Cyber Cafés
A How-to Manual

Including Designing a Web Site
and Implementing an
Online Peer Education Program

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Advocates For Youth
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Advocates for Youth is dedicated to creating programs and promoting policies that help
young people make informed and responsible decisions about their reproductive and
sexual health. Advocates for Youth provides information, training, and strategic assistance
to youth-serving organizations, policy makers, youth activists, and the media in the United
States and developing countries.

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ACRONYMS

AOL	America On Line
BPS	Bits per second
CD-ROM	Compact disk (disc)* read-only memory
CD-RW	Compact disk re-writable
CPU	Central processing unit
CRT	Cathode ray tube (monitor)
DECT	Digital enhanced cordless telecommunications
DLP	Digital light processing
Dpi	Dots per inch
DVD	Digital video disk
DVD-ROM	Digital video disk read-only memory
DVD-R	Digital video disk read
FAQ	Frequently asked question
FDDI	Fiber distributed data
GLBT	Gay, lesbian, bisexual, and transgender
HDD	Hard disk drive
HTML	Hypertext markup language
HTTP	Hypertext transfer protocol

IE	Internet Explorer
IrDA	Infrared data association
ISP	Internet service provider
IT	Information technology
LAN	Local area network
MBPS	Megabytes per second
MPGE	Moving picture experts group
NGO	Nongovernmental organization
NIC	Network interface card
OCR	Optical character recognition
PC	Personal computer
RAM	Random access memory
RGB	Red, green, blue
STI	Sexually transmitted infection
SWAP	Shared wireless application protocol
UPS	Uninterruptible power supply
URL	Uniform resource locator
WWW	World Wide Web
YSO	Youth serving organization

* Disk can be spelled ending either with a k or with a c; throughout this manual, disk will be spelled with a k.

1 Goals & Benefits of a Cyber Café

To provide an overview of the cyber café's goals and the manual's content; background information on the Internet, young people's need for sexual health information; and their use of the World Wide Web for such information; and an understanding of the potential benefits of a cyber café initiative to the young people, the community, and the organization

▶▶ THIS MANUAL

This manual draws heavily on experience gained from a cyber café initiative, led by Advocates for Youth in partnership with three nongovernmental organizations (NGOs) in Central America. These organizations—Entre Amigos in El Salvador, Comunidad Gay San Pedrana in Honduras, and OASIS in Guatemala—established cyber cafés to improve youth's access to sexual health information. Dedicated to preventing HIV and AIDS among the gay, lesbian, bisexual, and transgender (GLBT) communities in their countries, these NGOs used cyber cafés to establish safe spaces—both virtual and real—for GLBT youth.

Although much of the manual's content is based on the Central American experience with GLBT youth, the manual will also be useful in other parts of the world and with youth who are not GLBT. To ensure its usefulness, the authors examined and pilot tested the manual with three different NGOs in sub-Saharan Africa: Youth Health Organization in Gaborone, Botswana; Township Aids Project in Johannesburg, South Africa; and Youth Action Rangers of Nigeria, in Lagos, Nigeria. These three, youth-led organizations work with young people in HIV and AIDS prevention and education.

▶▶ GOALS OF THE CYBER CAFÉ

The over-arching goal here is to guide youth-serving NGOs in creating cyber cafés to promote youth's reproductive and sexual health. Within this primary goal, the cyber café is an important tool to achieve several other goals. It will allow young people to:

1. Access the Internet and search for accurate and up to date information on sexual health

2. Experience community, both online and off

3. Increase youth's computer literacy

4. Improve youth's job related skills.

The cyber café can also create revenue to sustain itself or to fund other activities. Finally, the organization can link the cyber café to its other programs that might benefit from the cyber café.

▶▶ CONTENT OF THE MANUAL

This manual is divided into nine easy-to-read chapters. The chapters build so that those readers who feel less able to use a computer can increase their base of knowledge as they read each chapter.

- This first chapter talks about the benefits of a cyber café and its potential for a positive impact on the lives of young people and adults.

- The second, third, and fourth chapters describe, in detail, the steps in setting up and operating a cyber café.

- The fifth chapter provides an overview of the basics of computers and computer networks.

