romania involvement:

Eduardo Contreras-Budge continued last quarter's work, but the final report was delayed until early 2002 due to Sonia Arias' departure.

TO Uganda involvement:

Budge continued update and follow-up. Most notably, he contributed to a local monitoring plan and strategies under development, and, specifically, to devising feedback forms for the evaluation of the online curriculum and materials by teacher/student users—an event expected during 2002 in PTCs.

TO Namibia involvement:

See last quarter for details about continued tasks. This quarter, since project field centers (within Teacher Resource Centers) are now operational, Budge started receiving and exchanging notes on feedback forms and field reports from the TRCs' users and coordinators and on how data collection and entry fulfills M&E requirements. A probable visit is expected next quarter.

TO Benin involvement:

See last quarter for details. Due to the sequels of the September 11 events, original evaluation plans which involved the visit and work by an evaluation consultant and our collective evaluative work thereafter, had to be redone or cancelled. There was no involvement in subsequent events this quarter.

Other activity:

Budge continued routine, ongoing TO1, AM&E, and LearnLink activities, mostly on evaluation-related matters, or minor involvements in other field task orders. Guatemala has requested my evaluation visit, perhaps early next year.

Travel:

None, other than my personal vacation to Chile 12/11-31/01.

TO1 - Presentations, Conferences:

- Attended conference and had working meeting with Professor Michel Menou on collaborative work on community telecenter evaluation guidelines (10/30).

- Participated in BID (IADB)–sponsored regional video-audio teleconference with telecenter leaders from 10 locations in Central America and Caribbean from IADB headquarters in Washington, DC, 10/12/01; made contributions on the evaluation process; and continued activity in its e-lists for planning and coordination.
- Continued involvement and working meetings (October and November, 2001) with the Inter-American Agency for Cooperation and Development IACD/OAS staff on collaborative potentials (see last quarter) of interest to them and LearnLink, DOT-Com, USAID, and AED. I am to provide specific input into their telecenter and education technology portal initiatives.
- Was invited (tentatively, March 2002) as a main speaker to an International event in Peru on Community and Technology in Latin America (“Encuentro sobre Apropiacion de las TIC en América Latina”) convened by ITDG-LAC with support from several international donors.
- Was invited (tentatively, early 2002) to a closed retreat/meeting supported by The Rockefeller Foundation, USAID/HPN, Change Project and PAHO, on devising competency-based training for development and social change communicators.
- Participated in the 2002 InfoDev Symposium “Lessons Learned and Directions for the Future,” World Bank, Washington, DC, 12/5-6.

Buy-Ins

• **FEMICA/LACUM – Strengthening Municipal Organizations**
 LearnLink Task Order #09
 USAID #: HNE-I-00-96-00018-00

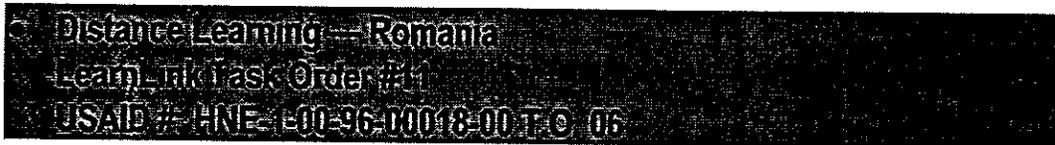
Summary

The original focus of this task order was to be the creation of an electronic network and a learning system to support the functions of the Federation of Central American Municipalities (FEMICA), based in El Salvador, and the Latin American Center for Urban Managers (LACUM), based in Ecuador. In the more than two years since the signing of this three-year activity, full implementation has been held back by the relocation of both FEMICA and LACUM to

Guatemala. Difficulties with recruiting suitable technical staff have also contributed to this lack of progress. Most original tasks with FEMICA have been completed. Just a few more tasks remain in cooperation with FEMICA, including the amplification of their web site and the hosting of a few online events.

Major Events this Quarter

A CD-ROM was produced by Femica that presents multiple ways for networking and locating information about government services.



Summary

Through a pilot effort in Romania, this Task Order explores ways in which distance learning information and telecommunications technologies (ITs) can increase the quality and impact of existing USAID Participant Training Programs. (Originally LearnLink anticipated activity in two pilot sites, but USAID eliminated the second site when its feasibility faded.) The overarching goal of the Romania pilot is to determine whether the use of IT and distance learning tools can increase the effectiveness and efficiency of participant training programs. The basic question is: Can USAID-funded participant training get more for their money by using IT and distance learning, thereby providing more training at less cost and improve current face-to-face training with follow-on activities that use IT for professional networking and information sharing?

World Learning's Transit/Romania Project administers this pilot effort. CRIPS (the Information Resource Center for Social Welfare Professionals), a local NGO with previous experience in Distance Learning—also involved with the Romanian Social Work movement, is the implementing agent for the pilot. What "LearnLink provides is technical support and guidance as well as oversight of the evaluation component.

Major Events this Quarter

The final draft of the evaluation and lessons learned report for this task order was completed and is currently under internal review prior to submission to USAID. Task leader Sonia Arias produced a first working report that was then thoroughly reviewed and discussed with LearnLink's Peter Spain and Eduardo Contreras-Budge. Subsequent work by Arias in discussion with Contreras-Budge led to the current final draft. The forthcoming report is based on responses to a set of four questionnaires administered at least six months after course completion. The report incorporates 1) an in-depth analysis of the qualitative responses provided by the social work professionals who took the course and completed its

evaluation—19 of the original 23 trainees, as well as 2) LearnLink's assessment of the experience and the lessons learned.

The report summarily concludes that participant training programs can be strengthened with the help of appropriate IT applications for increasing access and quality of learning.

1. Trainees were highly motivated, and reach among trainees exceeded that available from conventional face-to-face training.
2. Trainees reported learning as much as or more than a conventional setting.
3. With no prior information technology (IT) expertise, trainees attained proficiency quickly and appreciated the benefits of value-added skills in online-course preparation and distance learning tools, while manipulating the interactive components of the CD-ROM-based courses.
4. An unexpected side-benefit of the experience was the gain for the host NGO in organizational and professional expertise in using IT for learning and networking that was acquired throughout the training process.
5. Several key features were identified.
 - Careful, sound pedagogical design, quality content, and built-in interactive components ensured the courses' acceptance.
 - Despite learners being quite isolated geographically from each other, they were highly motivated and responded as responsible, self-paced professionals who saw a direct value in course content and skill development.
 - Most importantly, technological conditions need to seamlessly support the learning experience.

In this case, the CD-ROM itself was a very suitable instrument and an appropriate substitute for the lack of reliable Internet access. But this prevented web-based chat interactions and continuity of networking during and after the course was completed—features that would have enhanced skill building and educational and professional exchanges. This deficit was a loss to all learners who were unfamiliar with electronic Networking and Internet searches.

Summary

The Governments of the United States and Brazil initiated a series of bilateral activities and projects as part of the U.S./Brazil Education Partnership. The overarching goal of these efforts is to foster greater cooperation and exchange of ideas and information in the education sector. The U.S. Department of Education is the lead agency on the U.S. side of the partnership. USAID's Latin America and Caribbean Bureau, via the Human Capacity Development Center/Global Bureau, is funding LearnLink to create and manage the U.S./Brazil Learning Technologies Network (LTNet). The Ministry of Education is the lead agency on the Brazilian side of the partnership, and the Ministry's national school computerization effort, ProInfo, is LTNet's collaborating partner in Brazil.

LTNet's program has two parts. One part focuses on supporting study tours and conferences for Brazilian educators visiting the United States. The second part consists of a bilingual web site that provides U.S. and Brazilian educators, researchers, policy makers, and business people access to information, educational technologies, and networking support and services.

The LTNet web site offers:

- A variety of online tools for communicating and collaborating with other LTNet users.
- A "virtual library" of quality resources on educational technologies, many with abstracts.
- Five interactive online learning environments focusing on critical educational issues facing Brazil and the United States.
- A "What's New" section providing information about new and interesting reports, web sites, activities, and events related to learning technologies.
- Volunteer and internship opportunities for those interested in contributing to the development of the LTNet web site.
- Periodic updates to listserv members about LTNet and learning technologies and about projects in Brazil and the United States.
- Background information about LTNet and the participants in the U.S./Brazil Education Partnership
- Technologies and about projects in Brazil and the United States.
- Background information about LTNet and the participants in the U.S./Brazil Education Partnership.

Activities

The no cost extension to December 31, 2000 was approved.

LTNet's Final Quarterly Report

The project started on October 1, 1999, and, with a three-month, unfunded extension, the project was continued through December 31, 2001. Even though only ten days of senior staff time were available to cover activities undertaken this quarter, much was achieved. At this stage in the project, only one person in the US, LTNet's director, is engaged in LTNet project activities. In Brazil, Vera Suguri, a Pedagogical Coordinator at ProInfo, contributes greatly to LTNet activities and in many cases develops and discovers new activities for LTNet to participate in. Vera also serves as a pedagogical and cultural advisor to LTNet to ensure that whatever LTNet does is educationally appropriate and culturally suitable for Brazil. In addition to Vera, other staff at ProInfo provide a variety of services, ranging from translation to logistics. Over the last year, teachers and multipliers from across Brazil have also taken on greater responsibilities for contributing to LTNet both at local and national levels.

LTNet has grown significantly beyond the scope of a Washington, DC-based, USAID-funded initiative. The following describes the activities and accomplishments of LTNet during this final quarter of the project.

- One of the most important activities this quarter was participation by LTNet's Director, Eric Rusten, in a major international conference in Brazil organized by the Brazilian Ministry of Education and the Ministry's ProInfo program. The congress was held in Fortaleza, Brazil from October 20-26, 2001. The Ministry paid air fare to enable Rustin to travel to Fortaleza for the six-day conference. The US Embassy covered Rustin's per diem for the time he was in Brazil in exchange for his making a presentation at a US Embassy event (described below) and for his part of the US Government's contribution to the US Brazil Partnership for Education. The Ministry asked Rustin to make two major presentations at the Education-ProInfo conference. One, a keynote address, was on the Power of Partnerships (see Attachment 1) and focused on the positive impacts that partnerships in education can have on teaching and learning. The other on "Multiple Mechanisms for Collaborating, Exchanging & Learning Through Technology" described an innovative international, virtual exchange activity involving 11 Brazilian schools that LTNet facilitated. The activity focused on the great rivers of the world and enabled students to prepare virtual tours about their rivers (see Attachment 2).¹

¹ The copies of the Power Point presentations provided here are in English. For the conference, the presentations were translated into Portuguese by Vera Suguri, LTNet's principal counterpart in activities with the Ministry of Education.

- In addition to these two presentations, Eric also provided support to a multiplier, Lourdes Matos, and teacher, Noara Resende, from the state of Minas Gerais. Matos had proposed to ProInfo/MEC a series of workshops at the congress that showed how to use some of the collaborative tools in LTNet and how to enable teachers to participate in this growing network. ProInfo agreed with the idea and paid to have these two woman and two of Lourdes' students from Montes Claros come to Fortaleza to present six, 3-hour workshops over the course of the congress.

The workshops started on the second day of the conference. At a little past 9:00 A.M., Rusten went to visit the LTNet workshop to see what these two educators and students had organized. Rustin was shocked and pleased when he found that he could hardly enter the crowded room. There were so many participants that people were being turned away at the door. The atmosphere in the room was electric with excitement and anticipation.

The first activity in the workshop engaged all teachers in registering and using free email accounts. NONE had ever used email, and they were shocked when they experienced how easy it was to send and receive email. The two student instructors, one 18 years old and the other 14 years old from a public school in Montes Claros, were in charge of this part of the workshop—a strategy that LTNet has been promoting. These boys had never been out of their small town, ridden on a plane, or seen the ocean, and here they were teaching teachers from across Brazil how to register for and use email.

The second activity involved participants joining the LTNet Educators' Discussion List and communicating with over 1200 other Brazilian members of the listserv. When the first replies arrived in participants' mailboxes, they became very excited. Their faces showed their satisfaction and enthusiasm for participation in a new world of Internet-based communication. Several of the teachers even had tears of joy in their eyes and disbelief on their face as they read messages from fellow educators in distant cities welcoming them to the discussion list. Lives were forever changed.

In the third part of the training workshops, Lourdes and Noara had the teachers register for LTNet's *SchoolLinks* Chat. This has become one of the most important and popular educational tools in LTNet and thousands of teachers and students are now using *SchoolLinks* Chat. As the teachers were discovering the joys of instant communication, Lourdes and Noara focused the discussion on strategies for applying this tool to enabling interdisciplinary project-based learning activities. They also discussed how to use the chat tool with children who had limited access to computers and connectivity. Participants learned, most importantly, how

to obtain a digital copy of the chat's dialogue at the end of the chat and how to use this log file to extend the educational impact of chat activities.

The workshop ended with a demonstration of how to use one of the newest additions to the LTNet web site: the *Banco de Links*. Each participating teacher learned how to add a favorite web site link to the "Bank" and search for and explore URLs that other Brazilian educators had added to this resource. This tool was launched at the Congress and is being managed by a Noara Resende, as an LTNet volunteer. When we adapted this public domain tool for use on LTNet and translated it into Portuguese, we knew that it could be useful for educators. However, we had not expected the level of excitement that this relatively simple tool generated at the workshop.

It became clear from participants' comments that they were familiar with using search engines and portal web sites to seek out educational information for use in their school projects. But, it appears that this is the first tool that allows teachers themselves to add to and comment on useful URLs and then search the peer-recommended "Bank" for resources. We also added a mechanism to enable educators to suggest a new link-category to meet specific educational goals. Before the Congress, Noara had added about 12 links to the Bank to demonstrate this new resource. Then during the workshop, participants added more URLs that they were familiar with. The "Bank" now has over 100 new URLs and a new category on Brazilian Indians.

Feedback from the workshop participants was extremely positive. Lourdes and Noara commented that during the workshop teachers repeatedly mentioned their appreciation for finally having a set of free, easy-to-use tools for teaching students and enhancing project-based learning activities. Many explained that prior Internet searches had been frustrated by an inability to locate useful online resources for teaching. More importantly, they now have a much clearer idea of how to use educational technology resources.

Consequently, LTNet quickly became a household name at the congress, and subsequent LTNet workshops have been over subscribed.

Before traveling to Fortaleza where the ProInfo conference and LTNet workshops were held, the US Embassy asked Rusten to participate in the Annual Meeting of Presidents of Brazil's Bi-National Centers (BNCs)—about 70 BNCs—and to make a presentation. Rusten, who received US Embassy-paid per diem expenses for 17 days as part of the bilateral exchange, visited Sao Paulo prepared to speak about "Enhancing English as a Second Language (ESL) and Strengthening Brazil's BNC Network through Computer and Internet Technology" (see Attachment 3). This

invitation is compatible with the US Embassy's official recognition of 18 BNCs, where support is provided to their libraries and ESL programs and access is given to visiting lecturers.

- In response to LTNNet user requests for educational links, Eric Rusten found, configured, translated and installed a free software tool on LTNNet that enables users to add website resources to a “Bank of Links” so that all visitors can benefit from this resource. Managed by a volunteer teacher from Belo Horizonte, the “Bank-of-Links” (figure 1) screen page appears on the next page. When visitors add links, volunteer Noara Resende validates the usability of the URL as an educational resource. Then the link becomes active and available to all users of the Bank. This tool was pretested at the Education-ProInfo Congress referred to in the preceding paragraphs. Not surprisingly, the “Bank of Links” has become a very popular resource.

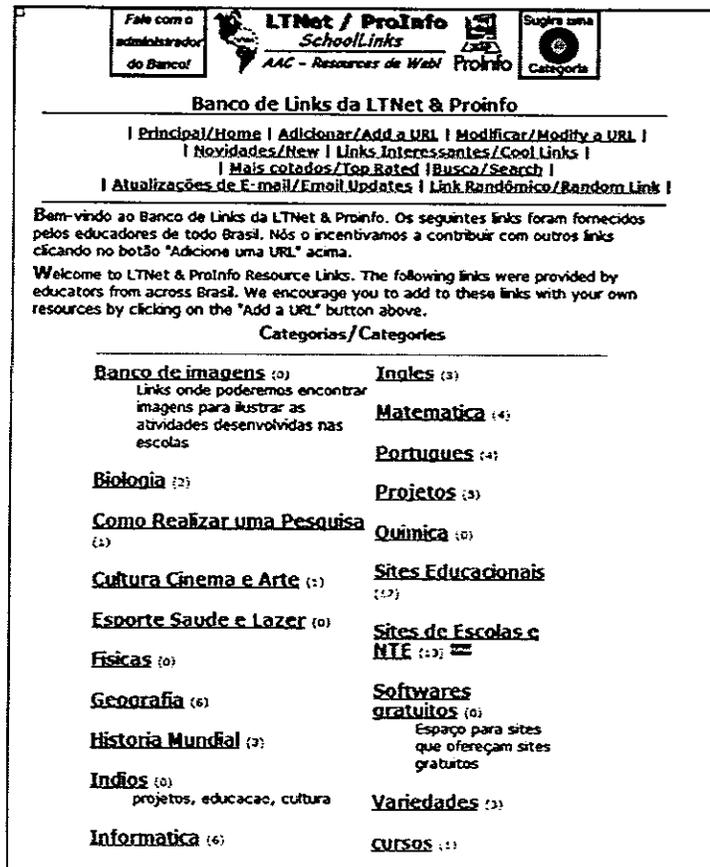


Figure 1: Screen shot showing LTNNet's Bank of Links.

- To help share LTNet's and ProInfo's experience with RiverWalk, Eric Rusten and Vera Suguri from Brazil's Ministry of Education teamed with Arati Singh, a colleague at the Academy for Educational Development (AED), in writing a paper on the RiverWalk project. This paper will be published in part in the January 2002 issue of *Techknowlogia*, an online educational technology journal with a circulation of over 15,000 people worldwide. Below is an abstract of this paper.

Some international educational technology initiatives are beginning to produce some exciting stories showing how computers and the Internet impact student learning. A key element to the RiverWalk-Brazil "success story" featured below is an equitable partnership between actors in Brazil and the United States. The essential players from Brazil include teachers and students in eleven schools and Vera Suguri, a pedagogical coordinator with the Ministry of Education. Key partners in the United States include Eduardo Junqueira and colleagues involved in the RiverWalk initiative at University of Michigan's Interactive Communications & Simulations group (ICS) and Eric Rusten, who directs the U.S./Brazil Learning Technologies Network (LTNet) project at the Academy for Educational Development (AED) in the U. S. This partnership forms the scaffold for Riverwalk-Brazil, an interdisciplinary project that enables Brazilian schoolchildren and teachers to become environmental scientists, activists, and reporters. RiverWalk is both an online publishing and planning forum for students (developed by the ICS) as well as an online professional development and collaborative learning environment for Brazilian teachers involved in RiverWalk (developed by Vera Suguri and Eric Rusten on LTNet).

- Collaborated with the U.S. Embassy in Brazil and the ProInfo program to organize and host an online chat event to commemorate the U.S. International Education Week (IEW)—an activity sponsored by the U.S. State Department and the U.S. Department of Education. In October, Michael Hahan of the U.S. Embassy in Brasilia asked LTNet to assist in organizing this November 14, 2001 IEW event.

This LTNet effort involved creating a section on the LTNet web site to host the online chat event (see the screen shot of this section of the web site below). Thus, the staff created 10 new chat rooms, protected by a password, a listserv, and an overall environment. Then, working with staff from Partners of the Americas and i*EARN, LTNet staff identified and recruited 8 schools (teachers and students) from across the US to participate in this event. Finally, LTNet staff promoted this event by posting an announcement about it on the U.S. Department of Education web site. After the event, LTNet staff sent the names and addresses of the participants to the U.S. Embassy so that the Embassy could send out letters of appreciation to all participants.

