AFRICAN GLOBAL
INFORMATION INFRASTRUCTURE
(GII)
GATEWAY PROJECT
(Leland Initiative)

End Of Project Report and Evaluation Summary

Academy for Educational Development
February 2001
Information and communication and the technologies that support them are playing a role in development like never before. Extending more affordable communication capability to historically information-poor countries has enabled large numbers of people to contribute to and participate in development globally. Businessmen have found new markets for their goods. Researchers have shared information with extended networks of colleagues. Doctors have been able to consult vast data and human resources in the diagnosis and treatment of disease. Children and adults have been able to learn more about the world.

The Internet—the most vital and dynamic technology tool for development to date—has not only connected the north to the south, but has also brought people together on regional issues and has enabled them to learn from those with similar experiences no matter where they may be. USAID’s Leland Initiative—and the Academy for Educational Development’s role in it—have contributed significantly to expanding Africa’s ability to shape its own development through the greater communication and information use afforded by the Internet.

**BACKGROUND**

In early 1995, very few people in sub-Saharan Africa had heard of the Internet, and even fewer saw any potential for its use in Africa. At the time, only about 1,000 people outside of South Africa used the Internet on the continent. South Africa, Namibia, Ghana, Uganda, and Zambia were the only African countries that managed their own Internet connections. The cost of using the Internet was prohibitive, averaging about US$80 per month for five hours of usage.

Recognizing the power of the Internet and its potential as an important development tool in the African context, the U.S. Agency for International Development launched the African Global Information Infrastructure (GII) Gateway Project—more commonly
known as the Leland Initiative—in February of 1995. The $15 million project was designed to extend full Internet connectivity to a minimum of 20 sub-Saharan African nations, facilitating and encouraging Internet use by Africans and their international development partners to meet the challenges of achieving sustainable development. The initiative addressed many of the regulatory, technical, and user-based challenges by involving a number of partners with a variety of expertise. The Academy for Educational Development (AED) was asked to build demand for the Internet among the development community and spearheaded an approach to help development organizations build skills and create strategies to use the Internet effectively. Internet training was provided in the following countries: Benin, Botswana, Côte d’Ivoire, Eritrea, Ethiopia, Ghana, Guinea Bissau, Kenya, Madagascar, Mali, Mozambique, Rwanda, Senegal, Uganda, and Zambia.

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**The Leland Initiative’s Strategic Objectives and Methodology**

The project activities of the Leland Initiative fell under three strategic objectives:

- **Strategic Objective 1**: Create an enabling policy environment in project countries to facilitate electronic networking and access to GII technologies.

- **Strategic Objective 2**: Strengthen the local telecommunications infrastructure to facilitate Internet access and support a local Internet Service Provider (ISP) industry to ensure the local availability of reliable, accessible, and cost-effective Internet access.

- **Strategic Objective 3**: Achieve broad-based utilization of information and global information technologies among USAID’s development partners to promote sustainable development.

AED’s focus was on Strategic Objective 3—to develop a broad base of trained Internet users who would create the demand for and support an expanded, competitive ISP market in each country. To fulfill this objective, AED had to design new methodologies to bridge the gap between the development of the ISPs and potential users who would create the demand. AED followed a methodology of conducting end-user assessments to raise awareness and determine readiness to adopt the Internet. The data gathered from these assessments provided the information to develop a set of indicators of readiness for use of the Internet, identified the most frequent barriers to access and effective use of the Internet, and formed the core for the design and development of a variety of training options to grow a user base educated in the Internet.

**End-User Assessments**

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Early Leland Initiative assessments conducted in Ghana, Benin, and Mali identified the issues facing potential users of this technology. Formidable national barriers to using the Internet effectively were the first hurdle. The institutional barriers were equally daunting. It was clear that the strategy needed to address both kinds of barriers at the same time, enhancing the capacity of the country to supply access to the Internet while increasing the demand among potential users.

AED recognized early on that unless the Internet was viewed as an effective tool for development, not a fad or gimmick, it would not fulfill its potential in Africa. Through interviews, it was found that though very few people had exposure to the Internet aside from what they learned through international media, many nonetheless had an understanding of and appreciation for the importance of information sharing. As a result of having talked with more than 85 partner organizations in Ghana, Benin, and Ethiopia, AED developed a list of indicators that would help determine an organization’s readiness for effective Internet use. A brief description of the indicators is below. A fuller description is included in Appendix B and on the Web at

### Internet Access Barriers

#### National Level
- Telecommunication policies
- Poor quality and service of telecommunication infrastructure
- Lack of computer technology
- Lack of computer technicians or training facilities
- Absence of a competitive Internet Service Provider industry
- Expensive and poor quality of current Internet services

#### Institutional Level
- Lack of awareness of the Internet and its potential use
- Lack of institutional information and communications strategies
- Lack of adequate training on the strategic use of the Internet

- **Institutional Information and Communication Strategy**: The ability to articulate what role communication and information play in the organization.