- The sixth chapter covers Internet basics.

- The seventh chapter introduces the basics of designing a Web site.

- The eighth chapter discusses online peer education as a key to providing youth-friendly information and support via the Internet.

- The ninth chapter discusses the importance of including in the program opportunities for youth to learn and practice job related computer skills.

Each chapter begins with a learning objective. Throughout the manual, examples and brief case studies, in sidebars and boxes, illustrate points made in the main text.

Finally, a glossary of computer related terms (beginning on page 87) will help readers who don't feel particularly comfortable with computer or Internet jargon. A list of acronyms (on page eight) will help, if the reader forgets the meaning of a particular acronym. Throughout this document, "you" is a collective term, meaning the team of people planning the cyber café—**always including youth**.

COUNTRY	USERS PER 10,000 INHABITANTS IN 2001
Ethiopia	3
Nigeria	10
Burkina Faso	16
Ghana	19
Cameroon	29
Botswana	297
South Africa	700

The Internet is fast becoming an important provider of health-related information. Users can search the Web for information on a range of health issues, from the common cold to HIV. Web sites that focus on sexual and reproductive health are increasing rapidly, both in number and in content. These sites answer the worldwide information needs of youth and adults.

YOUNG PEOPLE'S USE OF THE INTERNET FOR SEXUAL HEALTH INFORMATION

Young people throughout the world urgently need information on sexual health issues. This should not be surprising, given the number of unwanted pregnancies and sexually transmitted infections (STIs), including HIV, that youth experience. An estimated 11.8 million youth, ages 15 to 24, are living with HIV or AIDS, and more than half of all *new* infections occur in youth the same age, almost 6,000 each day.[1] Each year, about 15 million young women ages 15 to 19 give birth. In fact, 33 percent of women in less developed countries give birth before the age of 20.[2]

At the same time, Parents are often uncomfortable talking to their children about sex. Peers are often an important source of sexual health information; but their information often includes myths and misunderstandings. In some developing countries, youth may have difficulty finding accurate information. Many young people also need a safe place to ask questions and to get help without feeling embarrassed, harassed, or unwelcome. Around the world, youth often find health services unfriendly, hard to get to, and/or expensive.

So where can youth turn for accurate, confidential information? Where—the World Wide Web! In the United States in a recent survey, 68 percent of people ages 15 to 24 used the Web to search for health information; 39 percent looked up health information online at least once a month; 44 percent sought information on sexual health. Not surprisingly, the survey also found that 82 percent of youth identified confidentiality as "very important." [3]

NGOs, including youth-serving organizations (YSOs), can play a critically important role by giving youth access to the Internet and to the World Wide Web. Organizations can help to build young people's skills in creating sexual health information for Web sites as well as skills in using computers, designing Web sites, and developing and leading programs for youth.

THE BENEFITS OF INVESTING IN A CYBER CAFÉ INITIATIVE

There is no doubt that establishing a cyber café initiative takes serious commitment and investment from an organization. So why bother? There are several reasons for considering this strategy: in short, it provides important benefits to youth, the community, and the organization.

HOW CAN A CYBER CAFÉ INITIATIVE BENEFIT YOUTH?

Benefits vary for youth. However at a minimum, the cyber café should:

1. Give youth unhindered access to sexual health information.

[1] **UNAIDS.** *Report on the Global HIV AND AIDS Epidemic.* Geneva: UNAIDS, 2002.
[2] **Boyd A.** *The World's Youth, 2000.* Washington, DC: Population Reference Bureau, 2001.
[3] **Kaiser Family Foundation,** *Generation RX.com: How Young People Use the Internet for Health Information.* Menlo Park, Calif.: The Foundation, 2001.

2. Provide a safe place where youth can search the Web confidentially.

3. Involve youth.

4. Provide training in computer skills.

If it does these four things, it will really help young people. But, the cyber café can also improve youth's access to other, important services, like HIV testing, and it can alter adults' attitudes about youth while offering youth leadership opportunities.