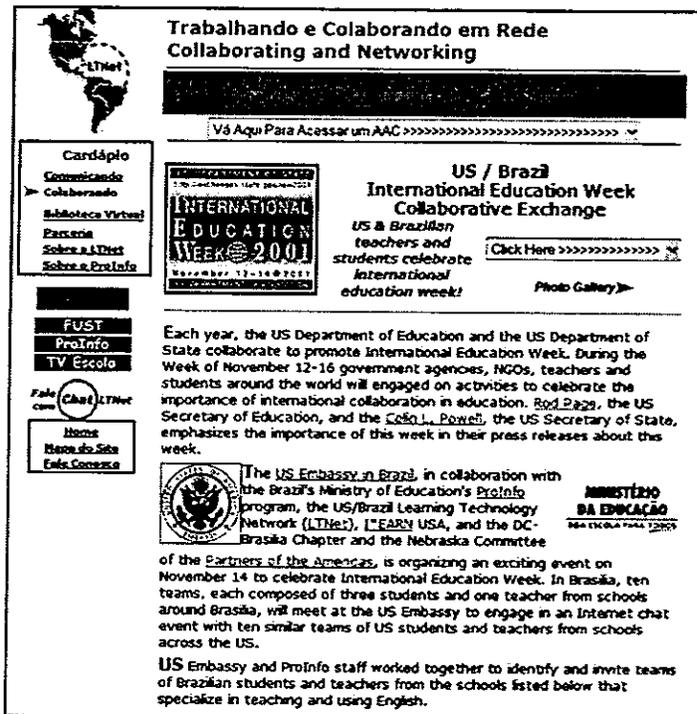


Figure 2: Screen shot from the AAC for International Education Week

- Preparing the LTNNet website for use and transfer to LTNNet-Brazil, a Brazilian NGO that will continue the work of LTNNet. Over the course of three years, the LTNNet web site has undergone significant changes. Because there was no staff or funding resources in the budget specifically allocated to build and maintain the web site, LTNNet's director had to take on this responsibility along with other project duties. As a result, there was never enough time to properly document the site as it evolved. Before LTNNet can be effectively transferred to LTNNet-Brazil, the site will need to be documented and "cleaned up." Margie Joyce, a web design specialist and LearnLink staff member, was hired for 15 days to assist with this effort.
- Transforming the chat room software to a database-driven chat tool to improve performance. LTNNet now has almost 30 chat rooms that are being used by thousands of teachers and students across Brazil. The free software tool that LTNNet has been using is not capable of providing sufficient speed to meet the grow popularity of this LTNNet service. As a result, the computer server that hosts the chat room crashes when too many people try to use the rooms. To solve this problem, LTNNet staff are shifting the chat rooms to a database driven software application with full text streaming. At the same time the rooms are being moved to a much more robust and powerful server. This will enable many more people to use the chat rooms without any problems; thus, the chat experience will be more enjoyable. All of the features in the original chat room, which make this a powerful pedagogical tool, will still be present in the new system.

- Worked with Brazilian educators to create LTNet-Brazil, an NGO continuing the work of LTNet in Brazil. To date, we have created a draft constitution, identified three prominent people in Brazil involved in education to serve as Board members. We also have identified local sources of funding that will enable the new NGO to have needed financial resources to continue activities.
- In collaboration with LTNet Brazil staff, arranged for a Macromedia-Brazil donation of two copies of Portuguese-language software for creating and maintaining web sites (Dreamweaver) and for creating and managing web graphics (Fireworks) of LTNet-Brazil. The suggested retail value of this donation is \$1,200.
- Prepared the Lessons Learned report about the three years of experience with LTNet. In collaboration with Vera Suguri from ProInfo, staff prepared a comprehensive report which was submitted to USAID.
- Contracted with Dr. Barbara Phillip to carry out the summative evaluation of the LTNet project focusing on the third year of operation. The first part of this evaluation took place in Brazil. Dr. Phillip met with staff at ProInfo, and the Ministry of Education met with teachers and multipliers in Vitoria, Espírito Santo who were participating in an LTNet/ProInfo training workshop. In Brasilia, Vera Suguri organized a study tour for Dr. Phillip at PROEM, a school in Brasilia for kids at risk. A group of students at PROEM participated in an LTNet collaborative effort called RiverWalk, and Dr. Phillip was able to learn first-hand about this experience. Also, with help from Vera Suguri, LTNet's principal collaborator at ProInfo, Dr. Phillip was able to engage in phone conversations with teachers and multipliers around Brazil who have participated in LTNet activities. Through these phone conversations, Dr. Phillip was able to learn about the impact, benefits and difficulties of LTNet end users. After returning to the US, Dr. Phillip worked with LTNet's Director to learn about other LTNet activities that have been undertaken this past year, reviewed project documents and the LTNet web site, and talked with others who are familiar with LTNet in DC.
- Prepared a paper on the critical issues involved in *Monitoring and Evaluating Large-scale Educational Technology* projects. This study will be delivered to USAID in early 2002 and published by LearnLink as one of several project concept papers.
- Created two new AACs (collaborative learning environments) for LTNet's two new communities—one for the state of Espírito Santo and the other for the state of Minas Gerais. AACs are sections in LTNet developed for a specific group or project. Each AAC includes initially five core

elements. As multipliers, teachers, and students use these environments, they can request changes and additions. Each AAC includes the following elements: 1) access to the SchoolLinks email discussion list which serves as the major discussion list of almost 2,500 members for LTNet; 2) access to one, two or more, bilingual (English/Portuguese) chat rooms that have been developed to meet the educational needs of teachers; 3) an “About name of locations or project” section of the AAC that enables the AAC owners to post information about their city, state, school or projects; 4) access to a web folio which enables members of the AAC to instantly publish text and images related to the work they are doing. (For some, the web folio is customized to suit a specific educational need.); and 5) access to a “Resource” page which is used to hold documents and information that members can download (Members can also upload their documents to the Resource page so that others can access them). The “Resource” page also provides access to LTNet’s “Bank of Links”.

- Revised and enhanced the web folio for the Riverwalk project AAC. This tool now includes a new question for enabling teachers and students to instantly publish information on the Internet. See the example of the web folio site on the next page.

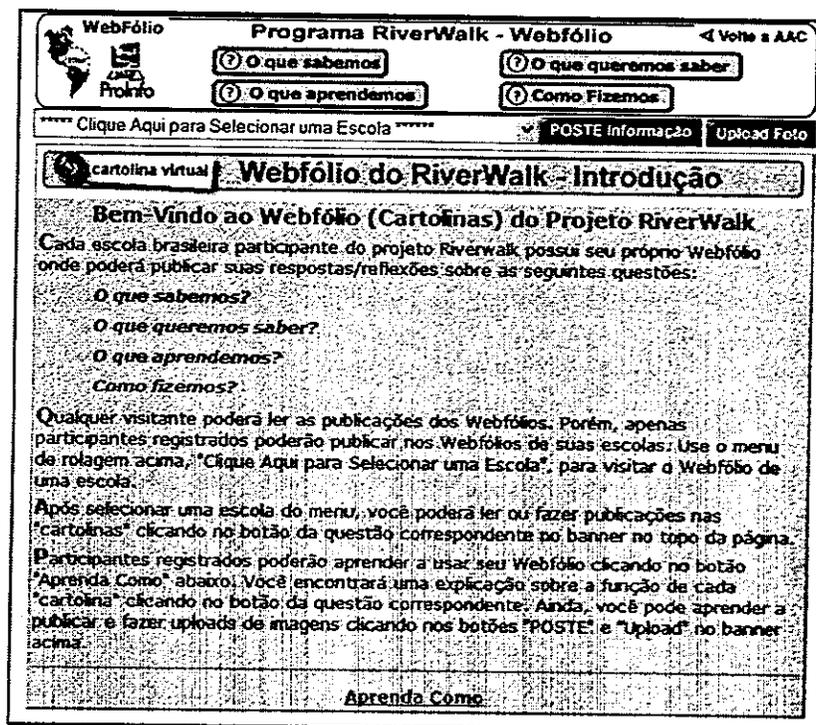


Figure 3: Enhanced AAC webfolio used in the RiverWalk AAC.

Attachment 1:
 PowerPoint Presentation #1 ProInfo/MEC Conference
 “Enhancing Teaching and Learning Through Educational Partnerships, Learning
 Communities, Collaborative Projects, and Virtual Networks”

ProfInfo & LTNet
US/Brasil Learning Technologies Network

Parcerias na Educação
Approaches, Impacts & Challenges

Enhancing Teaching and Learning Through Educational Partnerships, Learning Communities, Collaborative Projects, and Virtual Networks

Prof. Paulo A. S. Torres
 MEC/PROINFO/PROJETO 2000
 2000-2002

MEC PROINFO

Why Partnerships?

- > We are learning beings
- > Learning is a social process
- > Forming and using partnerships is an integral part of human interaction and learning
- > Many types of partnerships – who, when & where
- > Quality of partnerships vary – what, how & duration

Conclusion?

If we enable learners to form and use diverse high quality partnerships we will enhance learning.

MEC PROINFO

A Roles for Technology?

Enables:

- > Changes in learning relationships
- > New types of partnerships
- > Extending the reach of partnerships
- > An increasing numbers of participants
- > More & reflective partnerships
- > Bridging of barriers, potentials, capacities
- > Diverse learning opportunities
- > Changing perspectives

MEC PROINFO

Example Environments:

- > Sinop, MT
- > UFPR / American Univ.
- > Special Needs
- > Federal District
- > Minas Gerais
- > Santa Catarina
- > Goias
- > Campo Grande, MS
- > Parana
- > TV-Escola - PR
- > Rivers project
- > Ceara
- > Amazonas
- > YOUR State or Project???

MEC PROINFO

Impacts?

- > Discovery – About self & others
- > Learning more active
- > Learner-directed
- > Enables explorative learning – learners as scientists
- > Professionalises learning
- > Builds technical skills
- > Strengths self-esteem

MEC PROINFO

Outline

- > Why partnerships in education?
- > Roles for technology in learning partnerships
- > Examples & Impacts – LTNet / ProfInfo – AACs
- > Factors for success
- > Challenges
- > Future ideas & possibilities
- > Who can participate?
- > How can YOU participate?

MEC PROINFO

A Roles for Technology?

Some Basic Principles:

- > Many rich & powerful partnerships form and grow without technology!
- > Technology does not automatically create or improve learning partnerships!
- > Technology cannot replace people in learning partnerships!
- > LTNet is not the only web site supporting and enabling learning

MEC PROINFO

Virtual Environments

LTNet/ProfInfo AAC
Ambiente de Aprendizagem Colaborativa
Evolving & Customizable Environments!

Basic content & action elements:

- Introduction – focus, purpose, participants, etc.
- About your state, municipality, project, etc.
- School links & project discussion lists
- SchoolLinks Chat
- Web Pedia
- Banco de Links
- Foto Gallery

MEC PROINFO

Critical Aspects

- > Learners create and produce for groups & peers; not only teacher.
- > Increases interest, adds excitement
- > Learn about local realities
- > Teach and share with collaborators
- > Become aware of different perspectives.
- > Encourages questions; raises doubts; multiple paths for solutions

MEC PROINFO

Impacts?

- > Builds & strengthens literacy at all ages
- > Develops teamwork skills
- > Strengthens communication abilities
- > Builds life-long learning skills
- > Learning beyond the class & school
- > Enhances all disciplines

MEC PROINFO

Success Factors

- Use multiple tools & customize
- Teacher as *facilitator* not controllers
- Leadership & individual *responsibilities*
- Actively facilitate - Good mothers & fathers
- Training & on-going support
- Focused & Guided*
- Keep environment *open & dynamic*
- Mutual *rules of engagement*
- Specific products, outputs & *results*
- Feedback* - from many sources
- Mix of *open & closed* environments

Challenges

- Moving beyond social communication
- Finding *collaborator / partners*
- Creating & maintaining focus & *direction*
- Integrating into educational programs
- Closure, follow-up & *packaging*
- Scheduling - time & school year
- Language
- Sharing the *spotlight*
- Learning to use collaborative tools
- Evaluating process & *results*

Future Ideas & Possibilities

Special Projects

- Indians in Brazil
- Readers Club
- TV/Video & Internet (teachers & students)
- Math Clubs
- HIV/AIDS - Sexual Responsibility project

Tools & Applications

- More interactive publishing
- Discussion Fora
- On-line Web tools
- Participants' profiles
- Simulations
- Software downloads

Who Can Participate?

ANYONE! Accept the school's constraints or establish your own

Conditions for participation?

- Computers & Internet Access
- Willing to *exchange* ideas, distribute & collaborate
- A *concrete plan* & mission
- School-*initiated* & *self-directed* participants

What does it cost? **NO!** (with conditions)

How Can YOU Participate?

- Define and describe a specific need
- Start using open *SchoolInks* tools & the discussion list
 - www.ltnet.org/SchoolInks
- Identify partners & collaborators
- Clarify goals and objectives
- Communicate with Vera Suguri
- Soon: - On-line planning tool

Further Information:

- Talk with people participating in AACs
- Visit LTNer AACs
 - http://www.ltnet.org
- Contact:
 - Vera Suguri, vera@suguri.com.br
 - Eric Rusten, eric@ericrusten.com

Attachment 2:
PowerPoint Presentation #2 ProInfo/MEC Conference
"Multiple Mechanisms to Collaborating, Exchanging & Learning Through Technology"

ProInfo
US/Brazil *using technologies* project

Multiple Mechanisms to Collaborating, Exchanging & Learning Through Technology

Outline:

- Why?
- Integrated Project
 - Partners
 - Virtual Environments
- Different Technologies
 - Classroom
 - Classroom
 - Classroom
 - Classroom
 - Classroom
- Critical Elements

Integrated Environment

MEC AFD

Participating Schools:

MEC AFD

Interactive Web Environment

- Riverwalk Project - University of Michigan (demo)
 - Collaborative & Sharing
 - Easy to use
 - Multilingual - International program
 - User managed
- LTNet/ProlInfo AACs (demo)
 - Collaborative & Sharing
 - Web based no software needed
 - Customizable
 - Open, free, flexible, user controlled

MEC AFD

E-mail & Listservs

- Free Easy Tools - Powerful Impacts
- Makes Internet real - people become part of the global learning community; they believe in the theory!
- Starting Point for Internet & Education - Exposes Needs
- Idea Generator for projects
- Active strategies required for effective use

MEC AFD

Webfolio

- Easy, Free, Flexible - instant publishing (demo)
- No technical skills needed, destroys Internet myths
- People take ownership of the web
- Exposes learning processes - DYNAMIC
- Focuses on content & ideas - thoughtful & edutective
- Enables collaborative teaching & learning
- Different educational levels

MEC AFD

Critical Elements!

- Active!!! Coordinating & Facilitating
- Responsive to Emerging Needs
- Commitment, Determination, Courage
- Creative Problem Solving
- Open & Flexible Web Environments
- Decision Making Autonomy
- Access & Support (political, financial, technical)
- Collaborative Team Work

MEC AFD

For More Information:

- Visit Participans' stands
- Vera Soguni, ProlInfo
- Eduardo Junqueira
- Eric Rusten
- Univer. Federal de Pernambuco (Riverwalk AAC)

MEC AFD

Attachment 3: BNC Presentation
 "Enhancing ESL & Strengthening Brazil's BNC Network Computer & Internet Technologies"

US/Brazil - enhancing technologies work

Enhancing ESL & Strengthening Brazil's BNC Network Computer & Internet Technologies

Situations and Opportunities for Leveraging the Power of Computer & Internet Technologies

MEC AFD

Outline:

- Introduction to LTNet
- BNC challenges
- Strategies and opportunities
- Can technology help?
- Collaboration & prosperity
- Moving Forward?
- Q & A
- Virtual Communities (if time permits)

MEC AFD

LTNet

- A USAID funded project
- Works in Partnership with ProInfo & other organizations.
- Face-to-face activities
- Bilingual Web Site (www.linnet.org)
- Fosters the exchange & sharing of information, ideas, & experiences among Brazilian & US educators

BNCs

Moving Forward?

- *You are your greatest resource!*
- BNCs are doing much, learn from each other!
- Engage in collaborative activities
 - Can you collaborate?
 - Exchange ideas & experiences
 - Provide resources & practical support
 - Share knowledge
- Formalize relationship & hire coordinating services
- Periodic technology workshops

LTNet & the BNCs

- Technology & TEFEL workshops - Porto Novo
- Web Resources Lists
- Discussion Lists
- Regional BNC Lists
 - Tech Communities List
 - Lists of Professionals
- National BNC Lists
 - BNC of Professionals
 - BNC of Educators

Is It Expensive?

YES & NO!

- Failure to use can be more expensive
- Physical infrastructure can be
- Technology enhanced programs can be less costly than alternatives
- Virtual collaboration less costly
- Technology enables you to do things you can't do without!

Can LTNet play a role?

- This is up to you
- LTNet in transition
- May provide contracted coordination services
- Participate in periodic workshops
- Provide specialized technical input
- Enable collaborative activities in Brazil and US

**Benin Community Learning Centers
LearnLink Task Order #6
USAID/LENE#H00-96-00018-00 T.O. 805**

Summary

USAID/Cotonou has funded LearnLink to assist a local NGO, the Songhai Center, in establishing three Community Networking Services (CNS) Centers in different regions of Benin. LearnLink is working with Songhai, an agro-biological research and training center, to set up CNS Centers in each of Songhai's three regional locations: Porto Novo, the nation's capital; Savalou, an important commercial hub in Benin's central region; and Parakou, Benin's third largest city, in the northern region.

Project Activities This Quarter

The required final report and Lessons Learned document is being written.

• **Morocco – Computer-Assisted Teacher Training (CATT) Project**
LearnLink Task Order #14
USAID #: HNE-I-00-96-00018-00 T.O. 09

Summary

The Computer-Assisted Teacher Training (CATT) Project aims to improve the quality of teacher training in primary education through the introduction of educational technology. This is a pilot or demonstration project, which targeted the provincial teacher-training colleges in five provinces where girls' enrollment and retention rates lagged behind the national average. With the Ministry of National Education, LearnLink developed a program for pre-service and in-service teacher training that effectively integrated educational technology into existing academic programs. The project also explored the creation of a Master Information Teachers (MIT) program, which rewards teaching excellence through educational technology. During the period between July and September 2001, the CATT-PILOTE Project completed a number of important tasks that brought the project closer to completing the bulk of its objectives and contractual goals

Project Activities

During the last quarter, the final report was completed and submitted along with the project evaluation. Lessons learned was written and sent to translators. The Morocco Ministry of Education has approved for national distribution to all teacher-training colleges the seven modules developed by this AED/LearnLink project, which were posted for public access on the project web site (www.ibtikar.ac.ma). In answer to a MNE request, all seven modules are being reproduced in bound paper format (100 copies each) and digitally on CD-ROM (100 copies each). All deliverables were achieved, and some project staff were absorbed by USAID's Morocco Education for Girls (MEG) project, which is also expected to maintain the computer facilities at the five teacher training colleges.

• **Haiti – Expanded Internet Services**
LearnLink Task Order #15
USAID #: OUT-HNE-I-806-96-00018-00

Improving Access to Information and Communication Technology in Secondary Cities in Haiti under the U.S. Presidential Initiative for Economic Development

Summary

The LearnLink Task Order for Haiti consists of three primary components:

- building the technical human capacity of the Internet Service Provider sector;

- procurement and technical assistance to the *Reseau de Developpement Durable d'Haiti* to build the capacity of this organization to manage the .ht Internet domain and serve as a neutral forum for the discussion of telecommunications issues in Haiti; and
- establishing a telecenter in each of three key secondary cities through private-sector partnerships in order to increase access to information and communication opportunities for these under-served communities.

In order to achieve the first result – building the technical capacity of the Internet Service Provide industry – LearnLink will utilize a combination of subcontractor (Moroccan Trade and Development Services) expertise through workshops, an online help-desk, and short-term technical assistance by Task Order key personnel.

To achieve the second result – support to RDDH – LearnLink will assist RDDH in the procurement of necessary hardware and software for Internet domain-name management. For capacity building, depending on the availability of subcontractor time and key-personnel level of effort, LearnLink will either employ a combination of MTDS and Task Order key-personnel assistance, or seek sponsored training opportunities for RDDH staff in relevant international training fora.

To achieve the third result – establishing three telecenters – LearnLink is issuing Requests for Quotations to the private sector in Haiti for equipment and three separate Requests for Proposals for the establishment of telecenters. LearnLink field staff and Task Order key personnel will work closely with private-sector partners to ensure efficient operations and community access.

