



Peace Corps



Information and Communication Technologies (ICT)

Integrating Digital Tools
Into Your Projects

Idea Book
M0085

Information Collection and Exchange

This publication was produced by the Peace Corps' Center for Field Assistance and Applied Research. It is distributed through the Information Collection and Exchange (ICE). For further information or additional copies, please contact ICE and refer to the ICE catalog number that appears on the publication.

Peace Corps

Paul D. Coverdell Peace Corps Headquarters
Center for Field Assistance and Applied Research
Information Collection and Exchange
1111 20th Street, NW, First Floor
Washington, DC 20526

www.peacecorps.gov

Add your experience to the ICE Resource Center. Send your materials to ICE or the Center for Field Assistance and Applied Research so that we can share them with other Volunteers. Your technical insights serve as the basis for the generation of Peace Corps manuals, reprints, and training materials. They also ensure that the Peace Corps is providing the most up-to-date, innovative problem-solving techniques and information available to you and your fellow development workers.

There is a special form at the end of this booklet for submitting your activities for future Idea Books.

INFORMATION AND
COMMUNICATION
TECHNOLOGIES (ICT):
**INTEGRATING
DIGITAL TOOLS INTO
YOUR PROJECTS**



Peace Corps

2003

*Information Collection and Exchange
Publication No. M0085*



The Idea Book Series

The ICT Idea Book is one of a series of booklets produced to share specific activities you may be interested in replicating. Other titles in the series are listed below, and new titles are produced regularly. All of these ideas come from the work of Volunteers. Most of them were submitted just as they are printed—there is not additional information. Some are extracted from larger reports. Where there are additional reference materials for an idea, notations tell you how to obtain them. The reference section at the end of the booklet will direct you to additional available resources. Please contact the appropriate person or group to follow up on the ideas.

You are encouraged to submit your successful activities to this series. You will find a form on the final page of this booklet with instructions.

Titles in the Idea Book Series:

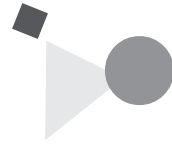
- M0080: Beyond the Classroom: Empowering Girls
- M0081: HIV/AIDS: Integrating Prevention and Care Into Your Sector
- M0082: Small Project Assistance Program (SPA): Supporting Sustainable Community Development
- M0083: In the Classroom: Empowering Girls
- M0084: DPM: Integrating Disaster Preparedness and Mitigation in Your Work



Table of Contents

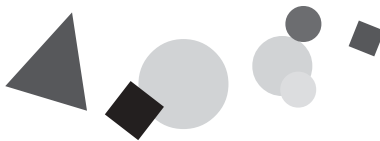
Introduction: A Look at ICT Activities Worldwide	1
What Is ICT?	1
The Peace Corps' ICT Initiative	4
Communication Technologies in Action	4
Technology Integration Trends	6
ICT-PCV Listserv	9
Online Resources	9
ICT in Health Projects	10
ICT in Education Projects	16
ICT in Agriculture and Environment Projects	23
ICT in Small Enterprise Development and Business Projects	28
Women and Girls Working With ICT	36
Youth and ICT	48
References and Resources	62
Volunteer-Developed Websites	62
Needs Assessment Model	62
Skills Transfer Workshops: Session Plan Format	70
Sample ICT Troubleshooting Workshop Design	72
ICT Training of Trainers	75
Resources Available Through ICE	79
Have a Good Idea?	85





Acknowledgements

Numerous field and headquarters staff worked to complete the publication of *Information and Communication Technologies (ICT): Integrating Digital Tools into Your Projects*. The Peace Corps appreciates the contributions of articles, ideas, and photographs by Volunteers, counterparts and staff throughout the world, and the efforts of all those who participated in this process.





Introduction: A Look at ICT Activities Worldwide

In today's technology-rich world, Peace Corps Volunteers are helping to bridge the digital divide through the use of information and communication technology (ICT) in development projects. The application of ICT strengthens the results and reach of projects. It also helps Volunteers find innovative solutions to problems, network with others in their own host country and around the world, and enhance their work with resources available on the Internet. In this idea book we present a wide variety of ways in which Volunteers are using all forms of ICT to achieve high-impact results across all Peace Corps sectors and initiatives.



What Is ICT?

What do you think of when you hear “ICT”? If you are like most people, you imagine a computer, and possibly the Internet, and how these two technologies are used to access and produce all sorts of interesting and relevant information. While this may be a commonly held definition, ICT, or Information and Communication Technology actually refers to a broad spectrum of technologies that allow users to get, produce, and share ideas and resources. It is useful to keep this concept in mind as we begin to strategize ways to use technology as a tool for “leapfrogging” stages of development.