1. Give unhindered access to sexual health information

Sexual health information can improve young people's awareness of STIs. Yet, such information may be hard to find or even censored, depending on the country and/or community where a young person lives. For example, in many countries in Central and South America as well as in Africa, policies may bar youth's access to sexuality related information. In the United States, many schools block computer access to sexual content and most, inadvertently, block sexual health information as well. Although more and more commercial cyber cafés are popping up, their user fees are often too high for youth. Then, too, in some countries commercial cyber cafés restrict access to Web sites whose content is considered dangerous or offensive. By providing youth with unhindered access, cyber cafés also provide youth with an opportunity to assess the information's accuracy and reliability. They empower youth to make informed decisions about their reproductive and sexual health.

2. Create a safe place

Youth frequently need a space where they can write e-mail or search the World Wide Web in privacy. That is, they need a space where no one overlooks their work, and where filters do not limit their access to sexual health Web sites. They also need a space where they can be who they are, without worrying about harassment or hostility due to their gender, ethnicity, sexual orientation, or gender identity. By providing a welcoming, confidential, and safe place where young people be themselves, search the Web, send and receive e-mail, and participate in message boards or Listservs, the café provides a service that youth often urgently need.

3. Involve youth

A cyber café can also promote youth's development by sharing management and decision-making between adults and youth. The cyber café offers youth opportunities to participate in designing and running programs. Meaningful involvement in creating and operating the cyber café gives youth opportunities to make decisions, take responsibility, and work effectively side-by-side with adults.

4. Provide training in computer skills

Young people can increase their knowledge and expertise in information technology while, at the same time, they increase their computer skills, including learning how to operate different software programs. Increased knowledge and expertise also increase their employment opportunities. For example, young volunteers at OASIS in Guatemala received promotions in their current workplaces, thanks to workshops on Microsoft Word and Excel taken at the cyber café to improve their computer skills. Youth can use the cyber café to do online research and to write papers or resumes.

The café also allows youth to open e-mail accounts. This increases their chances to work with other youth, locally, regionally, nationally, and internationally. When youth connect with other young activists from around the globe, they feel empowered and part of a much bigger movement.

5. Provide access to other services

Sometimes, youth feel scared of going into a place to ask to be a volunteer or an intern or to get tested for HIV or other STIs. The cyber café provides a welcoming "doorway." It lets youth get to know about the organization. Then, they can find out how to volunteer or to get tested. For example in Entre Amigos in El Salvador, the cyber café also contains a real (rather than a virtual) bulletin board. The bulletin board displays activities and asks for volunteers. Print copies of brochures on STIs and HIV are available in this space. This allows youth to share information with their friends and family. In these ways, the café also encourages youth to get tested for HIV.

6. Change adults' perceptions and improve everyone's ability to work together

Finally, by involving youth in designing and running the cyber café and Web site, the organization helps change adults' attitudes about youth. Staff and other adults see that young people are capable and valuable as partners in the work of serving youth. In the six partner NGOs in Central America and Africa, youth almost entirely manage and operate the cyber cafés, with some support from adults.

▶▶ HOW CAN A CYBER CAFÉ INITIATIVE BENEFIT THE COMMUNITY?

A cyber café within an organization can provide the surrounding community with several benefits:

1. Increase access to information on the World Wide Web

Students, professionals, parents, local school authorities and other members of the community learn the value of access to the Internet. Parents and teachers learn that the Internet is a rich source of educational information for students. Professionals learn that access to computers and the Internet has great value. This is especially true when they need research about a specific topic and can't easily find information through more traditional channels. Health professionals in Guatemala, for example, often use the cyber café at OASIS for information on the health of GLBT people. This is information they cannot find elsewhere, due to filters on Internet browsers or rules in the workplace, commercial cyber cafés, and many libraries.

2. Increase computer literacy in the community

Parents and other members of the community also increase their computer literacy. They, too, like youth, are then better able to work with a wide variety of software programs. Café visitors can quickly learn how to use computers and the Internet to obtain needed information.

3. Increase familiarity with the organization and its services

Members of the community become familiar with the organization and the services it provides. As the organization becomes better known due to its cyber café,

people who need its services are more likely to hear from others or to learn of them firsthand. People may also begin to support the organization and its mission because they know it has helped them or others they care about. For example, in El Salvador, Entre Amigos has been able to strengthen ties with other organizations and individuals in its neighborhood by allowing them to use the cyber café. The word is spreading about the work of Entre Amigos and the young GLBT community.