Major Accomplishments

- Thony Baptiste conducted training sessions in Cayes on October 13, 2001 for the community that included students, journalists, health professionals, and business women.
- The telecenter in Cayes was inaugurated on October 13, 2001. The center is open 14 hours per day.
- The telecenter in Jacmel was inaugurated on October 22, 2001. The center is open about 12 hours per day.
- Cayes - The telecenter offers training, Internet surfing, and desktop publishing services. During October to December, 2001, it received 2217 clients or an average of 30 people per day or 739 per month. About 70 people were first time users, introduced to the Internet and email, and about 500 were repeat users.

- Jacmel - The telecenter offers training, Internet surfing, and desktop publishing services. During October to December, it received 1498 clients, of whom 15% were students and 78% were men. 72% used computers for surfing the Internet. About 90 clients were repeat users. About 130 people have been trained, of whom 76% were given an Introduction to the Internet, and about 24% were given training in Basic Computer use and Microsoft Office applications. Indications are that Internet use among the cities 9-10,000 people may have increased from 40% to 65% since the inauguration of the telecenter.
- Karl Stanzick of MTDS traveled to Haiti and worked with major local ISPs.
- Sabina Béhague, Karl Stanzic, and Thony Baptiste had meetings with Elzadia Washington, head of the Economic Growth Office for the USAID mission in Haiti. The purpose of these sessions was to discuss a new implementation plan for the LearnLink activity in Haiti.
- Sabina Béhague and Thony Baptiste had meetings with other USAID project staff working in Haiti. The purpose was to explore collaborative possibilities in Education, Environment, Agriculture, Art, and Public diplomacy.

Activities Planned for Next Quarter

- The published results of “The State of IT for Haiti” overview developed by Haiti LearnLink project staff will be available.
- A web site will be operational for the Haiti LearnLink activity.
- Haiti-LearnLink will initiate activities to stimulate use of information technology (IT) for business and economic growth.

Travel

Staff	Dates	Destination
Sabina Béhague	October 12-13, 2001 October 22, 2001	Port-au-Prince Cayes Jacmel
Karl Stanzick	October 22, 2001	Port-au-Prince Jacmel
Thony Baptiste	October 12-13, 2001 October 22, 2001 November 2, 2001	Cayes Jacmel Jacmel

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	October 22, 2001	Cayes Jacmel
Karl Stanzick	October 22, 2001	Port-au-Prince Jacmel
	October 12-13, 2001	Cayes
Thony Baptiste	October 22, 2001	Jacmel
	November 2, 2001	Jacmel

• **Guatemala – Computer-Assisted Bilingual Education**
 LearnLink Task Order #16
 USAID #: OUT-HNE-I-807-96-00018-00

Using Information Communication Technology Applications to Support Intercultural Bilingual Education in the Department of El Quiché, Guatemala

Summary

This quarter was the beginning of the final push to close the task order. The main thrust was to finalize the 4 books and 5 CDs, which was almost accomplished. The second thrust was to make the centers sustainable. This is a more delicate process, which largely requires the project to back off and let the school principals take the lead. A four-day workshop was held to prepare normal school teachers to integrate technology into their teaching. Also significant progress was made with result 4.

The project is now well-positioned to complete all deliverables by February 13, 2002. Also, the workshop led by MSI/USAID and Sergio Cambronero's monitoring and evaluation visit gave project staff much insight into the ways we have been working and ways that we could be doing things to have a larger impact and improve the cost/benefit factor. A reshaping of the project has begun, which will lower costs and increase effectiveness. This will permit a fast, focused start upon approval of a new activity under dot.EDU.

Travel

Staff/Consultants	Dates	Destination
Andy Lieberman	Oct. 18, 19; Nov. 8,26,27,28; Dec. 1 – 12	Guatemala, Panajachel, Chichicastenango, Washington
Fausto Perez	Oct. 2, 4, 5, 16,17,18, 19,22,23,24,29,30, 31; Nov. 8,14,15,16,19,21; Dec. 1,5,12	Guatemala, Totonicapán, Cunén, Nebaj, Joyabaj, Panajachel
Francisco Tax	Oct. 16,17,18,19,22,23,24; Nov. 14,15,16	Joyabaj, Guatemala, Cuneen, Nebaj,
Domingo Camajá	Oct. 5,16,17,18,30,31	Totonicapán, Guatemala
Máximo Terraza	Oct. 16,18,19	Joyabaj, Cunén, Nebaj
Esmeralda Vasquez	Nov. 19,26	Panajachel
Dominga Pu	Oct. 30, 31	Guatemala
Concepcion Rosales	Oct. 4,5,16,18	Joyabaj

Major Accomplishments

Results #1 and #2: Culturally appropriate Mayan language instructional materials are developed and Teachers' professional skills are improved and their proficiency in oral and written Mayan language is strengthened

- ❖ Project library: Over 100 books were added to the project library. Many were donated. Others were purchased with project funds. The library is fairly strong in terms of Mayan language, culture and bilingual education but is weak in other areas. Also the number of multimedia resources is limited.
- ❖ Resource libraries in centers: Approximately 100 books were purchased or donated to the libraries of each school.
- ❖ Centers: The transition of center administration from project staff to normal school staff was completed. Sergio Cambronero, an STTA consultant, carried out a visit to the centers and conducted extensive interviews with project staff. He concluded that the school principals have excellent control of the centers and that the fixed income from the students covers basic costs, so sustainability is not an issue. Each center held vacation classes (for community access). As of this writing, enrollment information is still being gathered.
- ❖ Integration of technology into curriculum: A base group of approximately 5 teachers was formed in each school. These will be the pioneers in incorporating technology into their teaching. Mayan language and culture teachers were included in these groups. A 4-day training and planning workshop was held in Panajachel for these teachers with support from

Gabriela Alpirez. Workshop products include 50 lesson plans using technology in content courses that the teachers will use in the 2002 school year. A detailed report of the workshop is currently being prepared.

- ❖ CD-ROM: Engrandezcamos Nuestro Pensamiento. This CD for Mayan literacy practice was completed and approved for reproduction by USAID.
- ❖ CD-ROM: Así se ilustra mi palabra. This CD of 3000 Mayan clip-art images was finalized and approved for reproduction by USAID.
- ❖ CD-ROM of digitized books. Three books are finished (Girl's Education Manual, Escribiendo K'iche', and Escribiendo Ixil). Three others are in process: two DIGEBI books for K'iche' and Ixil literacy training and the Ixil Grammar primer developed by the project. A contract was made with a JavaScript programmer to create a number of interactive exercises for the Ixil grammar book. The code will be general enough so that it can easily be used in other digital products to enable more online exercises.
- ❖ CD-ROM: Pensamiento de Nuestros Abuelos. The finishing touches were put on this CD created by normal school students, and USAID authorized the reproduction.

Result #3: Early childhood activities to enhance student learning outcomes are developed

- ❖ CD: Florezcan las palabras de los hombres de maíz. From the Spanish, K'iche' and Ixil radio programs created in August, a CD was compiled with all the programs that had acceptable sound quality. Minor editing was done as needed and the CD cover was designed. Reproduction was authorized by USAID. Preliminary agreement was made with Radio Quiche for the transmission of these programs.
- ❖ Pre-school oral tradition story books: Layout was completed in November and the books were sent to the mission, which approved their publication pending a few minor changes.

Result #4: Institutional capacity in computer software use is developed and computer services are made available to the community

- ❖ Support to DDE, DIGEBI, ALMK, ALMI: Diagnostic visits were made to each institution to detect both equipment and training needs. A 2-day basic workshop was held in November for personnel of these institutions who needed training in Word and Excel. (10 participants) A list of equipment to be purchased for these institutions was prepared based on the diagnostic, and the equipment procurement process was begun.
- ❖ Support for center in Ixcan: Project director met with Ixcan center manager on two occasions and assessed center progress. In general, the center appears

to be functioning well, and the center manager has control over administrative, financial and technical aspects. Some training needs have been identified.

Administration and planning:

- ❖ Workshop in Educational Reform Policy by MSI/USAID. This three-day workshop for all project staff was very beneficial. The project learned to use political mapping and SWOT analysis as tools. We also saw ourselves in the context of the educational reform initiatives in Guatemala and identified ways that the project can have a wider impact.
- ❖ M&E visit by Sergio Cambronero. While this consultancy was originally designed to be focused on administration in the centers, Sergio came to the conclusion that the weaknesses and uncertainties in the centers stem from underlying weaknesses in the way the project was designed and carried out. He worked with key project staff on strategies for systematizing information, preparing lessons learned, and reshaping project activities and planning for a possible project extension under dot.EDU.
- ❖ Project director attended a one-week conference for chiefs-of-party at AED's central office. This was very important for creating more channels of communication between the local project office and AED.
- ❖ To lower overhead, the project took two measures: first, moving to a slightly smaller, much less expensive office. Second, the driver position was eliminated. When needed, qualified drivers can be hired on a daily basis.

Problems/Challenges

- Instability of computer teachers in normal schools (turnover in 3 of the 4 centers) has caused difficulties because technical details about use and maintenance of equipment are not transferred.
- Many logistical constraints (high ratio of students per computer, limited class time, etc.) jeopardize the ability of the normal school teachers to put into practice what they planned in the November workshop.

Priorities and Plans for January to February, 2002

The task order will finish as scheduled, on February 13, 2002. Pending key deliverables include:

- Printing of 1000 copies of each of 4 story books, to be distributed to normal schools and DIGEBI teachers.
- Reproduction of 300 copies of each CD (5 total)

- Reproduction of Gabriela Alpirez's curricular vision for integration of technology into the normal schools curriculum.
- A materials presentation event in Santa Cruz del Quiche, tentatively set for Feb. 6.
- Final information gathering from normal schools to be included in lessons learned report.
- Technical training for center managers and computer teachers. (2-day workshop)
- Transmission of radio programs via Radio Quiche and Radio Ixil.
- Equipment purchase and installation for partner institutions.
- Update of the project web page.
- Lessons learned report
- Completion of 4 case studies

• **Uganda— ConnectED: Connectivity for Educator Development**
LearnLink Task Order #17
USAID # HNE-I-00-96-00018-00 T.O. 809

Summary

The United States Agency for International Development (USAID) Uganda has worked in conjunction with the White House Education for Democracy and Development Initiative (EDDI) in Africa since September 1999. On request from USAID/Uganda, the USAID Africa Bureau Leland Initiative and the USAID Global Bureau LearnLink Project produced the Connect-ED activity.

Connect-ED falls under USAID/Uganda's Strategic Objective No. 3: Quality Basic Education for an Increased Percentage of Ugandan Children. Connect-ED builds on USAID's investment in the primary education sector by aiming to improve rural students' basic literacy, improve school administration, reduce the inequities persistent among different groups of children, and to further enhance and support the Universal Primary Education (UPE) policy in Uganda focusing on delivering services in rural areas.

Increasing the use of information technology for education and to promoting strategic partnerships on behalf of education, democracy, and development in Africa, are key elements which characterize Connect-ED.

Connect-ED works in conjunction with the Institute of Teacher Education Kyambogo (ITEK) in creating computer-assisted, multimedia, teacher-training resources for utilization in eight selected Primary Teacher Colleges (PTCs) and ITEK in Kampala. By providing professional development in a democratic setting for primary-school teachers' education through the introduction of educational technology, Connect-ED seeks to meet Uganda's goal of improving telecommunication services and quality.

Major Events this Quarter

The LearnLink Uganda, Connect-ED Task Order began April 25, 2000. Among the activities undertaken during this quarter were:

1. Online Multimedia Curriculum Development
2. Development of Digital Library CD-ROM Resources “Best Practices”
3. PTC Plans for Professional Development Computer Training
4. New Staff Hires by Connect-ED Project in Uganda
5. Identification of Three New ITEK Counterparts
6. Potential Identification of Two Additional PTCs
7. Estimates for PTC Renovation provided by ITEK-Approved Construction Companies
8. Equipment and Furniture for the PTCs
9. Connectivity Pre-Assessment
10. Coordinating Activities
11. Procurement of a vehicle

Online Multimedia Curriculum Development

More graphics have been included in the curriculum. Connect-ED and ITEK have worked together on the content. A final interface design will be set and a last round of production will begin in January when Education Technology Specialist, STTA, Wendy Koppel-Kohn arrives in Uganda. More graphics have been included in the curriculum. Feedback and Reporting Mechanisms are going to be embedded in forms in the multimedia curriculum with the intent that the recommendations and feedback from the PTCs would circulate via e-mail back to the Connect-ED Development Laboratory at Kyambogo. A demonstration was given at the November 16, 2001 PTC Principals’ Meeting at ITEK.

Development of Digital Library CD-ROM Resources on “Best Practices”

The November 16, 2001 PTC Principals Meeting included notification that Connect-ED has been filming Subject Matter Experts from ITEK and the PTCs. The relevant Department Heads identified additional Subject Matter Experts whom they thought deserved to be filmed. The Principals identified additional teachers at their PTCs who would be recommended for the film on “Teaching Best Practices.” One of the Principals suggested filming in a real life situation such as during lessons at the PTCs.

Connect-ED involves the PTC Principals and ITEK in identification and selection of model tutors to serve as exemplary instructors throughout the country. The Principals gave their recommendations and developed a list of tutors to be included in the film for “teaching best practices,” which will be included in the

CD-ROM-based Digital Resource Library. The tutors from nearby PTCs (Shimoni, Kibuli and ITEK) were filmed last quarter. The additional tutors identified are from distant PTCs such as Bushenyi, Gulu, and Mukuju. The Bushenyi PTC Principal recommends filming the following tutors: Mr. Justus Muramuzi (FED-Topic: Human Growth and Development, the meaning of concepts and their characteristics) and Mr. Gabriel Arumet (Mathematics-Topic: Plotting Function on a Cartesian Graph in Two Dimensions).

The three new Creative Materials Design Specialists (formerly LearnLink's three ITEK counterparts) have been working on the digital resource library. The training they underwent this past year has drawn to a close. Although they are covering in their jobs new topics like basic digital sound recording, sound for the web, sound for broadcast, and sound enhancement, they have used PowerPoint to insert media (sound and video) into their presentations. Further, they have worked with basic digital video and are competent in the following areas:

- Digital Library
- File formats for Digital Video
- Video for Broadcast versus Video for the web and other multimedia presentations
- Video frame sizes
- NTSC versus Paal
- Mpeg, Windows Media, QuickTime
- Video Compression Techniques
- Basic Video Recording
- Basic Video Editing
- Video Capturing

PTC Plans for Professional Development Computer Training

The PTC Principals were very pleased to hear that Professional Development Training will be conducted at the selected PTCs and ITEK so that each of the 8 PTCs will be trained to the point where they can design and update their own web site. Also, the PTC Principals and PTC staff were eager to participate and gain these skills. During the November 16, 2001 PTC Principals Meeting at ITEK, the PTC Principals were informed that PTCs will have their own web sites, which would be linked to the ITEK web site. Training in how to design and update web sites will be carried out so that the Principals and PTC staff know how to do it.

Additional Professional Development Training will allow the adult learners to evolve from basic computer skills through training in trouble shooting and training of trainers. PTC Principals asked whether they could also attend the training and were assured by Connect ED staff that they were welcome to participate!

Connect-ED Project Hiring Staff in Uganda

An advertisement was placed in the local newspaper for 8 Project Technical Assistants to work at the PTCs. Ideally, these people would be from the area surrounding the PTC. At the December 15, 2001 PTC Principals' Meeting at ITEK, the Principals at Soroti and Bushenyi PTCs nominated a candidate for this position at their own PTCs. Resumes of all applicants were reviewed, and a short list of qualified candidates was identified for interviewing.

The Connect-ED project looked for additional people to fill the three Creative Materials Design Specialist positions. Ms. Phoebe Kyomukama, Mr. David Kawumi, and Mr. Enosi Ssemenda, the former ITEK counterparts, have joined LearnLink/Connect-ED full-time to fill these three positions.

Identification of Three New ITEK Counterparts

ITEK's Principal Lutalo Bosa has called for volunteers from ITEK's Lecturers at Kyambogo campus to join the Connect-ED team for multimedia training and curriculum enhancement. Connect-ED welcomes the new counterparts: Mr. Emmanuel Kamuli, Ms. Julie Namulindwa, and Mr. Raymond Okumu.

Potential Identification of Two Additional PTCs

USAID together with the Ministry of Education identified two more PTCs that will be added to two other new sites and the original four in the Connect-ED Project—thus completing the PTC selection process. The new PTCs are Soroti Primary Teachers' College in Soroti and St. Bohn Bosco Primary Teachers' College - Ladonga in Yumbe. However, LearnLink was informed after-the-fact that the selections are still tentative, and the Ministry and USAID are re-considering the selections. This is posing difficulties because Connect-ED must have the final selections in order to be able to allocate funding appropriately and obtain appropriate bids from construction firms and Internet service providers on the remaining work.

Hawa Nyende, the Connect-ED Assistant Coordinator and the ITEK Estates Manager, with Martin Mayanja, USAID Kampala, planned on visiting the proposed sites for the two "new" PTCs (Ladonga and Soroti). However, this did not take place due to the change in schedule by USAID. The visits were postponed until early January 2002.

ITEK-Approved Construction Companies Provided Estimates for PTC Renovation

ITEK Principal Lutalo Bosa recommended that construction companies provide estimates for renovations at the four new PTCs and any additional modifications necessary at the initial four PTCs. These construction companies were chosen

according to regions where ITEK has had experience working with them. The ITEK-approved construction companies from whom Connect-ED will request quotes include the following: Kampala Technicians, Standard Technical Services, Prime Construction, and MM Construction.

During the November 16, 2001 PTC Principals' Meeting, the Principals were informed that, during renovation, priority will be given to security of the equipment. No one wants the equipment stolen. The selection of the construction firms who will renovate the four new PTC Labs is scheduled to begin soon.

Minor security measures will be put in place at the initial four PTCs. The initial four PTC Principals were reminded that they should not expect renovation of the whole building.

The Chairman of the meeting informed the principals that when ITEK was asked to provide room for the Connect-ED project, they had to mobilize funds and put up a new building as soon as possible. This was a challenge for ITEK since it was not in their budget. The Chairman asked the PTC Principals if it was possible to cost-share in certain areas. The PTC Principals asked about Connect-ED's budget constraints so that they could discuss the issue further with their Board of Governors and the Ministry. The Principal of Gulu PTC informed Connect-ED that a telephone line and electricity may be nearer the college when the equipment arrives. But, he suggested that Connect-ED coordinate with the Desk Office at the Ministry to ensure appropriate timing.

Equipment and Furniture for the PTCs

PTC Principals received a copy of the project IT order for equipment and applications for the Connect-ED project. They were informed that the equipment is ready to be delivered to the four original PTCs. The Chairman expressed concern about the date of purchase of the equipment and outdated technology due to postponed delivery. Stacy Cummings, the Connect-ED Project Manager, is considering adding to the list of software if financially feasible, since the software tends to become outdated before the hardware. The participating PTC Principals were happy to know what equipment to expect, although they were expecting 20 computers—not 10 as indicated in the inventory. Connect-ED staff affirmed expectations for approximately 10 workstations, which is the number approved by USAID at the inception of the project.

At the November 16, 2001 PTC Principals Meeting, the Principals provided feedback on the letter they received from the Permanent Secretary regarding acceptance of "substandard furniture" received from the former Connect-ED Collaborators and USAID Subcontractors (CFI/WorldLinks). PTC Principals claimed that they were aware of the furniture deliveries but had no idea about the origin. The suppliers of the furniture said they were from Cofreeze White God,, P.O Box 25786, Kampala. 6th Street Industrial Area. PTC Principals informed

LearnLink Connect-ED staff that they did not see any Inspecting Officer from the Ministry as the letter claimed and were puzzled that the letter was not copied to ITEK, USAID, the Commissioner of Teacher Education, or any member of the Connect-ED team.

The Principal of Gulu PTC said he received the furniture at a time when he was adjusting to his new position at the PTC. The Principal of Bushenyi PTC informed Connect-ED that they were aware of the furniture delivery. When the PTC Principals received the letter from the Permanent Secretary, they telephoned the Commissioner of Teacher Education, who also was not aware of the letter authorizing the delivery of substandard furniture to the PTC Principals.