- **Institutional Information Use**: The amount of communication and information sources used as an integral part of the institution’s operations.

- **Recognition of the Potential Contribution of the Internet to its Institutional Mission**: The basic understanding of the Internet and the ability to articulate the potential contribution of Internet applications to operations.

- **Champion**: An internal spokesperson(s) who can successfully encourage integration of new technologies or ideas.

- **Telecommunication and Computer Infrastructure**: An institution’s existing telecommunications facility and computer hardware and peripherals. Takes into account the investment necessary to upgrade the infrastructure to effectively integrate the new technology.

- **Potential for Sustainability**: This indicator measures the technology against an institution’s existing operational budget to calculate whether incorporating the new technology is affordable. An institution is measured for its ability to maintain the technology on a month-to-month basis.

These indicators formed the basis for the design of a training program called “Internet for Development” and its accompanying training manual *Making the Internet Connection Count: Effective Use of the Internet in Seven Steps*.

**TRAINING EXPERIENCE**

The Internet for Development training focused on the fundamentals of Internet use and provided guidance on assessing information use and action planning strategies for integrating the Internet into an organization. By the end of the training sessions, each organization created an action plan outlining their feasible next steps in introducing or using the Internet in their organization. This two-pronged training approach imparted the necessary skills to those who were poised to help their organizations consider the Internet as a viable tool for their work and reflect on how this might be achieved.
The training was designed for development professionals who were interested in the Internet and who understood the value of information to their organizations, as demonstrated by their involvement at some level in finding, creating, evaluating, or sharing information. The only requirement for training participants was computer literacy. Invitations issued to organizations requested that the prospective trainee be a person who would understand the utility of the tool, who is responsible for the information flow within the organization, and who is aware of how information moves to and from the organization. This reflects the training’s emphasis on the context of using the tool rather than its technical aspects and was one of the training’s greatest strengths.

Materials used for these trainings were developed in conjunction with the training design and were available in English and French, as were the training sessions (see http://www.usaid.gov/regions/afr/leland/manual.htm). Guides to web resources were updated and tailored to each training. Training manuals guided participants through the training and were used as resources once the training was finished. Many of the respondents (65 percent) had used the materials since the training, as a reference for themselves and others and as a refresher. A small but significant number (9 percent) used them to train others and often used them to develop trainings and accompanying materials.

Most training sessions lasted two days, enough time to familiarize participants with the software and issues related to e-mail and web use. It was intended to be an introduction that would get participants interested and comfortable enough to use the Internet after the training was finished. With exposure to the Internet’s resources and capabilities, participants were able to understand how the Internet could be of use to them and their organizations.

The program took advantage of the Leland Initiative trainings to set the stage for further networking by grouping participants by sector—education, economic growth,
environment, health, and so on. In this way, when organization representatives planned their next action steps, they could plan with other similar organizations and even come together as sector Internet champions. Given that a variety of organization types participated, the trainings helped promote some public–private collaboration in expanding access to information for the sector. They also helped generate interest in advocating their mandates on an international scale.

**Building On Networks**

The Internet does more to open access to the rest of the world. During the Leland Initiative training in Guinea Bissau, a rice researcher used the Internet to access research and make contact with colleagues he knew from conferences—through the International Rice Research Institute (http://www.cgiar.org/irri). As a result, his research is based on current resources and ideas, and he can share techniques with farmers throughout the country.

During the training, AED consistently required participants to devote part of the training time to developing action plans. Participants spent roughly half the time analyzing how their organization uses information and brainstorming about specific needs that the Internet could meet. A step-by-step action plan reflecting the specific needs and objectives of each participating organization was the final product of the workshop. Feedback forms taken immediately following training clearly stated that participants would have preferred to spend the entire time learning to navigate the Internet. Results of the evaluation survey, however, tell a vastly different story. A year after training, 82 percent of the respondents said that they found the action planning process useful. Even more importantly, 36.9 percent followed that plan or another one. For those who were not able to implement their plans, two reasons were most cited: time and resources. Lack of connectivity, for whatever reason, was a common barrier to implementation.

**About the Action Plans**

“We developed an action plan to introduce the Internet to our organization by carrying out an information use analysis. Since our organization is an educational institution, it benefits much from the Internet. For instance, we were launching a distance education center and teaching various students in various fields of study using the Internet. So we are implementing the action plan designed.” (Ethiopia)
By recruiting one or two individuals from each organization, this training created champions—people positioned to act as catalysts who can answer questions and advocate for new ideas. Without this person, the organization will likely have a much harder time when running into questions or obstacles when trying to adopt the use of the Internet. By developing and inspiring these champions, organizations and larger professional communities are given a source of knowledge and encouragement for their Internet use.