▶▶ HOW CAN A CYBER CAFÉ INITIATIVE BENEFIT THE ORGANIZATION?

A cyber café initiative can benefit an organization in several ways. It can:

1. Increase visibility

The organization benefits from increased visibility within the local community and among local organizations working in the same or related fields. This, in turn, can foster cooperative projects with other organizations. A successful cyber café initiative can also impress funding sources and may help the organization to obtain additional grants for the café, the organization as a whole, or other programs. For example, Entre Amigos in El Salvador was asked to open and administer a cyber café inside San Salvador's university. This allows Entre Amigos to create more awareness about HIV and AIDS among students while at the same time giving youth access to the Internet.

2. Support youth-adult partnerships

The organization's staff becomes more skilled in working with youth. Staff experiences the benefits of partnering with youth. By including youth in the cyber café initiative and working side-by-side with youth, staff learns youth's capabilities, energy, and creativity. Until an organization actually involves youth meaningfully in a project, staff may resist partnering with youth. A cyber café offers an exciting way to introduce and promote the powerful, yet sometimes anxiety-provoking, concept of partnering with youth.

3. Increase staff's skills

Staff in grassroots NGOs often lacks a thorough understanding of computers and how to use them most effectively. A cyber café within the organization can

improve staff's computer literacy. For example in Honduras, Comunidad Gay San Pedrana, staff members dramatically increased their knowledge of computers by using the cyber café to learn how to operate various software products.

4. Generate revenue

A well-managed cyber café has the potential to generate revenue. Running a cyber café incurs costs, especially at the beginning. But, it can at least cover some or all of its operating costs. Sometimes, the cyber café can actually provide additional income for the organization, especially if staff explores funding opportunities. For example, the organization can establish a sliding scale of fees. For a frame of reference, you might want to check out what other cyber cafes in the area are charging their customers and what services are being offered. Some users, such as youth, can be allowed to use the cyber café at no charge during certain established times. Other users can be charged a small fee to use the cyber café. Professionals can be charged a larger fee and allowed to reserve the cyber café during off-peak hours or days. Or the organization can offer, and charge tuition for, workshops on how to use a word processor, how to use search engines, or how to find or post a job. In El Salvador, for example, one of the local public schools lacked a computer lab. School officials rented the use of Entre Amigos' cyber café on certain days so students could learn basic computer skills.

To lessen costs of operating the cyber café, consider using volunteers who work at the café in exchange for its use. In Guatemala, OASIS lets young volunteers navigate the World Wide Web in exchange for online research on topics such as human rights, the latest advances in medication for HIV and AIDS, and GLBT issues. The volunteers gather the information and turn it over to OASIS' resource center. OASIS thus ensures that the resource center gets a steady stream of new information, while allowing volunteers to navigate the Web and improve their skills.

SUMMARY OF CHAPTER 1.
GOALS & BENEFITS OF A CYBER CAFÉ

Young people throughout the world need access to sexual and reproductive health information. The Internet provides such an opportunity, and NGOs have a role to play in providing a safe space where young people can find reliable sexual health information on the Internet. The advantages of hosting a cyber café are numerous, benefiting youth, the community, and the NGO.

The overarching goal of a cyber café initiative, as described in this manual, is to promote youth's reproductive and sexual health. The cyber café can improve youth's access to accurate and up-to-date information on sexual health; provide a space where young people can share information and form community, both online and off; increase youth's computer literacy; and improve young people's job related skills.

The manual is based on experiences Advocates for Youth gained from a cyber café initiative it led in partnership with three NGOs in Central America. The manual covers setting up, implementing, monitoring, and evaluating a cyber café initiative. It also offers guidance on: identifying good sites for reliable sexual health information; understanding and sharing computer and Internet basics; designing a Web site; setting up an online peer education program; and building computer skills.

2 Planning

To provide guidance on advocating for a cyber café initiative within the organization; conducting a needs assessment, identifying the target audience, and developing project goal

▶▶ INTRODUCTION

Setting up a cyber café requires careful and thoughtful planning, because the quality of services it can offer are directly related to planning. Careful attention in the beginning will help eliminate problems in the long run. Of course, flexibility is also important.