When LearnLink Connect-ED recently received a copy of the letter, our team called the Commissioner of Teacher Education and informed her about the letter. The Commissioner reiterated that her office always should be notified of furniture deliveries to the PTCs. LearnLink and Connect-ED staff concurred that appropriate channels of communication have been and will be followed. Connect-ED informed USAID about the existence of the letter.

Connectivity Pre-Assessment

Connect-ED staff visited several ISPs in Kampala and determined the following.

ISP	Feedback	Our comments
Infocom	They were to email Connect-ED the quotation and relevant documentation.	Their connection is slow.
Bushnet	They do not host web sites, however, if they do it for us, we need to provide them with <ul style="list-style-type: none"> • a new hard disk and • \$350 per month. They are to provide more detailed information through fax or email.	Since they don't host web sites, it might end up being expensive.
Afsat	We are to provide <ul style="list-style-type: none"> • a down payment for service six months in advance and • \$50 for every 25MB per month. 	They are unreliable. Recently they broke down for two weeks and their clients were not even informed. We may not get the best value for the money.
UTL	UTL should have faxed us a quotation, but we are waiting.	UTL has been in the telecom market for a long time and comes highly recommended.

Coordinating Activities

At the PTC Principals' Meeting of November 16, 2001, the PTC Principals recommended coordinating staff at the PTCs. It was agreed that the Principals should identify Connect-ED liaison staff at each PTC for reporting purposes. The following reporting mechanisms were suggested:

- Monthly reports from the PTCs and Connect-ED ITEK,
- Quarterly Connect-ED meetings,
- Telephone Contacts,
- Monthly reports to the Ministry and ITEK Administration as well as other coordinating activities as the need arises, and
- Report writing and dissemination to central headquarters by the PTC liaison staff.

The PTC Principals were given a tour of the Connect-ED Multimedia Development Lab, where equipment capabilities and purpose were explained. When the Multimedia Curriculum was presented, Principals were excited and hoped for their implementation as soon as possible. When a Sample of Digital Library Resource "Teaching Best Practices" was demonstrated, the Principals appreciated the power of multimedia in education. The Principals were informed that the three content design specialists were in the process of identifying appropriate online reference materials that will be used to enhance the curriculum.

In addition, the PTC Principals were led to the Training/User Lab, where the Creative Materials Design Specialists briefed them about the facilities and the use of the lab. The Principals were told to expect something similar to the user lab for the PTC labs, with some exceptions such as furniture, tiles, and other items that were provided by Principal Lutalo Bbosa and ITEK's generosity in a cost-sharing arrangement with USAID.

Date	Venue	Members Present	Outcome of meeting
October 2001	ITEK	Dr. Margaret Ochen (Ministry) Professor Lutalo Bbosa ITEK Administration Connect-ED Staff	A tour of the Connect-ED computer labs and an update of the project was provided to the visitors.
October 2001	ITEK	Subject Matter Experts (ITEK's curriculum developers)	Sensitization on the issue of filming "Best practices"
16 th November 2001	ITEK	PTC Principals ITEK Senior staff Connect-ED Staff	Minutes of Meeting available and supplied to USAID.
16 th November 2001	ITEK	Principals Connect-ED Staff	Several meeting to update the PTC Principals.
December 2001	ITEK	Subject Matter Experts	Sensitization on the issue of capturing "Teaching Best

			Practices”
December 2001	ITEK	40 Members of Uganda's Parliament Connect-ED staff ITEK Administration	The Parliamentarians liked the project goals and wanted the project expanded countrywide. Coverage was provided on local television.

Members Present at November 16, 2001 PTC Principals' Meeting at Kyambogo

Name	Title
Etibot Gerald Simon I.A.O	Principal Gulu PTC
E. Turyomugyendo	Estates Engineer ITEK
Tusiime Stephen	Finance Department Kyambogo University (KYU) East
G. K. Tindarwesire	Task force member KYU West
Cula A.A	Task force member KYU (Asst. Registrar)
Theresa Kigenyi	Institute Secretary
A. J. Lutalo Bosa	Chairman/ principal ITEK
Wamala Fredrick	Coordinator
Cissy Segujja	Asst. Coordinator
Hawa Nyende	Asst. Coordinator
J.B. Namande Kyambadde	Asst. Registrar (PTC Issues) ITEK
Phoebe Kyomukama	Materials Design Specialists
David Kawumi	Materials Design Specialists
Ahmed Kanya	Principal Kibuli PTC
Kamushaga Joseph	Deputy Principal Bushenyi PTC
Semanda Enosi	Materials Design Specialists
Wandira K. Theopista	Principal Ndegeya PTC
Sebugwawo Gertrude	Deputy Principal Ndegeya PTC

Namibia - Support to the Ministry of Basic Education and Culture
LearnLink Task Order #18
USAID # OUTFINE-1-808-96-00018-00

Executive Summary

Major Accomplishments

LearnLink / Namibia has had Successes in all Five Task Order Objective Areas:

In support of Task Order Objective Number 1 (support the National Institute for Educational Development (NIED) and its designated staff in acquiring the necessary tools and skills to develop computer-assisted training courses for advisory teachers, inspectors, and others in the four education regions where USAID is assisting the MBESC) the project:

- Provided approximately 30 hours of training and support to NIED Multimedia Working Group (MMWG).
- The NIED MMWG produced three online modules for the BETD /INSET (each module contains an activity booklet and a second booklet of support materials). These materials cover the first year of training in the Education Theory and Practice section of the BETD/INSET program.
- Assisted NIED MMWG member and Oshindonga Education Officer to produce multiple ED'S Net web pages to support Oshindonga education. Oshindonga is one of the 13 official Namibian languages and one of the mother tongue languages of one of the largest ethnic groups in the country.
- Assisted NIED MMWG member and NIED Resource Centre technologist who continued developing the NIED web site and to develop a brand new NIED Intranet.

In support of Task Order Objective Number 2 (support NIED in the development of a communications network for the training of advisory teachers, inspectors, and others involved in the lower primary phase by linking them to NIED through the Internet and other key computer-assisted delivery mechanisms to be developed) the project:

- Continued providing informal training on the Internet and ED'S Net to groups holding training and workshops at NIED.
- Continued updating and providing content to ED'S Net.

In support of Task Order Objective Number 3 (support the development of prototype curriculum-based teacher training materials for primary school) the project:

- Worked with NIED and BES II Management Advisor, Dr. Pfau, to produce an online version of the second module in the School Managers professional development series (HTML).
- Worked with the Ministry's HIV/AIDS committee and the Ministry of Local and Regional Affairs to provide two additional modules—bringing

the total to five—to train teachers about HIV/AIDS via ED'S Net. (May be downloaded in full module form or chapter-by-chapter in MS Word.)

- Worked with the Ministry's HIV/AIDS committee to publish another complete set of instructional materials for *My Future is My Choice*, a school-based program designed to raise awareness about HIV/AIDS, youth, and sexuality in Namibia.
- Developed a series of IT training materials that currently contain 22 *One-Page Information Sheets* (OPIS) to help provide basic training and guidance for Ministry officials and others to use. Current topics include accessing *Discover Windows 98*, accessing and using the Internet, accessing and using web-based email, accessing a program to help users search the Internet and identify quality sources of information, and 14 pages on basics of web site development.

In support of Task Order Objective Number 4 (support the expansion of an administrative framework at the level of the MBESC and NIED to include "Master Information Teachers," who champion the use of teaching/learning technologies) the project:

- Held first round of RETT meetings in Ondangwa East and Ondangwa West that included development of group objectives and mission statements and training related to ED'S Net and the Internet, email, and Windows 98.
- Held second round of RETT meetings in all, four education regions. Meeting activities included checking in on training done by RETT members in the region, developing mission statements, working with using the *Help!* features provided by Windows and other software, experimenting with Microsoft Net Meeting and Microsoft Messenger, using a web site that helps users learn how to more effectively use the Internet to do research, experimenting and learning functions of ED'S Net, and learning how to burn CDs.
- With the assistance of two Peace Corps Volunteers and one teacher, located a vendor to provide the project a deeply discounted rate for computer reading software that will allow blind students at the Eluwa School for the Blind and Deaf to use the computers and access the Internet at the Ongwediva TRC.

In support of Task Order Objective Number 5 (contribute to discussions of national policies, strategies, and guidelines on the use of teaching/learning technologies in the basic education sector) the project:

- Assisted NIED in developing proposed policies for the setting, collection, and accounting of fees collected at TRCs affiliated with the Namibian Open Learning Network (NOLNET).
- Assisted in the development of Regional Education Technology Teams that will discuss policy issues related to IT use, training, and investment in the education regions.
- Wrote a policy proposal to encourage NIED to consider providing more of its publications online for free.
- Assisted NIED management in its deliberations to purchase a wireless hub that will allow NIED residents to access the NIED network, email, and the Internet from their homes. In exchange, residents will be asked to pay monthly fees to help support IT at NIED. The project estimates that this purchase could eventually provide the NIED fund with a monthly income well over N\$1,000. Funds for this purchase and the purchase of the new server are all being financed from income provided by projects paying NIED for connectivity.
- Assisted NIED management in their development of a wireless networking policy that, among other things, details the contractual relationship between the NIED Fund and NIED residents choosing to access the NIED wireless network.
- Assisted NIED management in their deliberations to use past IT revenue in the NIED Fund to purchase a new, more robust SUN server for the NIED network. The backbone of the NIED network (both wired and wireless) is now owned wholly by the NIED Fund. The project also assisted NIED in obtaining a deeply discounted purchase price for this server. This server has freed NIED from having to buy a more expensive, less useful backup server to provide virus scanning functions, and it also provides the potential for NIED to migrate to a less expensive thin-client solution when making future workstation purchases.
- Assisted NIED management in their deliberations to reconnect their semi-professional staff to email and the NIED intranet for more comprehensive use of email and file sharing facilities.
- Assisted NIED management in their decision to move the computer center from its former location to a location wholly contained within the Resource Center. This will allow NIED to better use the Educational Technology Teacher (ETT) assigned to the computer center for both computer center as well as resource center work. In the

process, the ETT will acquire more training and will become a more valuable human resource for NIED.

- Assisted project counterpart, Alfred Ilukena, in deliberations to purchase computer equipment for at least 10 additional TRCs. This process took several months to complete, but, by the end of the quarter, Mr. Ilukena had received authority to purchase 42 workstations with specifications similar to those purchased for the CATT-supported computer centers.
- Provided significant assistance to NIED and USAID to help them develop a proposal for a nationwide web site design competition aimed at secondary school learners. While the first year's focus is on youth, sexuality, and HIV/AIDS, the project and NIED envision that the InformED Website Competition may become a yearly competition with a focus on different issues of social importance such as the environment, civic participation, tolerance, and other topics.
- Provided significant assistance to NIED and USAID in organizing and hosting a three-day workshop to help plan and coordinate activities related to the InformED Web Site Competition. Further, the project has continued to provide IT and logistical support to this activity.

Administration and Management Report

Introduction

The first section of the report covers the administration of Task Order #18 from October 1, 2001 – December 31, 2001. This section is divided into project management and operations, hiring and staffing, deliverables, procurement, and outstanding issues.

Project Management and Operations Management and Operations Activities Completed

During the past quarter, project staff contracted Mr. Richard Reed to complete a needs assessment for the NIED and the Teacher Training Colleges. Mr. Reed's work should begin early in the next quarter.

Hiring & Staffing

AED / Namibia

Senior Network Manager – The project decided that it was fruitless to attempt to re-advertise this position given the relative scarcity of applicants interested in working in Okahandja for such a short time period. The difficulty and time lost in

the project's unsuccessful attempt to hire the last incumbent weighed heavily in this decision.

Educational Technology Trainee (Center Advisor) for Ongwediva TRC – After months of consultation with the OTRC manager, a suitable and available representative has been identified to serve as the ETT in Ongwediva. The project submitted this person to be considered for hire by AED and USAID. It hopes to receive a positive response for this request early in 2002. The project hopes that Mr. Dennis Mwandangi, the OTRC employee the project has trained to run the lab in the interim, will be able to work closely with the new incumbent to provide her on-the-job training related to operating the computer center.

Operations / Finance Manager Moves to Quarter-Time Status – Given the relatively short time remaining in the project, the project's Operations Manager, Mrs. Elsie Klintonberger (formerly Ms. Elsie Hendricks) accepted a job with another NIED-based education project, the Namibian Environmental Education Project. Mrs. Klintonberger has agreed to continue to support the project on a quarter-time basis until the project's end. The project felt that it would not be worth its while to advertise, interview, hire, and train a new person for the short time period remaining in the project. Mrs. Klintonberger has been an excellent project employee and leaves a great void. The project is quite thankful that she remains near and that she has agreed to continue to support the project on a limited basis.

Ms. Tammy Hayano returns to the United States – Although Ms. Hayano was never an official LearnLink employee, NIED did have her primarily attached to the project and its activities. Ms. Hayano decided at the end of this quarter to return to the United States. As with Elsie, Tammy was a great addition to the project and creates a great void by leaving. The project truly appreciates the support that she gave the project and appreciates that Peace Corps and NIED allowed us to use her services while she was here.

AED / Washington

There has been no change in AED / Washington staffing related to the project consultants

Computer Mediated Learning Specialist – During this quarter, the project contracted Mr. Richard Reed to assist NIED and the project with a technology needs assessment for networking and connecting the Teacher Training Colleges to the Internet. Mr. Reed should begin his work early in the next quarter.

Deliverables

The deliverables for this reporting period include:

1. Fifth Quarterly Report (July 2001 – September 2001)

2. 30 Hours of Training and Support Provided to NIED Multimedia Working Group
3. 3 BETD/INSET Modules Produced and Made Available Online by Multimedia Working Group
4. Second Round of Regional Education Technology Team Meetings
5. First Round of Regional Education Technology Team Meetings for Ondangwa East and West
6. Report on Second Round of Regional Education Technology Team Meetings
7. Report on Second Round of Regional Education Technology Team Meetings
8. 2 Additional *Ombetja Yehinga* HIV/AIDS Teacher Training Modules Published Online
9. Complete Set of *My Future is My Choice* HIV/AIDS Program Materials Published Online
10. 2 BES II Management Reports Published Online
11. 1 Continuous Professional Development Module for Managers Published Online
12. 22 *One Page Information Sheets* (OPIS) Developed to Assist Users to Acquire Basic Computer Skills
13. Draft Addendum to TRC Manual for Computer Centre Policy Delivered Online
14. CATT/LearnLink Pages Delivered Online Including Online Versions of Project Planning Documents, Training Documents, and Quarterly Reports
15. *Amendment to the NIED IT Policy: Wireless Access to NIED Network* prepared for NIED
16. *Policy Proposal: Arguments for Freely Sharing Intellectual Property via the Internet* prepared for NIED
17. *InformED Website Competition Guidelines*
18. *InformED Website Philosophy Paper*

The deliverables for the next reporting period are the:

1. Sixth Quarterly Report (October 2001 – December 2001)
2. 2 Additional Rounds of Meetings of Regional Education Technology Teams
3. Reports on Meetings of Regional Tech Teams
4. Report on Needs Assessment for Expanding IT and Internet into the Teacher Training Colleges
5. *NIED Online Publication Policy*
6. Finish Publishing all Remaining BES II Management Modules Online
7. Informal Training of Additional NIED Staff to Develop Online Materials
8. Final Project Report including Lessons Learned Sections

Procurement

Items Procured in the Past Quarter

Quantity	

Procured	Description of Items Procured
1	Orthopedic Office Chair
1	Copy of JAWS Computer Reading Software for the Visually Impaired
1	Wooden Display Unit to Display Training Materials at the NIED Computer Centre
7	Uninterruptible Power Supply (UPS) Units
6	Copies of Microsoft Office XP
3	Sets of Burglar Bars for Doors Leading into NIED Resource Centre/Computer Lab

New and Outstanding Issues

a. Length of Time Required to Obtain Approval to Hire Project Staff

At this point in the project, this issue is not particularly important. Nevertheless, since the project's beginning, progress has been hampered by the project's inability to hire people in a timely manner. During the last quarter, the project gave up hope of being able to hire a network specialist. This position would have provided the project another technical staff member and would have allowed the project to move forward more quickly on several technical fronts. By the time the project received any response regarding its request, the candidate it had selected had been working in a new job for over two months. The project still has an outstanding request to hire an ETT for Ongwediva TRC.

b. High Costs of Internet Connectivity

The contract for project-supported connectivity will end early in the year 2002. At this time, for connectivity to continue at the centers, MBESC and the TRCs must have plans in place to continue funding this connectivity. The monthly price for leased line connectivity at these centers is currently N\$4,850 for the Ongwediva and Rundu TRCs and N\$5,950 for the Katima Mulilo TRC.

Outstanding Issues Resolved

Progress with Multimedia Working Group

This past quarter brought new advances with the NIED MMWG. The group has begun to meet on its own and has finished an assignment to develop the first year materials for BETD/INSET. By doing so, it acquired the tools and skills needed to develop computer-assisted training materials. Over the next quarter, the project plans to work more intensively with individual group members who have shown more interest in the tools. In particular, it will likely spend more time with Ms. Elbe Boshoff and Mr. Kashindi Ausiku, both of whom have begun creating online materials to support their professional activities. The project also plans to do some additional introductory training with other NIED staff, potentially during the next In-House Week.

Progress Report

Introduction

This quarter has been good in terms of addressing four of the five project objectives while beginning substantial work towards consolidating project gains in many areas and expanding project activities into others. On the other hand, the project did suffer a few setbacks—particularly in relationship to work stoppage of the Multimedia Working Group. Hopefully this issue will be resolved during the next quarter and substantial progress will be made towards achieving all objectives.

Progress Towards Task Order Objective Number 1

While the project has been working with the NIED MMWG since the first quarter of 2001, this is the first quarter the project can truly report results. The group has produced tangible evidence that it now has the capacity to produce computer-assisted training materials. Still, the project admits that this is an infant step and that there is plenty of room for continued growth in this area. Nevertheless, the project also believes that NIED and USAID need to seriously consider where to take these ideas and this capacity. With hindsight, a great deal of the difficulty this group and the project has encountered is derivative of the reality that the group's activities have never been attached to any specific training program. In essence, the group has been working on irrelevant activities that, too frequently, have not been related to members' primary work responsibilities. The latest project, for example, relates to the work of only one of the six group members. Further, even for this group member, the task was more exploratory as the current environment in Namibia does not allow for a large enough percentage of the target teachers to use these computer-based materials. As such, the group has continued to work with projects that are largely abstract and even irrelevant to their daily activities.

The project recommends that any future work with this group should relate to activities that the group as a whole or individual members identify as priorities. Further work expanding on the idea of developing computer-assisted training materials should be shelved until a suitable program or activity can be identified that can comprehensively benefit from the addition of computer-mediated enhancements.

Progress Made During this Quarter

1. 30 Hours of Training and Support Provide to NIED Multimedia Working Group (MMWG) — In this quarter, the project has moved away from providing more formal skills training and has moved towards providing informal support and training to the group. The project estimates that the MMWG, with project

support, dedicated approximately 30 hours of group effort towards the development of the online BETD/INSET modules.

2. MMWG Successfully Completes Project to Provide First Year BETD/INSET Modules Online – At the end of the last quarter, the project was still quite concerned about whether the group could come together enough to fulfill their commitment to produce these modules. While the process was not easy on group members or on the project staff member tasked to work with the group, in the end, the group did live up to its commitment. Thus, the group has demonstrated a capacity to produce at least one type of computer-assisted training material.

3. Oshindonga Pages Developed by MMWG Member for ED'S Net – Using the skills he learned from his work in the MMWG, the Oshindonga Education Officer chose to begin developing an Oshindonga page for the ED'S Net web site. While the project has been encouraging education officers to do this, Mr. Ausiku is the first to undertake this work and has taken advantage of both the formal and informal training opportunities provided by the project to assist him in his efforts. The Oshindonga pages are available at <http://www.edsnets.net/na/Resources/Oshindonga.htm>.

4. NIED Resource Centre Staff Member Takes Over Maintenance and Development of NIED Website and Begins Development of a NIED Intranet – Recently, another member of the MMWG has begun to actively use skills acquired through her work with the MMWG to take responsibility for continued development of the NIED web site. Before now, almost all web development was performed by foreign consultants and volunteers. In addition to this work, Mrs. Boshoff has also taken it upon herself to begin to develop an Intranet for NIED staff.