To use the Leland Initiative training in promoting organizational change, it became evident early in the training process that other kinds of trainings were necessary. A half-day executive session provided decision-makers with the opportunity to explore the tool and ask questions about its management implications. As a result, they were more likely to support their staff who returned from the two-day trainings ready to introduce and implement action plans for the organization.

**National Assembly Web site, Madagascar**

The National Assembly in Madagascar created a web site with the text of the Malagache constitution in English, French, and Malagache; the history of the National Assembly; their current work; and information about the members ([http://www.assemblee-nationale.mg](http://www.assemblee-nationale.mg)). USAID/Madagascar funded the creation, installation, hosting, and updating of the National Assembly’s web site.

Through the training, participants from government agencies, nonprofit organizations, private sector entities, and donor agencies acquired an understanding of the potential uses of the Internet for development, built necessary skills, and became advocates for using it. More than 1,500 African development partners and selected USAID staff from nine African countries participated in the training. Training-of-trainers (TOT) sessions introduced Leland training content and techniques to over 182 host country trainers for their future use.

**Partners for Internet in Education, Ghana**

As a result of an Internet training for teachers as a part of the Leland Initiative’s School-to-School Partnership program, a core group of Ghanaian teachers formed an association entitled Partners for Internet in Education (PIE). PIE has since brought together teachers and administrators from over 40 schools in three cities to harness the potential of the Internet for education. PIE members have not only been active advocates and lobbyists for the need of the Internet in Ghanaian schools but have also established a public access center in the national library, with the help of USAID and AED.
EVALUATION OF THE TRAINING

Given the incredible growth and the changes in the Internet environment over the last five years, AED conducted a survey to better understand how the Internet for Development training worked in support of and contributed to these changes in Africa. The survey was conducted in four countries: Ethiopia, Benin, Madagascar, and Mali. The goals of the study were to bring together our four years of experience and results and to determine:

- the participants’ current Internet connectivity, as well as the purpose of their Internet use;
- whether participants trained others to use the Internet and if they used Leland materials to do so;
- whether participants share information found on the Internet with others who do not have access to the Internet;
- what the participants’ main constraints have been in using the Internet; and
- the impact of the Internet and utility of the Leland training on the participants and their institutions

AED also took the opportunity to gather stories about the use of the Internet in Leland countries.

As a result, 278 former training participants were interviewed, a quarter of them were from nongovernmental organizations, another quarter belonged to government institutions and universities, 10 percent were from the private sector, and a third were USAID staff. Those that did not fall into these categories were teachers, doctors, and other nondevelopment technical specialists.

Survey Respondents

Ethiopia - 21 respondents
Benin - 91 respondents
Mali - 125 respondents
Madagascar - 41 respondents
The vast majority of the survey respondents (92 percent) indicated that they had used the Internet since the training. Almost as many (90 percent) had Internet connections in their organizations, about half of whom had only one computer connected. Because of these high levels of connectivity, most of those working for host country organizations use it in their offices (82 percent). Some, however, still visit cybercenters to get access (16 percent). More than half (51 percent) of the respondents have trained others to use the Internet—colleagues, associates, friends, and family—training anywhere from 1 person to as many as 300 people. Most trained two and three people each. Leland training graduates trained at least 1,700 others themselves, a process that we hope will continue to snowball over time. In addition, most respondents (84 percent) have shared information from the Internet with others, both information relevant to organizational activities and general news and information.

In addition to Internet advocacy with their colleagues and friends in terms of providing access to online information, respondents are also active in promoting their organizations and their own information to the global public by publishing web pages. Some of the respondents (20 percent) have used the Internet for web page development, perhaps not yet posting their pages, but gaining the skills to create them. Almost half (45 percent) indicated that the Internet has a role in helping their organizations achieve their goals by helping to create publications and promotional materials.

Education Center for Women in Democracy, Kenya

As a result of support from USAID/Kenya and the Leland Initiative training, the education Centre for Women in Democracy (ECWD) created a web site for the organization (www.arcc.or.ke/ecwd). The ECWD “hopes to assist women not only to become more active in politics but also to secure leadership positions in political parties, parliament and government.” Their web site includes information on relevant international conferences, membership in ECWD, and their newsletter and publications.

This training was intended to be the beginning piece of a process by building a core group of people in the development community who are comfortable using the Internet—or at least who have enough skills to get started—and most importantly who understand the importance of the Internet for development. The action plans created during the training were often turned into proposals for funding to get Internet connectivity or to implement an activity requiring the Internet.