In 2002, more than 1,300 Peace Corps Volunteers worked with 750 host country organizations and more than 14,000 host country counterparts and partners on information technology-related activities. Because of their computer, language, and cross-cultural skills, and the fact that they work on capacity-building efforts at the grass-roots level, Peace

Corps Volunteers are uniquely positioned to help individuals, organizations, and communities explore the use of information and communication technology to improve their lives. Included in this book are some ideas on ways in which Volunteers in all sectors can use ICTs to increase the impact of their work.

The following are descriptions of some forms of ICT and how they can be used to support Volunteers' work:

■ **Radio:** Radio is a fairly inexpensive and pervasive technology, yet it is often overlooked as a tool for development. In recent years, small community radio stations, which typically have a limited reception range, have increasingly been involved in broadcasting locally relevant development messages in such areas as health, nutrition, and civic participation. In several countries “interactive radio instruction” is used to provide educational programs in remote areas where teachers are undertrained or unavailable. Examples of this type of instruction include radio phone-in shows, road shows, and community radio. The core attributes of community radio instruction include prior research of relevant community issues on the part of the programmers and participation by community members in all facets of the broadcast. In addition, satellites can now provide radio reception to remote areas that were previously beyond reception range.



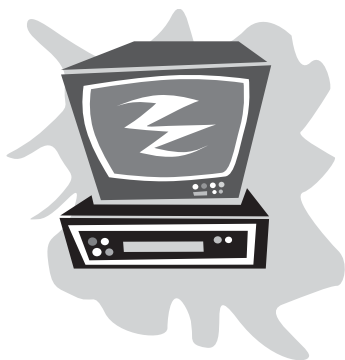
■ **Video:** Television signals are increasingly accessible in countries where Peace Corps Volunteers work, including areas beyond broadcast range with the use of satellite dishes. In addition, video has become a fairly inexpensive and common technology. The price of video cameras has dropped dramatically in recent years, and movies or videos with development messages can be shown in the most remote areas using a portable generator or car battery. Because of

the power of visual images, video—whether used for interactive teacher training or communicating effective health and nutrition practices—can be a very effective development tool.



- **Computers:** There are several levels of computer technology. A basic level would involve standard hardware, a computer, a monitor, and a printer, with word processing, spreadsheet, and database software. Depending on the processing speed of the computer, software might also be available on CD-ROM. Spreadsheet and database software alone can improve efficiency in organizational record keeping. An additional level of computer technology is e-mail. Because e-mail permits users to communicate across great distances quickly and at a relatively low cost, the demand for access has expanded exponentially. Another level of computer technology is Internet connectivity, which allows access to the World Wide Web.

The Web provides users with access to enormous amounts of information (e.g., scientific literature and development best practices), which might otherwise be inaccessible. The Web also allows interactive communication through the use of chat groups and bulletin boards. Currently, the most advanced form of computer technology is virtual reality, which allows users to interact in a computer-generated “virtual” world. Some promising applications for this technology are being developed, such as training in surgical techniques and allowing users to “ride” on atomic particles to demonstrate physics principles. However, this technology is prohibitively expensive for most development applications.



The Peace Corps' ICT Initiative

The Peace Corps is continuing a on going effort to formally focus on the use of technology to reach development goals. Volunteers are being called on in increasing numbers to transfer their knowledge in using all forms of technology to achieve those goals. Therefore, a significant development with regard to the Peace Corps' IT (information and technology) initiative is its name change to the ICT initiative. "ICT" stands for **I**nformation and **C**ommunication Technologies; the name change reflects the more comprehensive definition of technology to include radio and television as well as computers and the Internet. As of 2002, 75 ICT Volunteers were specifically recruited to work on ICT projects in the Inter-America and Pacific (IAP) region, and 14 were recruited in the Africa region.



A PCV in Africa trains a young girl in how to use a computer.

Communication Technologies in Action

Volunteers in all regions use TV, video, audiocassettes, print media (magazines, newspapers, and brochures), film, and especially radio to distribute their development messages to a broad audience. Volunteers have successfully used television and radio to spread health and educational messages to large numbers of viewers and listeners. In the IAP region, Volunteers established media committees on five islands

in the Pacific. Worldwide examples of Volunteers' use of technology include:

- ▶ organizing a live, interactive radio show to provide information on the European Union;
- ▶ producing an ESL (English as a second language) soap opera for television;
- ▶ producing a video about the importance of immunizations;
- ▶ developing radio call-in programs and TV segments about basic HIV/AIDS information;
- ▶ promoting a sales video featuring a women's weaving group;
- ▶ organizing a youth-led radio program to discuss issues centered on youth;
- ▶ using radio to publicize Community Content-Based Instruction accomplishments.
- ▶ using audiocassette recordings of health messages for broadcast on local radio stations;
- ▶ producing a radio show of a debate focusing on increasing women's capacity;
- ▶ using radio for disseminating information, such as public service announcements, and organizing on-air discussions, role plays, and stories to make the broadcasts educational;
- ▶ offering children's lessons via radio broadcasts; and
- ▶ hosting a radio show on American jazz.