Obstacles Encountered

While the project and the NIED MMWG have been able to produce substantial results over the past quarter, this effort has not removed the obstacles encountered in previous quarters. Progress towards this objective is still hampered by the time constraints of NIED staff. It is also hampered by the reality that web development and HTML scripting are time-consuming activities.

Lessons Learned

For large-scale computer-assisted teacher training (CATT) to take root in Namibia, it will require that the following six pre-conditions and assumptions are met:

- 1) The intended end users (teacher trainees) must be comfortable with the technology.
- 2) Most, if not all, of the intended end users (teacher trainees) must have sufficient access to technology.

- 3) The technology must be simple enough to use and learn so that those with teacher development content knowledge may easily use it to create quality programs.
- 4) The education system must be both interested in and capable of dedicating sufficient human and physical resources towards the creation of high-quality CATT materials.
- 5) These CATT materials can be developed in a way that encourages learner-centered and/or constructivist approaches.
- 6) These CATT materials can be developed in a manner that models effective teaching for educators (i.e., an educator-less system can be an effective model for an educator-facilitated or learner-centered system.)

Assumptions 1 and 2: At the moment, most of these conditions and assumptions have not been met. The current targets for in-service professional training tend to be older teachers working in rural schools. This tends to invalidate the first two assumptions. Obviously the first two assumptions are intertwined. It is unlikely that teachers who have no access to technology are highly unlikely to feel comfortable using it. Further, even if they are comfortable with it, they cannot access it anyway. With time and a great deal of success in expanding access through initiatives taken by library services, SchoolNet, and other resources, the access issue may be overcome. This will not necessarily result in the target group becoming more comfortable in using it.

Assumption 3: At a basic level, the project has shown that assumption three is essentially valid. Web site development is not particularly difficult to learn, although using it to develop quality content is more difficult.

Assumption 4 has been particularly problematic for the project. The approach chosen by NIED and the project has been to try to involve already overtaxed professionals in this project and to involve them in projects that are not entirely applicable to their daily responsibilities. Our experience over the past year has been that this has not proven to be particularly successful. The staff has learned the basic skills and competencies needed to produce CATT materials. It is fairly clear, though, that they will not continue with this work after the project ends. From the project's perspective, for either the ISC or the BETD to more fully take advantage of these technologies would require a much larger staff dedicated to *totally* reworking these programs. The project believes that this work could certainly enhance the current programs, but, given all of the constraints regarding staffing as well as the target audiences overwhelming lack of access to the technology, it would not currently be worthwhile.

Assumption 5: At an even more fundamental level, the project has some concerns regarding whether CATT approaches can be particularly effective in encouraging the current Namibian educational reform effort. Computer technology has many advantages, some of which could enhance teacher education programs in this country. From the project perspective, these strengths and enhancements come in

the form of providing greater access to information, to communication tools, and to communities of educators. While the project has shown that, with adequate time and human resources, modules and texts may be provided online, it has not been able (nor will ever attempt) to show that this has a significant impact beyond providing greater access to materials. While the technology may allow for more mixed-media presentations, online materials fall into the same category as textbooks and audio-visual materials. They can provide information, theory, and demonstrations, *but they cannot teach.*

Assumption 6: This assumption is similar to assumption 5 in that it addresses an issue relevant to the reform efforts currently underway in Namibia. Some education professionals interviewed by the project have suggested that one difficulty experienced by Namibian teachers in adopting many of the education reforms has been that the teachers have experienced few models of learner-centered education. They have been educated and trained in a predominantly teacher-centered system. While the technology can certainly be used in a manner that removes the “teacher” from an education program (particularly when used in distance education programs), this does not mean that this use of IT models learner-centered education. Unfortunately, the easiest approach is to use the technology to replace the teacher and textbooks with a computer. This is not learner-centered. Rather, it is computer-centered, or, more precisely, *expert-centered*. Along with failing to be learner-centered, it models an education approach that the average Namibian teacher has practically no possibility of recreating with his or her learners.

Computer technologies do have a role to play in Namibia’s in-service professional development programs. Unfortunately, this role is currently greatly hampered by a lack of access to both computers and the Internet. With time, though, it is likely that a much greater percentage of in-service teachers will gain this access. Therefore, the Ministry and its partners should continue to consider how these technologies may be used. During these deliberations, it is critical that they consider the technology’s strengths and weaknesses in relation to the Ministry’s education reform efforts. Using the technology to create textbooks with extra bells and whistles will not bring the education system closer to realizing its reforms. Rather, from the project’s perspective, it is more likely that communication features, facilitated by greater access to the Internet, will have the greatest potential for improving in-service education in general and current, comprehensive, in-service teacher training programs (i.e., the BETD/INSET and ISC programs) in particular. Until the access and IT competency issues are more fully addressed, it is questionable whether further inputs into using IT as a medium for comprehensive in-service teacher training will be of great value.

Work Plan for the Next Three-Month Period

The project will continue assisting individual MMWG members on projects they identify and for which they request assistance. This work will very likely include

additional assistance given to Ms. Elbe Boshoff in particular who is showing great potential in her newly-accepted role as the webmaster for both the NIED and ED'S Net web sites.

The project would also like to hold a few mini-training sessions with other NIED staff during the next In-House week. The purpose of this training will be to encourage other staff at NIED to acquire basic web development skills so that they may also contribute materials to the NIED and ED'S Net web sites.

Progress Towards Task Order Objective Number 2

This was the first quarter in several where work towards objective number 2 has consumed less time than any one of the other objectives. The centers have now all been operational for over two quarters. While there is still great concern over whether the Ministry is prepared to assume total responsibility for the centers after the project closes on March 31, 2002, currently the centers now largely run themselves without significant input or daily guidance provided by the project. The project has intentionally been trying to remove itself from these daily activities and decisionmaking processes. Nevertheless, as will be mentioned below in the lessons learned section, none of the centers currently come close to being financially self-sustaining. The closest are NIED and Ongwediva, but only because they exist in a much larger institutional setting that allows many costs to be shared with other projects and activities.

While time dedicated to work with the centers has decreased, the project still continues to do a great amount of work on ED'S Net. This work continues to be time-consuming though not particularly difficult.

Progress Made During this Quarter

- a) Continued provision of informal training on the Internet and ED'S Net to groups holding training and workshops at NIED – During this quarter, the project continued taking advantage of the great number of Namibian education professionals who regularly converge on NIED for training, meetings, and workshops.
- b) Continued updating and providing content to ED'S Net – While much of this work has not been obvious to frequent users, many of the functions and some of the old content and layout has been progressively upgraded or modified in the past quarter. As always, this work is quite detailed and time-consuming.

Obstacles Encountered

- *Time Required to Develop/Convert Materials for Online Delivery* – This continues to consume a very large portion of project time, particularly the time of the project's IT coordinator, Ms. P. Boer.

Lessons Learned

1. Interest in Use of the Centres Remains High -- The latest numbers of registered users at the centers are 273 for Katima, 89 for NIED, 359 for Ongwediva, and 181 for Rundu. As can be seen from the numbers, the Ongwediva center remains the most popular and the most active. Along with individual use, all of the centers are reporting increased use for training. In fact, this is approaching a point where the labs are suffering from their own success. Training events in several labs are beginning to consume an overwhelming portion of open lab hours. Nevertheless, these training activities are ensuring that a very large number of Ministry personnel are receiving at least introductory computer literacy training. More detailed, but dated center usage data are provided in Appendices A through E.

2. The Centres are Not Approaching Self-Sustainability -- This does not suggest that they never will be self-sustaining, but that they certainly are not at this point. Further, without more creative marketing and management, they are unlikely to reach a level where they may sustain themselves. Among the major constraints are location, hours of operation, the high percentage of free access provided to the education sector, and high Internet connectivity costs. Given the current environment and the fact that the education sector consumes the overwhelming majority of access time in the centers, it is fair to expect this sector to continue to subsidize the cost of the centers until the time comes when they may more fully support themselves. Center usage and revenue data are provided in Appendices A through E.

3. The Centres Will Need to be Subsidized by the Ministry to Remain Open in the Short Term -- As mentioned above, the centers currently are not receiving sufficient revenues to remain open without subsidies for center staff salaries and the cost of continued connectivity. It is even questionable if current revenues will allow for maintenance and repairs. The size of this subsidy could be reduced with a more favorable cost for connectivity, but it will still be necessary in the short term. Given that the centers are now overwhelmingly being used by education stakeholders, this seems fair assuming that the centers have proven their value to the education system. From the project's perspective, the great amount of interest shown by educators and learners is a good indicator of the centers value as is the great interest in the training that has largely been provided for free at the centers.

Work Plan for the Next Three-Month Period

The work plan for the next quarter is essentially the same as that for this quarter. This period will be used to continue to document lessons learned, improve upon past success and work, and to consolidate gains particularly in respect to the work on the ED'S Net web site and at the Computer Centers.

- Continued Intensive Work on ED'S Net Web site – A significant portion of project energy over the next quarter will be dedicated to adding content and functionality to the ED'S Net web site. This site, seen by the project and NIED as a major tool to support the soon to be created EDS Units, advisory services, and inspectors, will be developed with a theme- and subject-based structure. End users will be provided with options for just-in-time training on a host of professional development topics. Furthermore, fora will be provided for professional development, mentoring, resource development, and general discussions on subjects and themes of interest and use for Namibian education professionals. Once the site is developed to a point where these functions and utilities can be effectively demonstrated, the project will continue training project stakeholders on the use of the site while simultaneously seeking feedback on site improvements and modifications.
- Work with Additional Project Partners to Encourage Them to Use and Provide More Content to the ED'S Net Website – While the structure of the site is largely in place, the site currently functions similar to a largely empty library. The catalog system is in place and the shelves are labeled, but there are very few books on the shelves. Over this final quarter, the project hopes to work with additional partners to assist them in providing more content online.
- Continue Supporting TRC Managers, Staff and ETTs to Manage and Sustain Computer Centres – Given the very limited remaining time, this task is becoming more important, even though the project does not plan to provide any more formal training. The project will be available during the next quarter, though, to provide guidance where requested and to help facilitate the transfer of the centers to the Ministry.

Progress Towards Task Order Objective Number 3

For the second quarter in a row, the project has worked with other Ministry and NGO groups to provide more teacher-training content online. This quarter, the project has helped convert and publish three more professional development modules online as well as publishing all of the *My Future Is My Choice* program materials online. Also published online were the 22 *One Page Information Sheets*, designed to assist new users in accessing and beginning to use computers, building web pages, and using the Internet and email. In addition, the project has continued to modify and update the online TBCMs.

Progress Made During this Quarter

- Worked with NIED and BES II Management Advisor, Dr. Pfau, to produce an online version of the second module in the School Managers professional development series (HTML).
- Worked with the Ministry's HIV/AIDS committee and the Ministry of Local and Regional Affairs to provide two additional modules, contributing to a total of five, to train teachers about HIV/AIDS via ED'S Net. These may be downloaded in full module form or chapter-by-chapter in MS Word.
- Worked with the Ministry's HIV/AIDS committee to publish another complete set of instructional materials for *My Future Is My Choice*, a school-based program designed to raise awareness about HIV/AIDS, youth, and sexuality in Namibia.
- Developed a series of IT training materials that currently contain 22 *One-Page Information Sheets* (OPIs) to help provide basic training and guidance for Ministry officials and others to use. Current topics include accessing *Discover Windows 98*, accessing and using the Internet, accessing and using web-based email, accessing a program to help users search the Internet and identify quality sources of information, and providing 14 pages on the basics of web site development.

Obstacles Encountered

The process of converting documents for online delivery can be time-consuming, but this process can be dramatically shortened *if* the original documents are provided in electronic format, i.e., Word, Word Perfect, or other database software. Many of these formats can be uploaded immediately or almost instantly converted to PDF format.

Converting documents to HTML are a bit less time intensive, but MS Word facilitates a fairly easy conversion for source documents when "style" settings are used. In the case of monographs, reports, and other "static" documents, online conversion is quite simple.

Converting education materials for online usage is much more time-consuming as the producer should consider the strengths and weaknesses of the different online formats when producing the online materials. If HTML is chosen, the process can become quite lengthy in the event that any interactivity or many multiple pages or views are desired.

Lessons Learned

NIED Must Develop a System for Ensuring the Archiving of Electronic Copies of All of its Documents – A great amount of project time went into recovering text from the paper-based version of the TBCMs. The amount of time it takes to convert documents from other electronic formats into TBCM is time-consuming enough without having to totally retype the document in the first place. On average, it took approximately two full workdays to convert each TBCM *after the format was developed and the TBCMs were retyped*.

Work Plan for the Next Three-Month Period

Additional BES II Modules will be Converted to Online Format – As two new modules are close to being completed, it is possible that these modules will be converted by quarter's end.

Progress Towards Task Order Objective Number 4

During this quarter, the project was able to complete the first round of meetings with the RETTs in Ondangwa East and Ondangwa West and to hold a second round of meetings in all four regions. This second round allowed the teams to continue along the lines of the previous round of meetings. They all did work on continuing to develop mission statements as well as work on exploring more tools and their uses within the Namibian education system. One addition to the second round of meetings has been a component of reflective assessment designed to encourage the members to reflect upon their experiences in the group. As these groups have been developed in part to demonstrate learner-centered, reflective approaches, this activity has been put in place to help the team members better understand the approach, evaluate the approach, and reflect upon how they work within this approach.

In general, the project has been very pleased with the outcomes of this component. Some team members have become quite active in their roles of technology champions and have chosen on their own to share their training experiences with relatively large numbers of colleagues. While this "cascade" effect has never been explicitly encouraged, it is heartening to see our training methods reproduced—particularly by new users.

Progress Made During this Quarter

RETTs Hold Second Training Meetings – At these meetings, the RETTs met for the second time to discuss their introductions to IECT, which they developed and led for their colleagues. They also discussed what form future meetings should take, what training they felt they needed to continue as technology leaders in their regions, and what they want to happen with the RETTs. All team members

continued to show a high degree of commitment to implementing IECT in Namibia.

Obstacles Encountered

1. *Contacting Team Members to Organize Meetings* – Upon arriving at computer centers, team members had not been contacted by phone regarding meeting dates and times. Most members were able to come to meetings on short notice. This was discussed during the meetings, and it was decided that contact persons would be established and tasked with contacting all team members by phone a week before each meeting. The use of emailing reminders to team members has proved insufficient as only some members have daily access to their email accounts.

2. *Access to Computers* – Team members found difficulty in finding time to bring themselves and/or their target groups to the computer centers. This was due to the already heavy workload of team members and their target groups. When time was found, often the centers themselves were booked for other training. It was interesting to see that it was ultimately access to computers and not lack of interest or fear which kept team members from training others. The use of CD-ROMS and other computer centers are being explored as ways of opening up access to users in the regions.

Lessons Learned

Given that this project component is so new, the following “lessons learned” are all very preliminary and can only be appropriately assessed with more time and analysis. Nevertheless, they are included here to help introduce readers to the project’s approach, thinking, and initial perspective at this point in the process.

1. *Reflective Assessments* – The initial responses to the reflective assessments brought limited information to the project. It was explained that the forms would be used to assess the effectiveness of the meetings thus far. Many of the team members felt that they hadn’t done enough at this stage. It was explained that information explaining what had been done *or* information explaining why they had not been able to work with more people (i.e., obstacles encountered) would be helpful in developing RETT training and IECT policy in Namibia. By gathering information in this way, team members felt much more comfortable contributing ideas and concerns.

2. *Developing OPIs* – The *One Page Introductory Sheets* used during the second training meeting were developed less completely than those used in the first round of meetings. We found that team members needed more step-by-step guidance in the initial presentation of new programs. Showing specifically where to find each program relaxes new users by allowing them to make mistakes and come back unassisted to their starting point. Though this was done during the first meeting, we presented less in the second meeting to see what would happen.

Work Plan for the Next Three-Month Period

Third and Fourth Round of Meetings to be Held in Each Region – Over the next quarter, the project intends to hold two more rounds of meetings with the RETTs in each region. In addition, the project has been encouraging the groups to meet on their own. Future meeting topics will attempt to continue to help the groups better organize themselves and better understand their own perceived roles and purposes. Other activities may include “training” to use additional software and potentially HTML and web design tools. During the last round of meetings, the project encouraged the groups to begin to identify their own training interests. Where possible, the project would like the teams to request and recommend topics and ideas for the future meetings. The project hopes that these groups will be relatively well established and comfortable in their own stated roles by the end of the quarter.

Progress Towards Task Order Objective Number 5

This quarter has been particularly active in terms of policy assistance. NIED, after being queried on its need for policy support, has recently made several requests for the project to provide policy support. Below is a list of areas where the project has made contributions to NIED IT policy. In reality, though, the project has always provided support to NIED. The primary difference this quarter has been that some of the support has been more formal and concrete than in the past.

Progress Made During this Quarter

1. Assisted NIED in developing proposed policies for the setting, collection, and accounting of fees collected at TRCs affiliated with the Namibian Open Learning Network (NOLNET) – NOLNET has recently been working on proposing policies for all of the distance education centers affiliated with the network. Most TRCs are aligned with this group, therefore will likely need policies similar to other NOLNET centers. The project, using experiences gained through its computer centers, has actively advised NIED management on these issues over the past quarter.
2. Assisted in the development of Regional Education Technology Teams that will discuss policy issues related to IT use, training, and investment in the education regions.
3. Wrote a policy proposal to encourage NIED management to consider providing more of its publications online for free.
4. Assisted NIED management in its deliberations to purchase a wireless hub that will allow NIED residents to access the NIED network, email, and the Internet

from their homes. In exchange, residents will be asked to pay monthly fees to help support IT at NIED. The project estimates that this purchase could eventually provide the NIED fund with a monthly income well over N\$1,000. Funds for this purchase and the purchase of the new server are all being financed from income provided by projects paying into the NIED for connectivity.

5. Assisted NIED management to develop a wireless networking policy that details the contractual relationship between the NIED Fund and NIED residents that access the NIED wireless network.

6. Assisted NIED management in deliberations to use past IT revenue in the NIED Fund to purchase a new, more robust SUN server for the NIED network. The backbone of the NIED network (both wired and wireless) is now owned wholly by the NIED Fund. The project also assisted NIED in obtaining a deeply discounted purchase price for this server. This server has freed NIED from having to buy a more expensive, yet less useful backup server to provide virus scanning functions. It also provides the potential for NIED to migrate to a less expensive, thin-client solution when making future workstation purchases.

6. Assisted NIED management in their deliberations to reconnect their semi-professional staff to e-mail and the NIED intranet to allow for more comprehensive use of email and file sharing facilities.

7. Assisted NIED management in their decision to move the computer centre from its former location to a location wholly contained within the Resource Center. This will allow NIED to better use the ETT that work in the computer center for both computer center as well as resource center work. In the process, the ETT will acquire more training and will become a more valuable human resource for NIED.

8. Assisted project counterpart, Alfred Ilukena, in deliberations to purchase computer equipment for at least 10 additional TRCs. This process took several months to complete, but, by the end of the quarter, Mr. Ilukena had received authority to purchase 42 workstations with specification similar to those purchased for the CATT supported computer centers.

9. Provided significant assistance to NIED and USAID to help them develop a proposal for a nationwide website design competition aimed at secondary school learners. While the first year's focus is on youth, sexuality, and HIV/AIDS, the project and NIED envision that the competition, Informed Web site Competition, may become a yearly competition with a focus on different issues of social importance such as the environment, civic participation, tolerance, and other topics.

10. Provided significant assistance to NIED and USAID in organizing and hosting a three-day workshop to help plan and coordinate activities related to the

InformED Website Competition. Further, the project has continued to provide IT and logistical support to this activity.

Obstacles Encountered

Although not an obstacle *per se*, the project is concerned by the perception that it is not successfully working towards meeting this objective. In fact, project staff are working quite diligently towards achieving this objective and have made certain that staff are placed on committees with input into Ministry policies related to IT and education. Also, project staff have worked to be involved in most major discussions of IT and education taking place within the Ministry. If there is more expected of the project in this regard, the project is certainly willing to invest more time into these efforts, but it feels that the Ministry and its bodies should take the lead in making this request. To date, it has addressed every specific request given to it by the Ministry and project partners and is only constrained by the time needed for these groups to respond to requests.