Though people and organizations have been gaining access to the Internet and using it to
improve their communication and outreach, the process has not necessarily been an easy one. Of those USAID partner organizations connecting through the host-country infrastructure, many (36 percent) cited a lack of physical resources (funds, computers, phone line, funds for online time) as a barrier to their Internet use. In addition, almost one-third said that a lack of training posed a problem.

Overall, though, almost everyone (98 percent) agreed that the Internet has a role in helping their organizations accomplish their goals by providing better access to information and by making communication easier. About half of the respondents also cited the Internet’s utility in being able to share their information with others and in being able to reduce costs.

**Overcoming Barriers**

Telecenters go by many names: cybercenter, cybercafé, information center, information kiosk. Some are for-profit enterprises, while others are nonprofit community centers. All of these provide the public with access to the Internet, usually at an hourly rate, without needing to invest in expensive hardware and infrastructure or paying recurring maintenance and connection fees. In addition, some of these centers have staff available to assist clients in finding information or understanding the tools available—this becomes critical in areas where the technology is less familiar and where information access has traditionally been severely limited.
AFRICA AFTER THE LELAND INITIATIVE AND LESSONS LEARNED

By November 2000, all 54 African nations had been connected to the Internet. The average cost for using the Internet (usage fees and telephone time) has dropped to US$50 per month. The number of users has climbed to 150,000 (in all of sub-Saharan Africa, except South Africa). Policies have changed to facilitate access as well; sixteen countries have adopted policies that tariff long-distance Internet users at local costs.

Lessons About Training, #1

When asked about the training experience itself, three-quarters of the participants (74 percent) felt that the training met at least some of their needs, and most (61 percent) felt that sessions fully met their needs. The study found that the opportunity to use the tool for a substantial amount of time was crucial to their understanding it. Web browsing and searching was by far the most popular training module. The online web time was carefully constructed to show the participants a wide range of resources available to them in their sectors of work and provided them time to explore and share their findings.

AED’s work with the Leland Initiative allowed us to interact with African development organizations of many types, in many sectors. We also connected with donor organizations, private sector firms, Internet trainers, and many others who have affected the growth and development of the Internet in Africa. There were many lessons from the period of pioneering Internet in Africa; the following are those highlighted from AED’s experiences:

- People are using Internet for development and are sharing information and skills. Many barriers at the national and institutional levels have been overcome, and those that still exist are sometimes overcome through other means, such as using cybercafés.

- Users can gain a great deal from the Internet, even if access is not consistent and reliable. The training’s emphasis on understanding what the Internet can offer and how it can best be used went a long way in inspiring participants to use the Internet in spite of technical problems.

- The Internet can change the way institutions operate, especially if it affects the bottom line.
• Training needs to be followed-up by other assistance if it is to change the way the organization operates.

• People do come together to advocate and act for this type of change, even if the barriers seem overwhelming, once they understand the potential. Africans know that this can help them especially, given their long-time lack of access to information and technology. They are also anxious to communicate their own information to others.

• Champions are an essential element of the technology advocacy and adoption process.

• Training executives and managers to understand the implications of Internet use for their organizations is essential to the adoption process.

• The training developed a substantial Internet user base in sub-Saharan Africa that understands the importance of the Internet in African development.

Lessons About Training, #2

After participating in the Leland sessions, many respondents wanted to go the next step, stressing the need for follow-up trainings that were more advanced or more technical. In addition, many respondents expressed frustration that they were unable to put their newly acquired skills to use once the training was over because their institutions did not yet have Internet access.

The Leland Initiative and AED’s role in developing a significant user base have contributed greatly to the ability of Africans to understand, access, and use the Internet, opening up untold opportunities for obtaining and sharing information worldwide. Such information exchange has the potential to bring data and knowledge to a host of subject areas as never before, significantly enhancing development policy and practice.
**APPENDIX A: EVALUATION METHODOLOGY**

This evaluation consisted of a post-training survey of men and women who participated in the Leland training in Mali, Benin, Madagascar, and Ethiopia between September 1997 and August 1998. Conducted between November 1999 and April 2000, the survey was designed to obtain both qualitative and quantitative information on the respondents’ current level of connectivity and use of the Internet, their activities as advocates for the use of Internet resources, and their experiences with Internet use in their organizations for development purposes.

Of the 468 total participants in the Leland Initiative trainings, 278 responded to the survey, 37 percent of which were women.

**Data Collection**

In Mali, Benin, and Ethiopia, local consultants were hired to administer the survey, developed by the AED/Leland Initiative team in Washington. In Madagascar, a USAID employee and former training participant took on this responsibility. USAID Leland Coordinators introduced the Leland Initiative and provided an overview of the training to the consultants prior to beginning the survey process and furnished them with a list of training participants and contact information. Consultants then interviewed each former participant face-to-face, spending an average of roughly 45 minutes with each respondent.