Technology Integration Trends



Distance Learning

Volunteers are beginning to use a variety of media to support distance learning efforts, thus increasing opportunities to access education in the local communities. For distance learning to occur the instructor and student must be in different locations but able to interact or communicate through the use of print media, computer-based training, Internet-based training, interactive radio instruction, teleconferencing, and videoconferencing. The African Virtual University is an ambitious example of distance learning that offers a diverse set of courses via teleconferences to an underserved population.

Volunteers can exchange distance-learning ideas and resources with other international development practitioners and their counterparts by joining the DLDC (Distance Learning in Developing Countries) online discussion list. More than 600 members from all over the world participate in the list. To join, visit the DLDC website at:

<http://groups.yahoo.com/group/dl/dc/>



Computer lab in Russia.

Promoting Computer Literacy

Volunteers worldwide work with a variety of audiences to transfer needed computer literacy skills (word processing, creating spreadsheets, and producing electronic presentations). For example, in the Dominican Republic, 17 education Volunteers became ICT teacher trainers, placed at district and regional levels by the secretary of education. Also, the new ICT Volunteers in the Dominican Republic train teachers in computer skills, focusing on how computers can be used to improve the quality of education in the classroom.

ICT Workshops

Volunteers throughout the world are conducting useful computer and interactive media workshops with and for their host country national counterparts and colleagues. For example, a Volunteer in Latvia organized a weeklong workshop for local teachers to learn computer and Internet skills. This Volunteer also recruited computer students from a local college as volunteer assistants for the workshop, which added to the event's capacity building. An agenda for a workshop can be found on page 16, taken from the *Information and Communication Technology Training of Trainers* manual (ICE No. T0122). Another type of workshop facilitated by Volunteers in The Gambia and Tonga focused on troubleshooting skills. See the Resources section of this Idea Book for an example of a troubleshooting workshop. Associate Peace Corps directors (APCDs) may have insights into possible funding sources for ICT workshops.

Technology Teams, Working Groups, Clubs, Support Groups, and Steering Committees

ICT Volunteers in several countries have created technology youth groups and Volunteer technology working groups to share resources and ideas and to provide support to one another. In Paraguay, Volunteers, who all use ICT in some form at their site, started a club as a support and communication network. Small enterprise development (SED) Volunteers in Senegal regularly produce a newsletter called



The Squeaky Wheel, which includes information on ICT activities and projects.

The following example describes the activities of a successful technology team established in Peace Corps/Ukraine.

Business Development Group 14 Creates the PC/Ukraine Website and Listserv

Peace Corps/Ukraine's Business Development Group 14 has created a website and a listserv (www.pcukraine.org). The listserv allows Volunteers to stay networked via the Internet or e-mail. It has helped PC/Ukraine to take its first step toward integrating the use of ICT with the work done by Volunteers in-country. The PC/Ukraine website has increased the effectiveness of Volunteers by offering helpful resources for use at their sites and has helped Volunteers in Ukraine to both communicate about and illustrate the Peace Corps experience and Ukrainian life to friends, family, and World Wise School partners in America.

The newly named, Volunteer-led technology team (formerly known as the Web team) intends to use the momentum created by Group 14's efforts to continue to expand the use of technology throughout Ukraine.

The objectives of the PC/Ukraine technology team include:

- 1.** Advance the effectiveness of current Volunteers in Ukraine by maintaining and building the PC/Ukraine website's library of resources and operating relevant software.
- 2.** Train Volunteers and their Counterparts in technology skills—including but not limited to conducting research via the Internet; developing websites for their organizations, schools, institutions, universities, etc.; and utilizing IT equipment and resources to draft grants, presentations, and promotional materials—at pre-service training, regional conferences, and sector conferences.
- 3.** Continue to help Volunteers in Ukraine to both communicate about and illustrate the Peace Corps experience and Ukrainian life to friends, family, World Wise Schools partners, and potential Volunteers in America.



The ICT-PCVs Listserv



The ICT_PCVs Listserv provides a forum for Peace Corps Volunteers and staff to share information that is relevant to their efforts to use ICT in their countries. Any Volunteer or staff member can subscribe to the listserv by going to the following URL:

http://groups.yahoo.com/group/ICT_PCVs/

Click on “Join This Group” and follow directions for signing up to become a member of the group. You may also subscribe by sending a subscription request to:

ICT_PCVs_subscribe@yahoo.com



Online Resources to Explore



- Guide to ICTs for Development
[www.comminit.com/pdf/CKS_Guide to ICTs for Development.pdf](http://www.comminit.com/pdf/CKS_Guide_to_ICTs_for_Development.pdf)
- Digital Opportunities for Development
<http://learnlink.aed.org/Publications/Sourcebook/home.htm>