Lessons Learned

While the investment in IT infrastructure has been high and is continuing at a strong pace, more thinking related to what this means and how it will be utilized is needed. – It is well reported that the quality of the IT infrastructure in Namibia is quite high, and this project, SchoolNet/Namibia, and many other donor-supported projects within Namibia are beginning to invest heavily in IT equipment for schools and Ministry support systems. Nevertheless, it is not clear whether many of these groups or the Ministry itself have begun the process of developing plans to encourage the productive use of these inputs.

There appears to be strong local awareness that the Ministry and its schools need to acquire IT equipment and develop IT skills, but there appears to be little consensus regarding answers to the questions of what equipment, what skills, and, most importantly, through what means and towards what ends this equipment will be used. The project has from its inception placed itself in situations where it can provide input into these decision-making processes.

Work Plan for the Next Three-Month Period

1. *Continue to Provide Policy Support on an "As Requested" Basis* – With project staff serving on NIED's IT Committee, the E-Learning Development Group, and on the Regional Education Technology Teams, and monitoring and participating in discussions on the Ministry's ICT listserv, the project is in a good position to continue to support IECT policymaking within the Ministry.
2. *Continue Documentation of Lessons Learned from the Computer Centres* – The project has already begun a process of collecting weekly activity reports

from the ETTs working in the computer centers. These reports, combined with face-to-face training sessions, meetings in the field, and information gleaned from baseline computer center user surveys, and data captured from the centers, should provide the project with interesting information regarding how the centers are being used and how it can propose to make the centers more sustainable and productive related to the project's goals of providing computer-mediated professional development.

3. *Continue Supporting NIED in Developing its Online Publication Policy* – This policy is currently in draft form awaiting NIED management comment. Once these comments are received, the project will continue its working in providing more input into this policy. This policy should be complete by the end of this upcoming quarter, which also marks the end of the project.
4. *Complete work on Project Lesson Learned Documentation and the Project's Final Report* – The project hopes that these papers will serve to inform Namibian education professionals on future directions for IT and education policy within Namibia.

Success Stories

Virtual Meeting Held between RETTs and NIED Staff

During the latest round of RETT meetings, team members were introduced to new “virtual” team members at NIED. These virtual members are part of NIED’s staff assigned to the languages of the different regions. All team members and the virtual member (along with Jeffrey Goveia) all met online using Microsoft’s Net Meeting. This allowed all members to explore how meetings can be held at a distance. As with many RETT activities, the silence was deafening as team members in the region and team members at NIED frantically typed messages back and forth to each other. The project hopes to organize future chats early next year using www.edsn.net.na and involving other, more senior MBESC officials.

RETTs take Initiative in Planning Follow-Up Meetings

All teams organized follow-up meetings without assistance or requests made by the project. Teams plan to discuss ideas for their web pages, future training needs, and their mission statements. Teams decided that multi-day meetings, while useful initially, will be unnecessary in the future. Members decided to meet more often for shorter periods of time. It is hoped that the RETTs will eventually begin meeting on a bi-weekly or monthly basis. In this way, they will be able to continue meeting after the end of CATT/LearnLink.

RETT Members Take Lead in Working with Target Groups

Over 200 new users were introduced to the regional centers through training organized by RETT members. All RETT members agreed that the materials introduced in the first round of meetings made developing and reproducing training easy. They reported that new users easily overcame their fears in using the technologies in the computer centers—some quickly, others more slowly. Nevertheless, all users eventually became comfortable, working on their own through different competencies organized by RETT members. RETT members reported being excited by their ability to train others and continue to plan new training. In one case, two of the RETT members in Katima voluntarily worked together to train approximately 90 people affiliated with the Katima College of Education.

Training at Regional Computer Centres

Along with the training voluntarily organized by the RETT members, many other groups continue to provide frequent training at the regional computer centers. The BES II project, the Ondangwa East IT advisor, and Peace Corps are particularly active in this regard. As mentioned previously in this report, the centers have begun to become victims of their own success in being prime locations for training. Training has begun to crowd out the amount of time the centers are available for ad hoc use. This is particularly a problem at the Ongwediva TRC where the lab has been booked for weeks and even months ahead of time for training by the three groups mentioned above.

Investment in NIED Resource Centre Employee, Elbe Boshoff, Providing Significant Returns

Mrs. Boshoff, a member of the NIED Multimedia Working Group, over the past few quarters, has rapidly adopted an ever greater number of IT skills and responsibilities at NIED. While Ms. Boshoff's primary job is library assistant at the NIED Resource Centre and the acting Manager since last January, she has since become the acting NIED network administrator as well as the webmaster for both the NIED, NIED Intranet (which she proposed and has largely developed on her own), and ED'S Net web pages. Ms. Boshoff has shown an amazing amount of interest and skill in accepting these new responsibilities, and the project has been very active in supporting her. NIED and the project have been exceptionally lucky to find such a committed, intelligent, and resourceful staff member to help continue much of the project's work after it concludes.

NIED Multimedia Working Group Member Develops Oshindonga Resource Pages

In another example of a Multimedia Working Group member taking his training in new directions, Mr. Kashindi Ausiku, the Oshindonga Education Officer, has

created a series of Oshindonga Resource Pages for ED'S Net. These pages, almost entirely in Oshindonga, include information on the Oshindonga Curriculum panel, several pages on different Oshindonga competitions, as well as a page designed to help non-Oshindonga speakers learn some basic words and phrases in Oshindonga.

NIED a New Leader in IT and Education

When CATT/LearnLink first came to NIED, one of its first major policy successes was working with the NIED IT Committee in solving a long-standing problem it had with its network and server. At that time, NIED was faced with an outstanding bill to provide licenses for the majority of its workstations to connect to its Microsoft NT server. Understandably, NIED was extremely hesitant to pay this money to access a server that was not providing the Institute with reliable access to email or the Internet.

NIED essentially had two problems. The first problem was the need to find a solution to the network's technical problems. The second was to find a way to pay for the new licenses or pay for another solution. With CATT assistance, NIED decided to take IT at NIED in two different directions. First, it chose to replace the existing server's operating system with Solaris. This solution was actually cheaper than purchasing the licenses to continue running the Microsoft software. This still required funding though. To address this issue and at least some future funding issues, NIED also decided to begin charging projects that connected to NIED's network for Internet use, email, and printing facilities. Essentially, this was put in place to encourage some cost sharing between NIED and the projects that are housed there. The immediate outcome was a great success for everyone. The network became very stable, and NIED began collecting additional revenue for further upgrades and system maintenance.

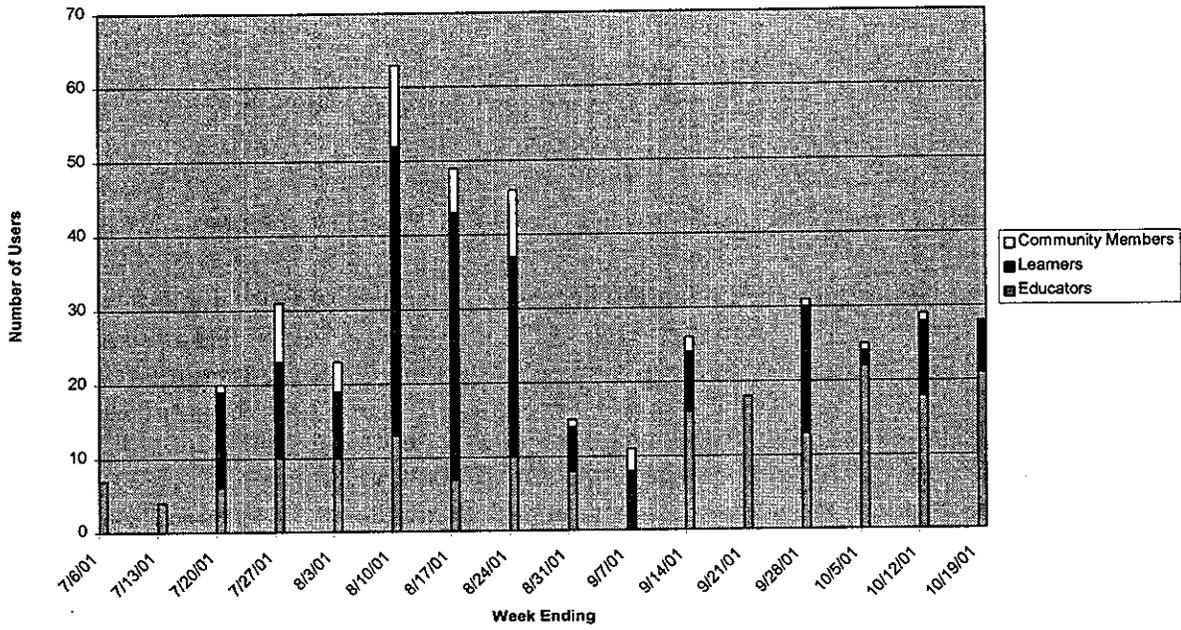
With the greater stability provided by the new operating system, maintenance costs also decreased, and NIED was able to end one of its ongoing maintenance contracts. Thus, NIED has been able to develop a small fund to continue supporting its IT needs, while providing it with some flexibility in making new purchases as well as experimenting with new technologies. In recent months, NIED has begun using these funds more actively. In response to the recent increase in virus activity, the Institute decided it needed additional virus protection for its network. When purchasing this software, it discovered that it would either need to purchase a workstation to run the software or would need to purchase a new server powerful enough to handle new software. With project assistance, NIED was able to negotiate the purchase of a significantly more powerful refurbished SUN server at a price lower than that of new workstation or approximately 1/3rd the cost of a new server with similar specifications. If NIED had never established its IT fund, though, it would never have been able to make this purchase.

NIED is also currently considering purchasing a wireless hub. The idea behind this purchase would be to allow NIED residents to connect to the NIED network in exchange for a small monthly fee. NIED and the project see this as a potentially small but powerful investment. Not only will it provide a new benefit for NIED residents and their families, but it will also provide another small revenue stream for the NIED IT Fund. Further, it will provide Namibian schools with faculty living on campus a model for how they may also share costs for purchasing Internet connectivity.

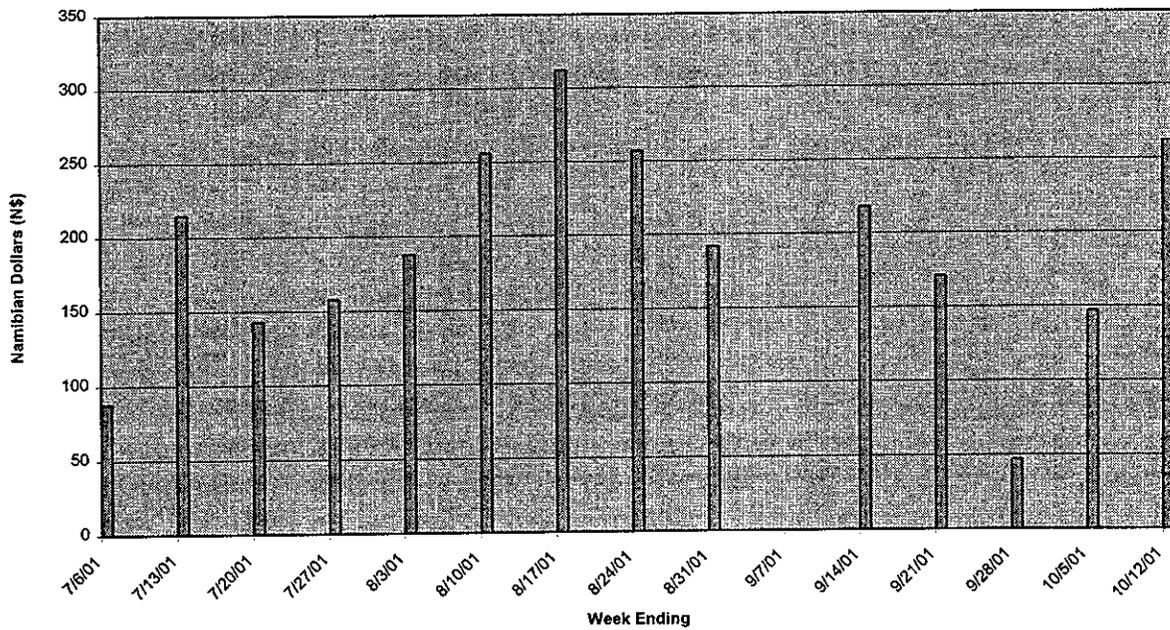
In the short time CATT has been active at NIED. NIED has taken major steps in becoming a leader in IT and Education within Namibia. It has gone from an institute with serious IT problems and frequent down time to one with outstanding equipment and software and virtually no down time. Further, it has gone from being an Institute that previously had great difficulty funding IT maintenance and purchases to one that can now be proactive and creative in their IT purchases and serve as a model for other education institutes within the country.

Appendix A – Katima Mulilo TRC Computer Centre Usage

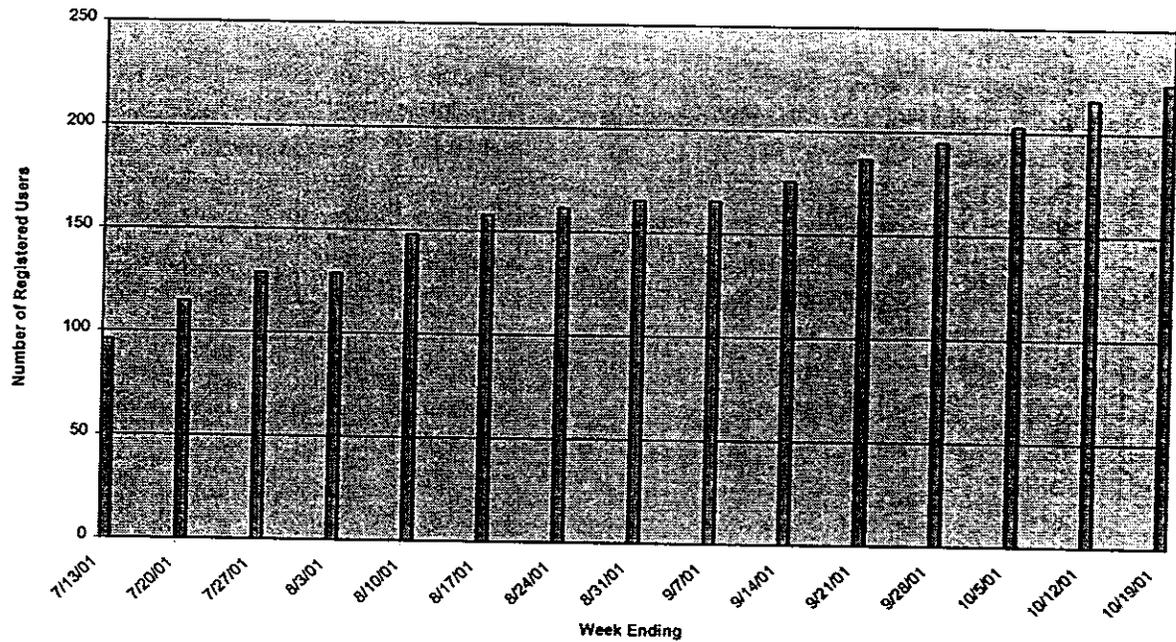
Weekly Use



Weekly Revenue



Registered Users

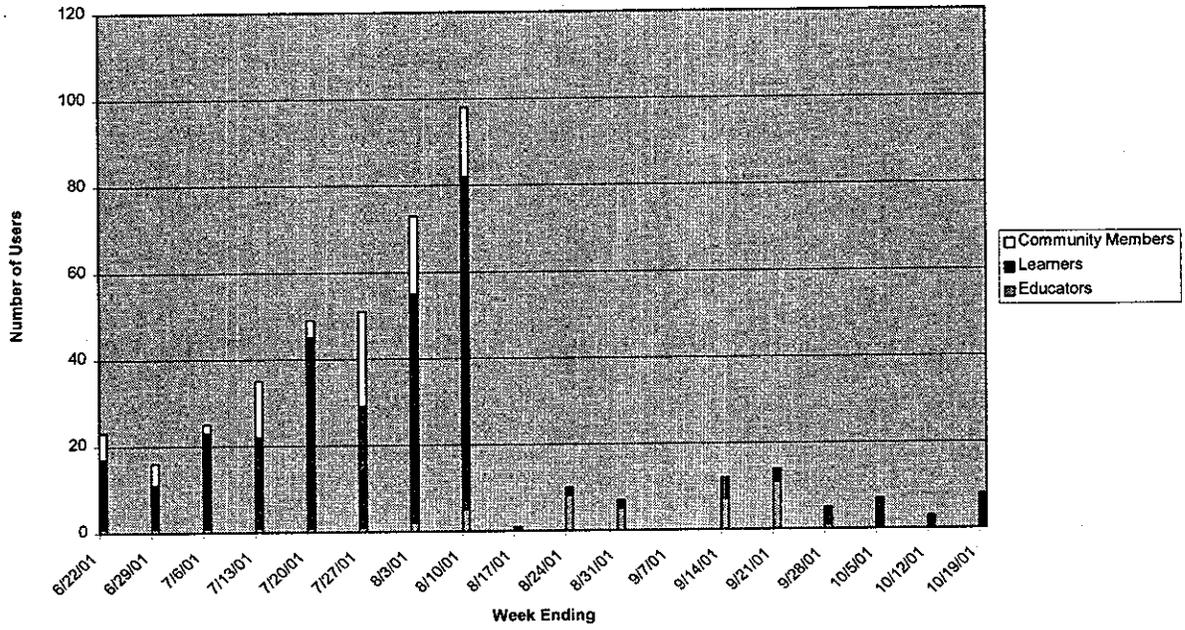


Occupational Categories of Katima Computer Centre Users

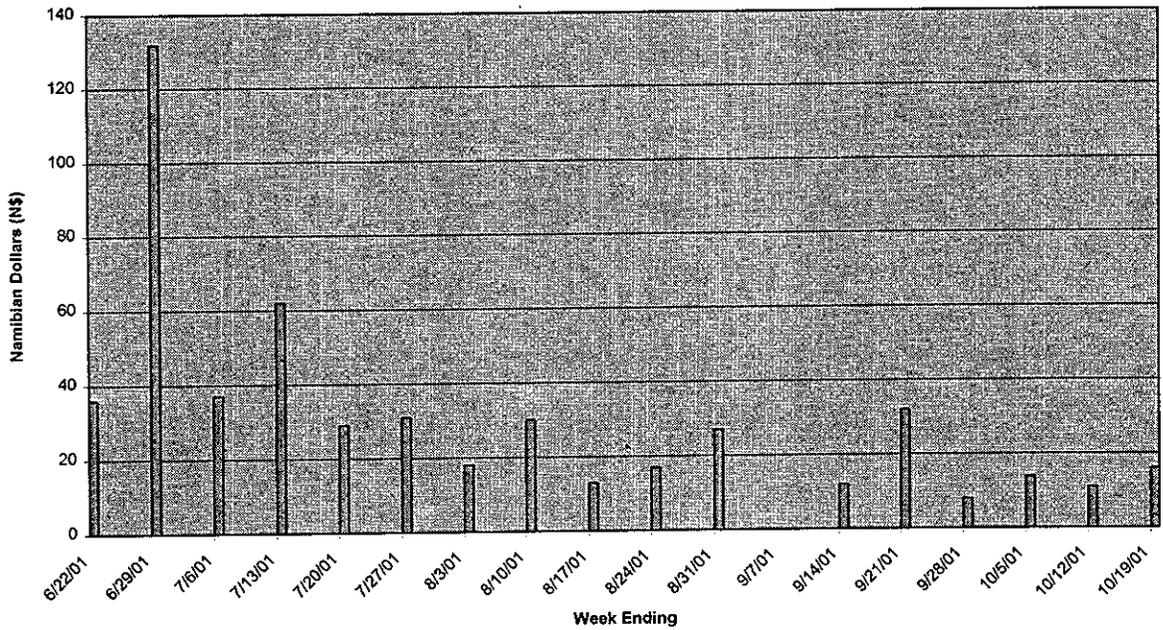
	Male	Female	Total	%Female	% of Females	% of Total
Learner	77	6	83	7.23%	11.54%	35.93%
Primary	0	0	0	—	0.00%	0.00%
Secondary	66	2	68	2.94%	3.85%	29.44%
Tertiary/Other	11	4	15	26.67%	7.69%	6.49%
Student Teacher	10	3	13	23.08%	5.77%	5.63%
Self Employed	2	1	3	33.33%	1.92%	1.30%
Other Employment	16	9	25	36.00%	17.31%	10.82%
None Applicable	12	8	20	40.00%	15.38%	8.66%
Instructional Staff	49	18	67	26.87%	34.62%	29.00%
Lower Primary	1	6	7	85.71%	11.54%	3.03%
Upper Primary	6	5	11	45.45%	9.62%	4.76%
Jr. Secondary	18	3	21	14.29%	5.77%	9.09%
Sr. Secondary	20	4	24	16.67%	7.69%	10.39%
Teacher Trainer	4	0	4	0.00%	0.00%	1.73%
Non-Instructional Staff	13	7	20	35.00%	13.46%	8.66%
Advisory Teacher	5	1	6	16.67%	1.92%	2.60%
Inspector	0	0	0	—	0.00%	0.00%
Principal	2	0	2	0.00%	0.00%	0.87%
Education Officer	2	0	2	0.00%	0.00%	0.87%
Secretary/Clerk	1	5	6	83.33%	9.62%	2.60%
Administrator	3	1	4	25.00%	1.92%	1.73%
Total	179	52	231	22.51%	100.00%	100.00%