The questionnaire consisted of eleven multi-part questions, warranting multiple choice and open-ended responses. For administration in Benin, Mali, and Madagascar, the survey was translated into French. Once completed, the original surveys were mailed to AED in Washington for analysis.

**Data Analysis**

Once in Washington, all data from the surveys was entered into a Microsoft Access database. Codes were developed for the qualitative data, and these were also entered into the Access database to identify themes and to note specific anecdotes. Data was transferred into SPSS for analysis and used in combination with lessons and results gleaned from the Leland experience to produce this report.

**Reporting**

For the purposes of this report, much of the data (unless otherwise indicated) does not include responses from USAID staff because their level of Internet connectivity and established patterns of information exchange are very different from those operating in the host country environment.
This study has shown that traditional qualitative and quantitative evaluation methods are relevant to assessing the impact of new technology use and training. The availability of easily attributable baseline data would have added additional validity to the survey.
APPENDIX B: INDICATORS OF READINESS TO ADOPT THE INTERNET

Institutional Information and Communication Strategy: This indicator evaluates an institution’s ability to report its mission and main objectives. The institution is measured on its ability to articulate what role communication and information play in the organization.

Institutional Information Use: This indicator examines what information sources are produced and used. The institution is evaluated by the types of material and publications routinely produced and collected—such as newsletters, research reports, and raw data—in combination with the amount of data used from outside sources to accomplish its goals and make decisions. The institution is measured on the amount of communication and information sources used as an integral part of the institution’s operations.

Recognition of the Potential Contribution of the Internet to its Institutional Mission: This indicator measures an institution’s ability to recognize the need for and the ability to articulate the potential use of information from outside its usual resources. The institution is measured on its basic understanding of the Internet and its ability to articulate the potential contribution of Internet applications to its operations.

Champion: This indicator identifies one or more individuals within the organization who promote Internet use, articulate the importance of Internet use, and set an example of effective Internet use in the workplace. In essence, the institution is measured by its ability to identify an internal spokesperson(s) who can successfully encourage integration of new technologies or ideas.

Telecommunication and Computer Infrastructure: This indicator records an institution’s existing telecommunications facility and the number and types of computers, modems, and printers already in use. This indicator takes into account the required investment necessary to upgrade the existing telecommunication and computer infrastructure to effectively integrate the new communication and information technology into existing operations.

Potential for Sustainability: This indicator measures the technology against an institution’s existing operational budget to calculate whether incorporating the new technology is affordable. An institution is measured for its ability to maintain the technology on a month-to-month basis.
APPENDIX C: SELECTED QUOTES FROM PARTICIPANTS

Quote: Benin

Yesterday, my boss tried to fax a twelve-page document to Geneva. The fax wasn’t going through, so I quickly took the document that I scanned, and after, I sent it as an attachment and it worked. It was very fast and less expensive compared to an ordinary fax.

Quote: Mali

My first contact with the Internet was in this training. I very much appreciated the tool and afterwards it was me who convinced my bosses to get connected to the Internet, and it’s done.

Quote: Madagascar

In the beginning, we had difficulties communicating with our regional partners and even with our offices in the provinces . . . it would take more than a week to send and receive working documents. The installation of the Internet between sites has allowed us to communicate in real time. [We use] e-mail for interoffice messages, FTP for sharing big documents, and the Web for internal use (sharing agendas, documents). [As a result, the] costs for sending packages has been reduced, travel for site maintenance is less frequent [to provide] technical support, [to] update anti-virus software [and] other software. . . . Today we have . . . a web site that we share with partner institutions to better share information, and it’s very easy and efficient.

Quote: Mali

Our organization, being an Internet service provider and having a lot of business in the area of training, this Leland Initiative training helped us a lot. This training had the basics for me and it allowed me to create a training program. Before, I had problems using the Internet and even email. But today, I can surf like I want and even train other people.

Quote: Mali

The training only gave me an idea about searching the Internet. It’s after that I started to learn to navigate and to teach others. Today, I’m an Internet trainer in the office and it’s through the Leland training that I understand the Internet well. The personnel are always asking me for more training, the first wasn’t enough. Thank you!

Quote: Ethiopia

It helps me and the institute to know how to use e-mail. It enables the organization to get
more information. It helps researchers generate or produce more publications. It helps our organization to communicate easily. It helps in communication costs.

**Quote: Mali**

Before the training, there was no transparency in the management and the use of administrative documents at work, now you can follow the evolution of your mail through all of the levels of the hierarchy.

**Quote: Madagascar**

This kind of training is effective for international development, with the globalization of an economy based on massive exchange of information. I hope that the Internet training can become a part of the curriculum in secondary schools and colleges in Madagascar.
BENIN: COUNTRY DATA

About the Survey Respondents
Total number: 91
Male: 61.5 percent
Female: 38.5 percent

About the Respondent’s Organizations

Type
USAID/Other US: 14.3 percent
NGO: 15.4 percent
PVO: 16.5 percent
Government/University: 23.1 percent
Private Sector: 13.2 percent
Other: 17.6 percent

Sectors of Primary Focus
(Respondents chose all of those applicable; sectors chosen by 20 percent or above included here.)
Education: 65.9 percent
Health: 38.5 percent
Politics: 39.6 percent
Social/Cultural: 20.9 percent
Respondents’ Internet Connectivity and Use

Connectivity
Organizations connected to the Internet at the time of the survey: 84.6 percent
   Type of connection - not applicable: 16.5 percent
   Type of connection - no response: 83.5 percent
Organizations that have a LAN at the time of the survey (not necessarily related to Internet connectivity): 36.3 percent

Use
Respondents who have used the Internet since the training: 83.5 percent
Respondents who have used the Web since the training: 72.5 percent
Respondents who have used e-mail since the training: 71.4 percent
Respondents who have developed web pages since the training: 9.9 percent
Respondents who have used e-mail mailing lists since the training: 18.7 percent
Respondents who have used the Internet at the office since the training: 72.5 percent
Respondents who have used the Internet at home since the training: 11 percent
Respondents who have used the Internet at public access centers since the training: 17.6 percent
Respondents who have trained others to use the Internet since the training: 44 percent
Respondents who have shared information from the Internet with others who don’t have Internet access since the training: 85.7 percent
Skills most used now that were covered in the training (respondents chose all that applied)
   World Wide Web: 62.6 percent
   E-mail: 68.1 percent
   E-mail mailing lists: 8.8 percent
Problems with Internet Access

(Respondents chose all that applied to their situation at the time of the survey)

Lack of funds for equipment: 28.6 percent
Connection problems to/with ISP: 60.4 percent
Sharing one phone line/computer: 14.3 percent
Insufficient technical/use training: 16.5 percent
Lack of funds for online time: 13.2 percent

Role of the Internet

All (100 percent) of the respondents felt that the Internet has a role in helping their organization accomplish its goals.

   Greater/quicker access to information: 93.4 percent
   Creation of publications/promotional materials: 31.9 percent
   Ease of communication: 84.6 percent
   Cost savings: 34.1 percent

About the Training

Content

The training provided adequate skills for the respondents’ needs:

   Yes: 80.2 percent
   No: 8.8 percent
   Yes and No: 7.7 percent
After the training, the respondents felt that they still had the following needs:

- Web page development skills: 1.1 percent
- More training: 8.8 percent
- More depth or specifics: 1.1 percent
- More practice/more time: 100 percent

Respondents’ opinion of what was the most relevant content of the training:

- E-mail: 16.5 percent
- Searching or navigating the Web: 30.8 percent
- Getting connected: 2.2 percent
- Action planning: 2.2 percent
- General Internet information: 4.4 percent
- Practice/hands-on work: 15.4 percent
- Atmosphere/learning environment: 1.1 percent
- Exchange with others: 1.1 percent
- Training materials: 1.1 percent

Respondents who found the action planning process useful: 93.4 percent

**Materials**

Respondents who have used the Leland Initiative materials since the training: 65.9 percent

**Impact**

The training increased their senior managements’ support of the Internet: 86.8 percent
ETHIOPIA: COUNTRY DATA

About the Survey Respondents
Total number: 21
Male: 85.7 percent
Female: 14.3 percent

About the Respondent’s Organizations
Type
USAID/Other US: 4.8 percent
NGO: 28.6 percent
PVO: 4.8 percent
Government/University: 57.1 percent
Private Sector: none
Other: 4.8 percent

Sectors of Primary Focus
(Respondents chose all of those applicable; sectors chosen by 20 percent or above included here.)
Agriculture: 52.4 percent
Economics: 28.6 percent
Education: 38.1 percent
Environment: 23.8 percent
Health: 23.8 percent
Trade and Investment: 23.8 percent


**Respondents’ Internet Connectivity and Use**

**Connectivity**

Organizations connected to the Internet at the time of the survey: 100 percent

- Using a phone line: 19 percent
- Other: 4.8 percent
- Type of connection - no response: 76.2 percent

Organizations that have a LAN at the time of the survey (not necessarily related to Internet connectivity): 42.9 percent

**Use**

Respondents who have used the Internet since the training: 95.2 percent

Respondents who have used the Web since the training: 85.7 percent

Respondents who have used e-mail since the training: 95.2 percent

Respondents who have developed web pages since the training: 47.6 percent

Respondents who have used e-mail mailing lists since the training: 33.3 percent

Respondents who have used the Internet at the office since the training: 90.5 percent