Appendix B – NIED Computer Centre Usage

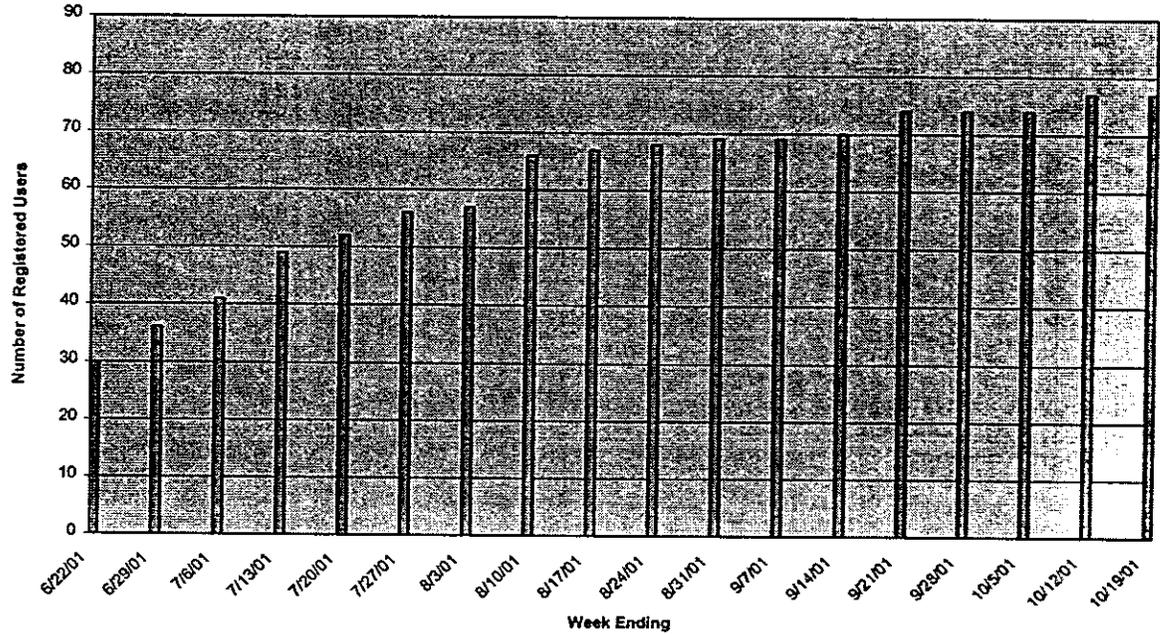
Weekly Usage



Weekly Revenue



Registered Users

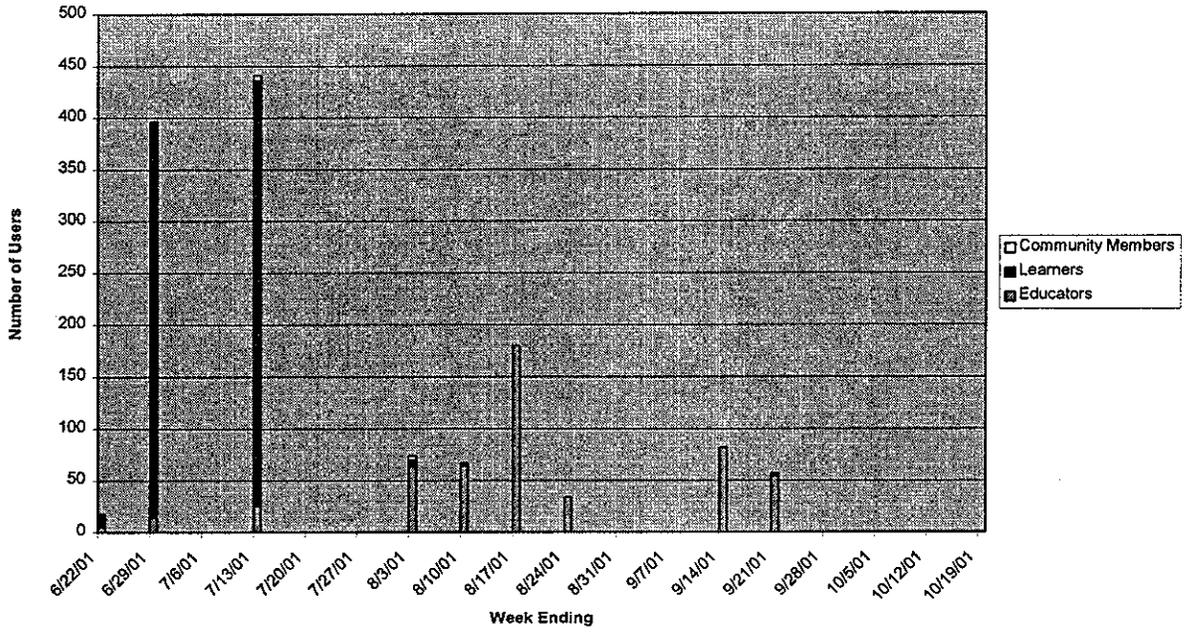


Occupational Categories of NIED Users

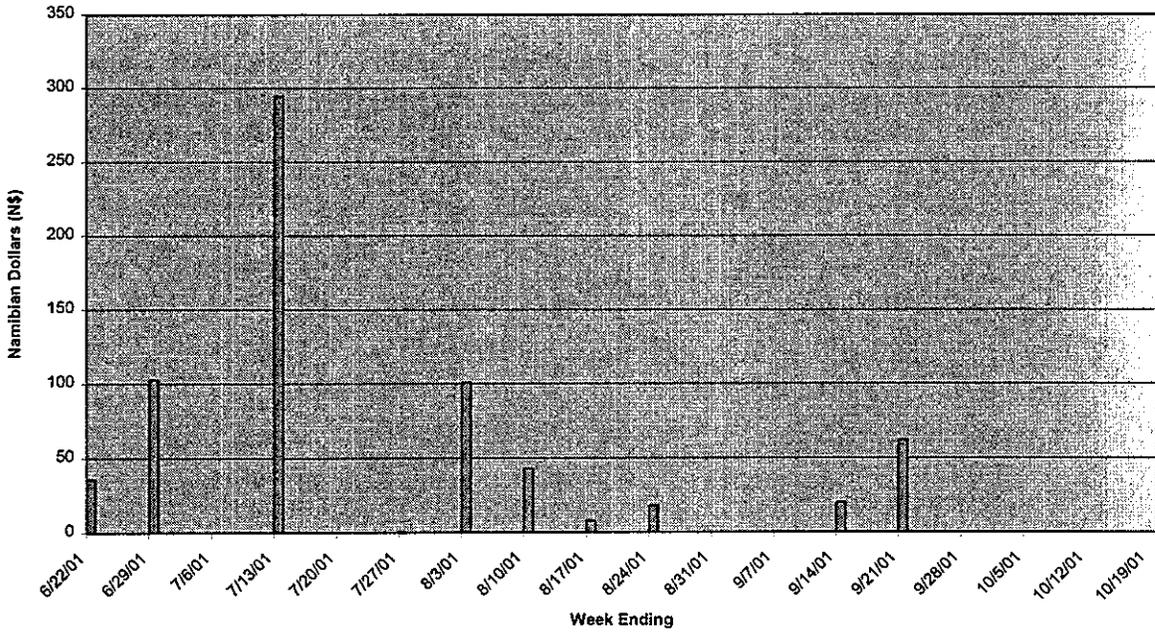
	Male	Female	Total	%Female	% of Females	% of Total
Learner	38	11	49	22.45%	29.73%	58.33%
Primary	7	4	11	36.36%	10.81%	13.10%
Secondary	27	6	33	18.18%	16.22%	39.29%
Tertiary/Other	4	1	5	20.00%	2.70%	5.95%
Student Teacher	0	0	0	—	0.00%	0.00%
Self Employed	0	0	0	—	0.00%	0.00%
Other Employment	3	11	14	78.57%	29.73%	16.67%
None Applicable	2	7	9	77.78%	18.92%	10.71%
Instructional Staff	3	3	6	50.00%	8.11%	7.14%
Lower Primary	0	2	2	100.00%	5.41%	2.38%
Upper Primary	0	0	0	—	0.00%	0.00%
Jr. Secondary	3	0	3	0.00%	0.00%	3.57%
Sr. Secondary	0	1	1	100.00%	2.70%	1.19%
Teacher Trainer	0	0	0	—	0.00%	0.00%
Non-Instructional Staff	1	5	6	83.33%	13.51%	7.14%
Advisory Teacher	0	1	1	100.00%	2.70%	1.19%
Inspector	0	0	0	—	0.00%	0.00%
Principal	0	0	0	—	0.00%	0.00%
Education Officer	1	2	3	66.67%	5.41%	3.57%
Secretary/Clerk	0	2	2	100.00%	5.41%	2.38%
Administrator	0	0	0	—	0.00%	0.00%
Total	47	37	84	44.05%	100.00%	100.00%

Appendix C – Ongwediva TRC Computer Centre Usage

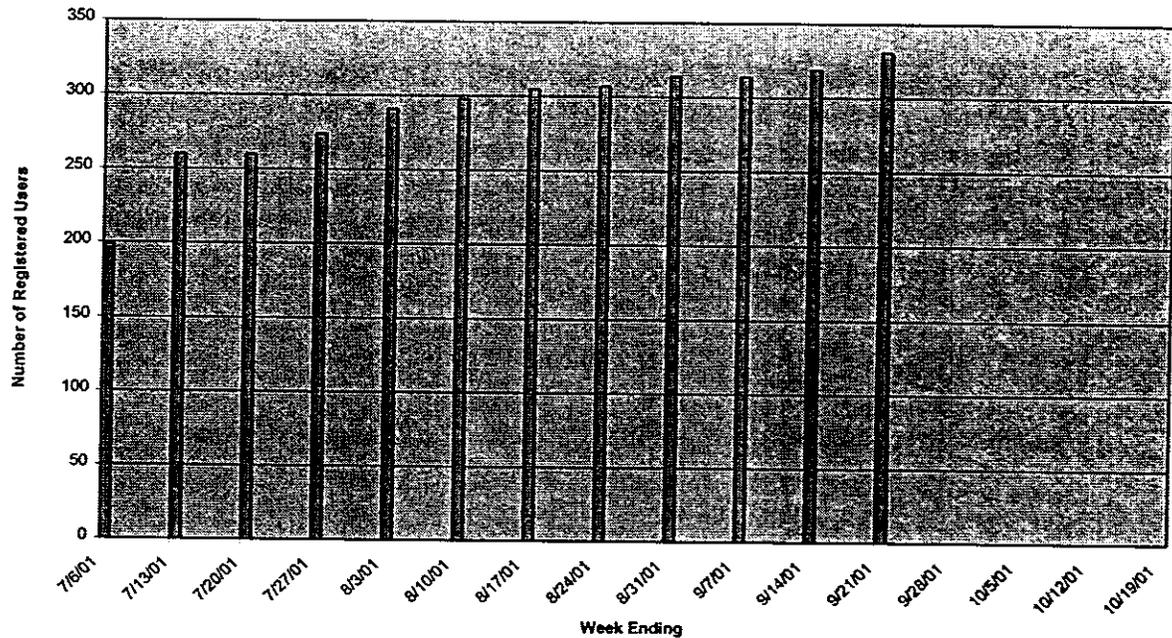
Weekly Usage



Weekly Revenues



Registered Users

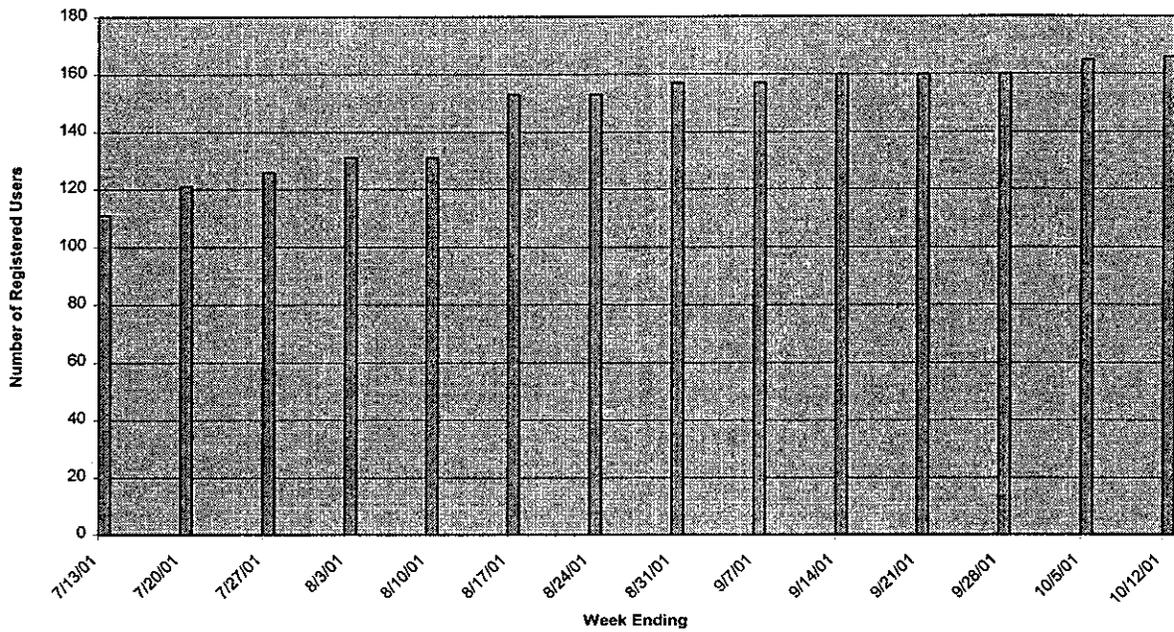


Occupational Categories of Ongwediva Users

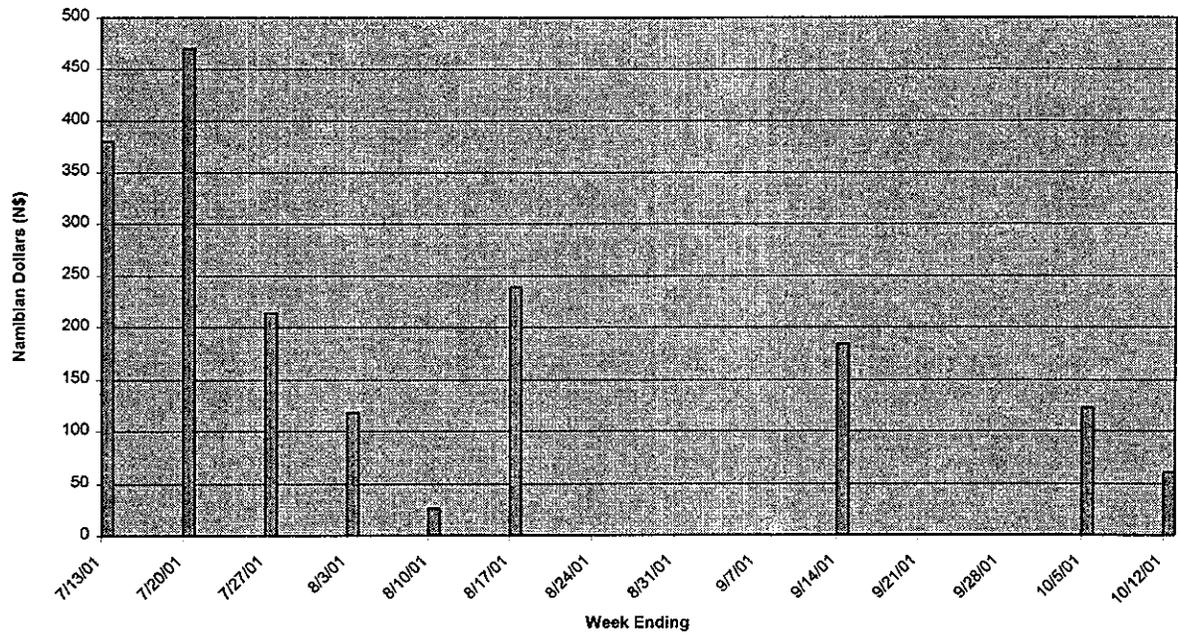
	Male	Female	Total	%Female	% of Females	% of Total
Leamer	7	6	13	46.15%	4.11%	3.92%
Primary	0	0	0	—	0.00%	0.00%
Secondary	7	3	10	30.00%	2.05%	3.01%
Tertiary/Other	0	3	3	100.00%	2.05%	0.90%
Student Teacher	122	67	189	35.45%	45.89%	56.93%
Self Employed	3	1	4	25.00%	0.68%	1.20%
Other Employment	2	2	4	50.00%	1.37%	1.20%
None Applicable	1	0	1	0.00%	0.00%	0.30%
Instructional Staff	36	52	88	59.09%	35.62%	26.51%
Lower Primary	1	10	11	90.91%	6.85%	3.31%
Upper Primary	9	10	19	52.63%	6.85%	5.72%
Jr. Secondary	11	10	21	47.62%	6.85%	6.33%
Sr. Secondary	14	21	35	60.00%	14.38%	10.54%
Teacher Trainer	1	1	2	50.00%	0.68%	0.60%
Non-Instructional Staff	15	18	33	54.55%	12.33%	9.94%
Advisory Teacher	3	6	9	66.67%	4.11%	2.71%
Inspector	1	0	1	0.00%	0.00%	0.30%
Principal	0	0	0	—	0.00%	0.00%
Education Officer	5	8	13	61.54%	5.48%	3.92%
Secretary/Clerk	3	3	6	50.00%	2.05%	1.81%
Administrator	3	1	4	25.00%	0.68%	1.20%
Total	186	146	332	43.98%	100.00%	100.00%