Respondents who have used the Internet at home since the training: 9.5 percent

Respondents who have used the Internet at public access centers since the training: 4.8 percent

Respondents who have trained others to use the Internet since the training: 76.2 percent

Respondents who have shared information from the Internet with others who don’t have Internet access since the training: 85.7 percent
Skills most used now that were covered in the training (respondents chose all that applied)

- World Wide Web: 76.2 percent
- E-mail: 90.5 percent
- E-mail mailing lists: 38.1 percent

Problems with Internet Access

(Respondents chose all that applied to their situation at the time of the survey)

- Lack of funds for equipment: 38.1 percent
- Connection problems to/with ISP: 66.7 percent
- Sharing one phone line/computer: 42.9 percent
- Insufficient technical/use training: 42.9 percent
- Lack of funds for online time: 42.9 percent

Role of the Internet

95.2 percent of the respondents felt that the Internet has a role in helping their organization accomplish its goals.

- Greater/quicker access to information: 95.2 percent
- Creation of publications/promotional materials: 66.7 percent
- Ease of communication: 85.7 percent
- Cost savings: 66.7 percent
About the Training

Content

The training provided adequate skills for the respondents’ needs:

- Yes: 71.4 percent
- No: 14.3 percent
- Yes and No: 4.8 percent

After the training, the respondents felt that they still had the following needs:

- Web page development skills: 100 percent
- More training: 4.8 percent
- More depth or specifics: 14.3 percent
- More practice/more time: 4.8 percent

Respondents’ opinion of what was the most relevant content of the training:

- E-mail: 33.3 percent
- Searching or navigating the Web: 57.1 percent
- Getting connected: 100 percent
- Action planning: 100 percent
- General Internet information: 9.5 percent
- Practice/hands-on work: 100 percent
- Atmosphere/learning environment: 100 percent
- Exchange with others: 100 percent
- Training materials: 100 percent

Respondents who found the action planning process useful: 61.9 percent
**Materials**

Respondents who have used the Leland Initiative materials since the training: 85.7 percent

**Impact**

The training increased their senior managements’ support of the Internet: 52.4 percent
MADAGASCAR: COUNTRY DATA

About the Survey Respondents
Total number: 41
Male: 53.7 percent
Female: 46.3 percent

About the Respondent’s Organizations
Type
USAID/Other US: 34.1 percent
NGO: 17.1 percent
PVO: 14.6 percent
Government/University: 22 percent
Private Sector: none
Other: 12.2 percent

Sectors of Primary Focus
(Respondents chose all of those applicable; sectors chosen by 20 percent or above included here.)
Agriculture: 22 percent
Economics: 34 percent
Environment: 61 percent
Health: 51.2 percent
Politics: 26.8 percent
Respondents’ Internet Connectivity and Use

Connectivity

Organizations connected to the Internet at the time of the survey: 95.1 percent

- Using a phone line: 39 percent
- Using a leased line: 19.5 percent
- Using a WAN to parent: 26.8 percent
- Other: 2.4 percent
- Not applicable: 2.4 percent
- No response: 9.8 percent

Organizations that have a LAN at the time of the survey (not necessarily related to Internet connectivity): 68.3 percent

Use

Respondents who have used the Internet since the training: 100 percent
Respondents who have used the Web since the training: 92.7 percent
Respondents who have used e-mail since the training: 97.6 percent
Respondents who have developed web pages since the training: 34.1 percent
Respondents who have used e-mail mailing lists since the training: 22 percent
Respondents who have used the Internet at the office since the training: 97.6 percent
Respondents who have used the Internet at home since the training: 7.3 percent
Respondents who have used the Internet at public access centers since the training: 9.8 percent
Respondents who have trained others to use the Internet since the training: 51.2 percent
Respondents who have shared information from the Internet with others who don’t have Internet access since the training: 75.6 percent
Skills most used now that were covered in the training (respondents chose all that applied)
  
  World Wide Web: 87.8 percent
  E-mail: 90.2 percent
  E-mail mailing lists: 14.6 percent

Problems with Internet Access
(Respondents chose all that applied to their situation at the time of the survey)
Lack of funds for equipment: 12.2 percent
Connection problems to/with ISP: 43.9 percent
Sharing one phone line/computer: 17.1 percent
Insufficient technical/use training: 17.1 percent
Lack of funds for online time: 19.5 percent

Role of the Internet
92.7 percent of the respondents felt that the Internet has a role in helping their organization accomplish its goals.
  
  Greater/quicker access to information: 100 percent
  Creation of publications/promotional materials: 46.3 percent
  Ease of communication: 92.7 percent
  Cost savings: 46.3 percent

About the Training

Content
The training provided adequate skills for the respondents’ needs:
  Yes: 51.2 percent
  No: 29.3 percent
  Yes and No: 19.5 percent

After the training, the respondents felt that they still had the following needs:
  
  Web page development skills: 22 percent
  More training: 9.8 percent
  More depth or specifics: 12.2 percent
  More practice/more time: 2.4 percent
Respondents’ opinion of what was the most relevant content of the training:

- E-mail: 26.8 percent
- Searching or navigating the Web: 56.1 percent
- Getting connected: 4.9 percent
- Action planning: 7.3 percent
- General Internet information: 7.3 percent
- Practice/hands-on work: 2.4 percent
- Atmosphere/learning environment: 4.9 percent
- Exchange with others: 2.4 percent
- Training materials: 2.4 percent

Respondents who found the action planning process useful: 73.2 percent

**Materials**

Respondents who have used the Leland Initiative materials since the training: 80.5 percent

**Impact**

The training increased their senior managements’ support of the Internet: 90.2 percent
MALI: COUNTRY DATA

About the Survey Respondents
Total number: 125
Male: 62.4 percent
Female: 36.8 percent

About the Respondent’s Organizations
Type
USAID/Other US: 48.8 percent
NGO: 5.6 percent
PVO: 9.6 percent
Government/University: 22.4 percent
Private Sector: 10.4 percent
Other: 3.2 percent

Sectors of Primary Focus
(Respondents chose all of those applicable; sectors chosen by 20 percent or above included here.)
Agriculture: 68 percent
Economics: 42.4 percent
Education: 62.4 percent
Environment: 49.6 percent
Health: 67.2 percent
Politics: 30.4 percent
Social/Cultural: 27.2 percent
Technology: 30.4 percent
Trade and Investment: 39.2 percent

**Respondents’ Internet Connectivity and Use**

**Connectivity**

Organizations connected to the Internet at the time of the survey: 90.4 percent
- Using a phone line: 0.8 percent
- Using a leased line: 5.6 percent
- Using a WAN to parent: 3.2 percent
- Other: 0.8 percent
- Not applicable: 12 percent
- No response: 76.8 percent

Organizations that have a LAN at the time of the survey (not necessarily related to Internet connectivity): 68.8 percent

**Use**

Respondents who have used the Internet since the training: 95.2 percent
Respondents who have used the Web since the training: 80.8 percent
Respondents who have used e-mail since the training: 86.4 percent
Respondents who have developed web pages since the training: 19.2 percent
Respondents who have used e-mail mailing lists since the training: 16.8 percent
Respondents who have used the Internet at the office since the training: 92 percent

Respondents who have used the Internet at home since the training: 9.6 percent

Respondents who have used the Internet at public access centers since the training: 13.6 percent

Respondents who have trained others to use the Internet since the training: 51.2 percent

Respondents who have shared information from the Internet with others who don’t have Internet access since the training: 85.6 percent

Skills most used now that were covered in the training (respondents chose all that applied)

- World Wide Web: 66.4 percent
- E-mail: 73.6 percent
- E-mail mailing lists: 14.4 percent

**Problems with Internet Access**

(Respondents chose all that applied to their situation at the time of the survey)

- Lack of funds for equipment: 20.8 percent
- Connection problems to/with ISP: 46.4 percent
- Sharing one phone line/computer: 24 percent
- Insufficient technical/use training: 32.8 percent
- Lack of funds for online time: 6.4 percent

**Role of the Internet**

97.6 percent of the respondents felt that the Internet has a role in helping their
organization accomplish its goals.

Greater/quicker access to information: 94.4 percent
Creation of publications/promotional materials: 54.4 percent
Ease of communication: 93.6 percent
Cost savings: 77.6 percent

About the Training

Content
The training provided adequate skills for the respondents’ needs:

Yes: 48 percent
No: 25.6 percent
Yes and No: 16.8 percent

After the training, the respondents felt that they still had the following needs:

Web page development skills: 4 percent
More training: 22.4 percent
More depth or specifics: 9.6 percent
More practice/more time: 12 percent

Respondents’ opinion of what was the most relevant content of the training:

E-mail: 16.8 percent
Searching or navigating the Web: 47.2 percent
Getting connected: 1.6 percent
Action planning: 3.2 percent
General Internet information: 7.2 percent
Practice/hands-on work: 5.6 percent
Atmosphere/learning environment: 1.6 percent
Exchange with others: 2.4 percent
Training materials: 2.4 percent

Respondents who found the action planning process useful: 74.4 percent

**Materials**
Respondents who have used the Leland Initiative materials since the training: 56.8 percent

**Impact**
The training increased their senior managements’ support of the Internet: 88 percent