Appendix D – Rundu TRC Computer Centre Usage

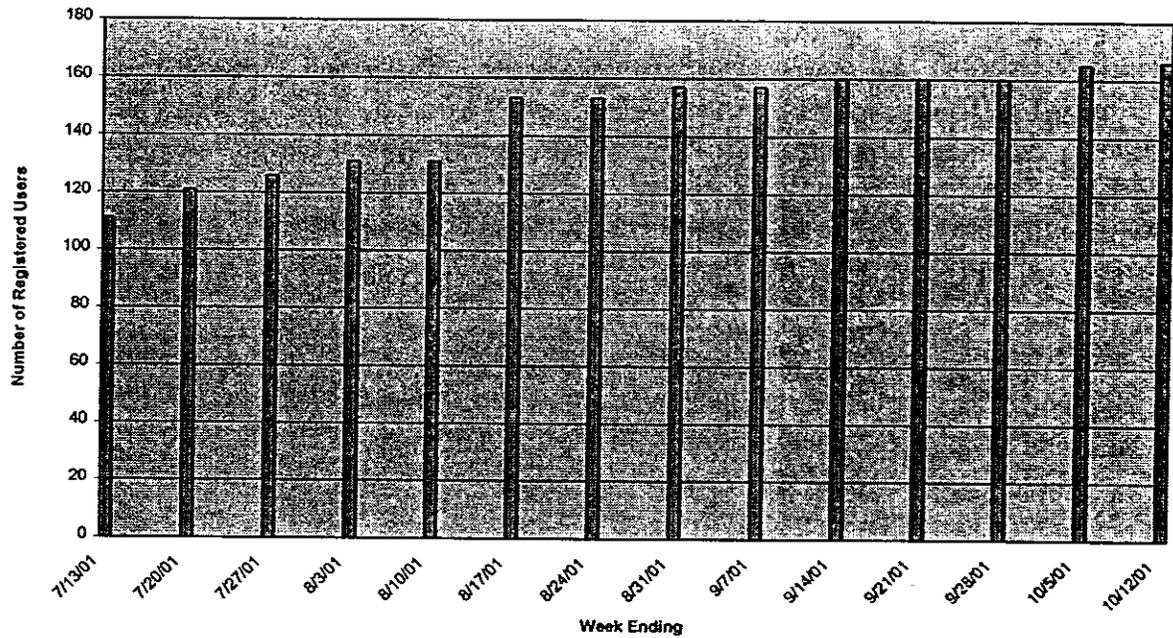
Registered Users



Weekly Revenue



Registered Users



Occupational Category	Male	Female	Total	%Female	% of Females	% of Total
Learner	36	43	79	54.43%	51.81%	50.97%
Primary	4	2	6	33.33%	2.41%	3.87%
Secondary	23	12	35	34.29%	14.46%	22.58%
Tertiary/Other	9	29	38	76.32%	34.94%	24.52%
Student Teacher	13	9	22	40.91%	10.84%	14.19%
Self Employed	0	2	2	100.00%	2.41%	1.29%
Other Employment	3	1	4	25.00%	1.20%	2.58%
None Applicable	3	5	8	62.50%	6.02%	5.16%
Instructional Staff	15	14	29	48.28%	16.87%	18.71%
Lower Primary	0	3	3	100.00%	3.61%	1.94%
Upper Primary	5	5	10	50.00%	6.02%	6.45%
Jr. Secondary	6	3	9	33.33%	3.61%	5.81%
Sr. Secondary	4	1	5	20.00%	1.20%	3.23%
Teacher Trainer	0	2	2	100.00%	2.41%	1.29%
Non-Instructional Staff	2	9	11	81.82%	10.84%	7.10%
Advisory Teacher	0	1	1	100.00%	1.20%	0.65%
Inspector	0	0	0	-	0.00%	0.00%
Principal	0	2	2	100.00%	2.41%	1.29%
Education Officer	0	1	1	100.00%	1.20%	0.65%
Secretary/Clerk	0	2	2	100.00%	2.41%	1.29%
Administrator	2	3	5	60.00%	3.61%	3.23%
Total	72	83	155	53.55%	100.00%	100.00%

Appendix E – Summary Computer Centre Usage

Occupational Categories	Male	Female	Total	%Female	% of Females	% of Total
Learner	122	23	145	15.86%	9.79%	22.41%
Primary	7	4	11	36.36%	1.70%	1.70%
Secondary	100	11	111	9.91%	4.68%	17.16%
Tertiary/Other	15	8	23	34.78%	3.40%	3.55%
Student Teacher	132	70	202	34.65%	29.79%	31.22%
Self Employed	5	2	7	28.57%	0.85%	1.08%
Other Employment	21	22	43	51.16%	9.36%	6.65%
None Applicable	15	15	30	50.00%	6.38%	4.64%
Instructional Staff	88	73	161	45.34%	31.06%	24.88%
Lower Primary	2	18	20	90.00%	7.66%	3.09%
Upper Primary	15	15	30	50.00%	6.38%	4.64%
Jr. Secondary	32	13	45	28.89%	5.53%	6.96%
Sr. Secondary	34	26	60	43.33%	11.06%	9.27%
Teacher Trainer	5	1	6	16.67%	0.43%	0.93%
Non-Instructional Staff	29	30	59	50.85%	12.77%	9.12%
Advisory Teacher	8	8	16	50.00%	3.40%	2.47%
Inspector	1	0	1	0.00%	0.00%	0.15%
Principal	2	0	2	0.00%	0.00%	0.31%
Education Officer	8	10	18	55.56%	4.26%	2.78%
Secretary/Clerk	4	10	14	71.43%	4.26%	2.16%
Administrator	6	2	8	25.00%	0.85%	1.24%
Total	412	235	647	36.32%	100.00%	100.00%

• Bulgaria – Public Computer and Communication Centers (PC3)
 LearnLink Task Order #20
 USAID #: HNE-I-10-96-00018-00
 Period of performance: September 25, 2000 – April 24, 2002

Summary

LearnLink is working in Bulgaria to develop an operational plan for Public Computer and Communication Centers (PC3), implement a network of sustainable PC3s in Bulgaria, and evaluate the initial use and impact of that network. This Task Order has the following deliverables:

- A detailed written workplan for project implementation to CTO
- Agreement with local entrepreneur(s) to establish a network of PC3s.
- Opening the first PC3 within six months
- Full network operational within nine months
- In project communities, pilot centers will have at least one PC3 offering a broad range of services.

- The PC3 network will be privately owned and operated.
- Portfolio of services available to the public, including both for-profit and public-good services.
- M&E system in place by the end of the Task Order
- Concept paper produced discussing options for selecting PC3 networks or other models
- PC3 operators meeting at the Pravetz opening
- Intensive on-going communication with the operators; all kinds of troubleshooting, site visits
- Establishing contacts with other donor organizations and institutions (meetings/communication with Ministry of transport and comm., UNDP, CRS, Microsoft, software developers, etc.)
- Content:
Suitable software, textbooks and books identified and provided to the operators; Educational software (Comenius Logo); multimedia software for children (4 packages with educational games, storybooks, etc.); and IT textbooks for different school levels

The primary PC3 Project activities for the fourth quarter of 2001 were:

1. Opening of four PC3 centers (after opening six PC3s in September)
2. Providing technical assistance for the PC3s set-up and operation
3. Implementing the PC3 Pre-paid Card System
4. Completing the delivery of equipment and reimbursement of expenses according to the subcontracts with the PC3 operators
5. Organizing two training workshops for the PC3s: a) System Administration and b) IT for Children and Students (training of trainers)
6. Designing and developing the PC3 Project web site
7. Handling the issues related to PC3 project extension — extending the contracts for PC3 local staff and subcontracts for the PC3 operators, the PC3 office equipment rentals, office Internet connectivity, office security, and other necessary activities.
8. Giving a presentation on the PC3 Project for the UNESCO Workshop on Multimedia Community Centers (Bucharest, 3-8 December, 2001)
9. Initiating of PC3 content development phase
10. Initiating of PC3 monitoring and evaluation system design

Major activities for the 4th quarter

Staffing

1. Information and Communications Systems Specialist replacement and contracting

The former ICT specialist, Tony Gerassimov, whose contract expired on 24 November, 2001, was replaced by a new ICT specialist, Georgi Gatchev, starting 17 December, 2001. Georgi Gatchev was the trainer in two PC3 training workshops (training in Basic Computer Applications — August, 2001 and System Administration — November, 2001). Through these PC3 events, the trainer introduced the PC3 concept and activities and proved his competence and efficiency in resolving various ICT issues raised by the PC3 operators. Because of his proven abilities, he was considered the best candidate for the ICT position. His name and supporting documentation were submitted to AED for consideration. This request was approved with a contract start date of December 17, 2001.

2. Preparation for replacing the PC3 receptionist

The initial contract of the current PC3 receptionist, Tina Peneva, expired on 24 November, 2001 and was extended only until 31 December, 2000, since Tina needs time to prepare for university examinations in January/February. An extensive search for a suitable replacement was initiated, including announcing the position on the Job Tiger website. Evaluation of the submitted applications is ongoing. Since Tina's performance so far has been very good, it is possible that she will be considered for further involvement in the project on a more flexible basis. More detailed information on staffing will be available in January.

3. Opening the last four PC3 centers (after opening 6 PC3s in September)

The opening of the PC3 centers continued in this quarter as follows:

- *5 October – Madan*
(opened by the Mayor of Madan and the PC3 Country Director, Mrs. Iliana Nikolova)
- *19 October – Vetren*
(opened by the Ministry of Transport and Communications representative and the PC3 Country Director)
- *9 November – Zlatograd*
(opened by the Director of the USAID/Bulgaria Mission, Mrs. Debra McFarland, and the Mayor of Zlatograd)

- *26 November – Varshets*
(opened by the US Ambassador in Bulgaria, H.E. Richard Miles, and the Minister of Transport and Communications, Mr. Plamen Petrov)

The PC3 openings in September were as follows:

- *11 September – Pravets*
(opened by the USAID Administrator, Andrews Natsios, and the Mayor of Pravetz)
- *13 September – Tryavna and 14 September – Byala*
(opened by the USAID/Sofia PC3 Project Coordinator, Mrs. Nora Ovcharova and the Mayor of the town and attended by the AED Vice President and LearnLink Director, Dennis Foote, and AED/Bulgarian Project Director, Brian Bacon)
- *27 September – Aitos*
(opened by the mayor of Aitos and the PC3 Country Director, Mrs. Iliana Nikolova)
- *28 September – Omurtag*
(opened by the Mayor of Omourtag and the USAID/Sofia PC3 Project Coordinator, Mrs. Nora Ovcharova)
- *29 September - Apriltsi*
(opened by the Mayor of Apriltzi and the USAID/Sofia PC3 Project Coordinator, Mrs. Nora Ovcharova)

The PC3 operators reported that the official openings played an important role in drawing the attention of the local authorities and communities to the PC3 center and for enhancing the interest and respect towards the PC3 activities.

4. Providing technical assistance for the PC3s set-up and operation

PC3 openings and start of operations were accompanied with continuous support on behalf of the PC3 Sofia office, including also some site visits. Part of the support was in the form of help with opening preparations, while the other support included assistance in technical troubleshooting of the computer networks and Internet connectivity, identifying and providing software for more effective administration of public computer centers, handling warranty issues for the equipment installed, answering all sorts of questions related to PC3 functioning, helping PC3s identify suitable information and software related to concrete inquiries of their clients, and other technical issues.

An important step was the establishment of reliable and effective information and communication channels within the project:

- PC3 office “hotline” (office phones, mobile phone, fax, office e-mail: pc3office@pc3.orbitel.bg),
- PC3 sites group e-mail address: pc3sites@pc3.orbitel.bg
- PC3 online discussion forum (not widely used)
- Face to face meetings – during the site visits, at training workshops, at PC3 operators seminars
- PC3 Project Web site: <http://pc3.orbitel.bg>

5. Implementing the PC3 Pre-paid Card System

At each PC3 opening, some pre-paid cards were distributed. The rest of the PC3 cards were left with the PC3s for further distribution according to previously developed preliminary distribution lists and agreed-upon distribution guidelines. The pre-paid card system is already in place at all PC3s, and operators' expenses are reimbursed according to the PC3 monthly financial reports. Based on these reports, preliminary analysis of the PC3 users and services has been performed.

6. Completing the delivery of equipment and reimbursement of expenses according to the subcontracts with the PC3 operators

During this quarter, the PC3 project completed the delivery to the PC3 operators of all items of equipment listed in Column C of the subcontracts. Recurrent costs and items listed in Column B of the subcontracts are regularly reimbursed based on related financial documents and PC3 operators' reports. The regular reimbursement of pre-paid cards cost also is continuing.

7. Organization of two training workshops for the PC3s

System administration

The SYSADMIN training took place from 15 to 18 November, 2001 at the PC3 center in Apriltzi. There was one participant from each PC3 center – the person responsible for the administration of the PC3 computer network. The training pertained to the following topics: an overview of PC3 computer and operating systems, hardware and software installation and maintenance, common problems and troubleshooting, TCP/IP protocol, Local Area Network (LAN) topologies, and LAN set up and maintenance.

IT for children and students (train of trainers)

The training was held in Sofia during November 29, 2001 and December 2, 2001. The objective was to train trainers for the PC3 centers who would be able to offer meaningful ICT training and activities to a range of PC3 clients — children, students, and teachers. Two participants per center were invited, and 19 altogether attended the course. The topics addressed the 1) juridical, ethical and health aspects of the use of computers by children; 2) national school curricula for ICT for different age groups; 3) building ICT skills for children (6-10 years old) and students (11-17 years old); 4) software suitable for children; 5) computer graphics; 6) text processing; 7) computer presentations and Internet for children and students; 8) problem solving using ICT; 9) applications of ICT in project work; 10) educational philosophy; 11) microworlds for children; and 12) an introduction to programming and project development.

Both training modules were monitored by PC3 staff and evaluated by the participants. Summaries of the multiple training and evaluations were provided to AED-Washington with the December financial report. The PC3 operators found both training modules relevant, timely, and useful.

8. PC3 Web site design and development

In October, 2001, the first version of the PC3 Project website was developed and presented at <http://pc3.orbitel.bg>. The Bulgarian version is complete, but parts of the English version need translation and further development. The PC3 website was found to be a valuable resource for publicizing PC3 project activities.

9. PC3 Project extension affairs

Extending the contracts with the PC3 local staff and the subcontracts with the PC3 operators

The contracts for the Country Director and the Administrative Specialist were extended until 24 April, 2002. The contract for the Receptionist was extended to 31 December, 2001. The contracts with the PC3 operators were extended to 24 March, 2002 — the last month from 24 March to 24 April will be spent closing out the project, technically and financially).

Extending the rental of office computer network equipment and the office Internet connectivity contract

The contract with the Computer Team for renting computer equipment for the PC3 office was extended according to the project extension to 24 April, 2002. A very favorable monthly rent was negotiated for the extension period based on the

fact that the equipment has already been used (450 USD per month compared to the rent prior to 24 November, 2001 of 670 USD per month).

Also, the contract with the Internet service provider Orbitel Ltd. for Internet connectivity for the office was amended according to the project extension. A favorable monthly fee — 100 USD compared to a prior rate of 200 USD — was negotiated based on the finding that PC3s did not generate enough traffic during the short 3-month duration of operation.

Extending the insurance for the office equipment and office security

The contracts for the office security and insurance for the office equipment (including the project laptop computer and LCD projector) also were extended to 24 April, 2002.

10. PC3 Project presentation at the UNESCO Workshop on Multimedia community Centers in Bucharest, 3-8 December, 2001

At the suggestion of Brian Bacon and with expenses covered by UNESCO, the PC3 Country Director, Iliana Nikolova, gave a presentation and fielded questions at UNESCO's "Multimedia Community Centers" Workshop held in Bucharest during 3 to 8 December, 2001. The presentation on PC3 project development is posted on http://pc3.orbitel.bg/UNESCO_FINAL.ppt. In addition, at the request of the UNESCO Workshop coordinator, Stella Hughes, Iliana acted as a mediator for one of the panel sessions. She contributed to the discussion and highlighted the potential for linking telecenters via community radios. Also, in attendance at the workshops, Mary Fontaine from AED-Washington joined the Round Table discussion following the workshop.

11. Initiation of PC3 content development

PC3 content related Workshop, December 20, 2001

In order to handle the issues related to PC3 content development in a more effective way — in particular, to investigate the information and training resources available with USAID partner organizations and other Bulgarian content providers — a half-day workshop was organized on 20 December, 2001 at the American Center in Sofia. The PC3 office carefully prepared presentations for over 65 representatives of different potential content-providing organizations that were invited and the 10 PC3 operators. Fifty-five (55) participants altogether attended the workshop.

The aim was to discuss demand and supply and provoke a discussion about PC3 content development. A preliminary content needs-analysis for the 10 PC3s was

performed, and the results were summarized by the PC3 team, comprised of the operators attending the workshop. The PC3 Country Director gave an overview of PC3 project development. Two other USAID projects were also described – the Southeast Europe (SEE) Online initiative that developed a Web portal for NGOs in SEE and the Bulgarian Economic Portal Initiative that developed the econ.bg web portal. In the discussion that followed, participants suggested relevant content and Web resources for inclusion on the site. At the workshop end, participants were invited to complete a form seeking contact information, more details about the suggested resources, and the conditions under which new content approved by the team could be available on the site. Analysis is underway of the data collected at the workshop.

Working meeting with the PC3 operators

Following the workshop on content, a working meeting was conducted among PC3 operators on current and upcoming issues.

12. Initiation of PC3 monitoring and evaluation

Initial monitoring and evaluation based on PC3 operators' reports

A monthly reporting system has been established, which provides some of the input needed for monitoring and evaluation. PC3 operators send to the PC3 office two types of monthly reports:

- 1. General reports** as a Word document addressing PC3 center operation, users needs, offered and needed services, questions, problems, troubleshooting, and other concerns.
- 2. PC3 card usage logs** as a spreadsheet that determines PC3 card reimbursement.

Based on these reports, the PC3 team summarized and analyzed operator reports of PC3 interesting ideas, suggestions and experiences and distributed the summary to all PC3 centers for facilitating sharing and exchange. Based on the pre-paid card distribution lists and usage log sheets, valuable data has been collected and disaggregated among users by age, sex, entry level of skill, services, time zones, and other descriptive measures.

PC3 monitoring and evaluation system design

First steps in the development and implementation of a PC3 monitoring and evaluation system were undertaken by the USAID/PC3 project coordinator, Nora Ovcharova, who will use this feature as the basis for her master's research project. Based on the telecenter experience worldwide and relating it to the Bulgarian

context, she proposed a model for telecenter monitoring and evaluation and developed measurement instruments, which were tested at several PC3 sites. The introduction of evaluation measurement tools and requests for feedback helped create awareness at the PC3 sites about the importance of monitoring and evaluation and the variety of approaches and procedures.

It is expected that in early January a team from AED - Washington will come to Bulgaria to help set up and implement a formal PC3 monitoring and evaluation system.

TRAVEL

During this quarter no AED - Washington staff has traveled to the field. It is anticipated that Linda Leonard, the current LearnLink Project Leader, and Doug Beaudreau, AED financial officer, will travel to Sofia in early January to assist the local team with the upcoming project issues such as content development and monitoring and evaluation. Dennis Foote, LearnLink Director, and Brian Bacon, former Bulgaria Project Director, attended the opening of several PCs in September.

ACTIVITIES PLANNED FOR NEXT QUARTER

Staffing

- Receptionist replacement or contract extension

Based on the evaluation of the job applications already received and on expected information about the availability of the current receptionist for the next several months, a decision will be made and a receptionist will be recruited and contracted for the remaining project time.

- Multimedia Computer Applications Development Specialist recruiting and contracting or subcontracting

Based on the final selection of content pieces to be developed and converted for the project, one or more multimedia developers will be recruited and contracted and/or one or more companies to perform this task will be subcontracted. In order to handle this task more effectively during the short amount of project time left, it is possible that different well-defined content development tasks will be allocated to different developers. In addition, the multimedia development will include further development of the PC3 project website.

Additional pre-paid cards printing and distribution

As part of the project extension, each PC3 should receive an additional number of pre-paid cards (about 200). An order for reprinting of these additional cards has already been placed.

Design of further trainings and identification of trainers

The PC3 operators have expressed interest in additional training in Web Design, Programming, Software Applications, and Telecenter Management. The PC3 team will analyze these requests and will make the necessary investigations for suitable locations and trainers/training providers. Depending on an analysis of PC3 training requests, a decision will be made about future training and implementation.

Additional training in Hungary, mediated by World Learning and with support from USAID beyond the PC3 project budget, is being negotiated.

Content development / conversion

AED will assist selected Bulgarian organizations in converting into Bulgarian language computer-based and Internet accessible formats existing information resources and training materials broadly relevant to the economic and social development of under-served communities. Concrete decisions about the number and kind of the content pieces to be developed/converted will be made in January, and suitable developers will be identified and (sub)contracted.

Monitoring and evaluation

As mentioned above, AED-Washington will assist the local PC3 team in the development, set up, and implementation of a PC3 monitoring and evaluation system.

The monitoring and evaluation, including site visits, observations, interviews, data collection, and analysis, will require hiring of additional project assistants.