The planning phase is about mapping the concept before laying out the structure. It involves a lot of thinking and drafting, as well as a thorough assessment of all resources available for the project. After conducting extensive research and working with three organizations in Central America to set up cyber cafés, Advocates for Youth has identified key steps to follow in planning a cyber café initiative. The steps will be presented here in chronological order, in this and the next two chapters.

The present chapter guides you through planning for the cyber café, including:

1. Planting the seed internally
2. Planting the seed externally
3. Assessing needs
4. Envisioning the project
   a. Identifying the target audience
   b. Making the café accessible
   c. Including youth as partners
   d. Identifying goals and objectives
   e. Developing a work plan
   f. Fund raise

▶▶ 1. PLANT THE SEED INTERNALLY

The purpose here is to ensure that the organization will support the cyber café initiative. Starting something new is no fun, if you are on your own. Draw on your colleagues' experience and get their help. It is worth the time it takes to build support. With support, you can move forward with the project.

A cyber café initiative relies heavily on new technologies. Introducing staff to this project may bring light to how comfortable or uncomfortable staff is with new technologies. It can also show where staff stands on using new technologies and the Internet as tools for HIV/STI prevention and sexual health education. Be prepared to educate any staff who is less comfortable with new technologies. For example, staff may want to know what technologies apply to the project, how they can be used for education, and how and why they are appropriate for youth.

A cyber café initiative run by and for youth means that staff must be open to 1) youth's involvement and 2) partnering with youth in designing and running programs. Usually, it will be important to show staff how youth-adult partnerships can strengthen the organization's work and contribute to its mission.

Involving staff, from the beginning, in discussions about the initiative will help build support for the program. When others participate in the planning, they feel that they contribute to and "own" it. This builds a sense of value for the cyber café across the organization. Be prepared to share first ideas on the steps to take in developing and running the program. Be honest about potential challenges as well as benefits. Finally, to keep support alive for the project, keep staff informed as the project moves from planning and creation to actual operations.

▶▶ 2. PLANT THE SEED EXTERNALLY

Support from outside the organization is critical to the success of a cyber café. You can increase people's interest in having a cyber café in the community by

involving the community's leaders, both youth and adults. Involve parents, teachers, and women's and student's associations as well. This can also attract possible funders and boost the organization's credibility.

To gain community interest and support, organize meetings with influential people and with the community. In order to do this, think about those you want to involve. Be clear about why you have chosen these particular individuals or groups. Identify ways to reach these chosen people. Will these be one-on-one meetings? Will you organize a group meeting and, if so, where? Other staff can give you ideas about ways to capture the attention of youth and adult community leaders and where and how to hold the meetings. Finally, be sure to give these important people information about the initiative as well as time to share their thoughts.

▶▶ 3. ASSESS NEEDS

Before moving ahead, it is important to assess what the community needs. Then you can see how and whether a cyber café could meet those needs. A needs assessment can give a clear idea of the resources available in the community. The identified needs shape the design of a program and set its goal(s) and achievable objectives. Successful projects usually reflect a good understanding of the community and its needs. An assessment can also provide a baseline from which to measure the impact of the initiative. It allows you to see the situation prior to launching the initiative and to compare baseline with changes over time.

Ideally, you would carry out a needs assessment before developing a proposal and seeking funding. In reality, needs assessment often occurs *after* funding has been received. If this is your situation, you can use results of the needs assessment to refine or alter the program as laid out in the proposal.

To determine how to carry out the needs assessment, think about:

● What is already known about the community
● Gaps in what is known about the community
● How much time you have
● People and resources available to conduct the needs assessment.

The needs assessment should provide information on issues around youth's reproductive and sexual health as well as their access to and use of the Internet. The answers will help in tailoring the aims and focus of the cyber café. Here are questions that the needs assessment should answer.

Assess reproductive and sexual health issues among youth

● What data help identify the reproductive and sexual health status of youth in the country, region, and community? What sexual health concerns of youth are not identified by data?

● What reproductive and sexual health issues are of most concern to youth in the community? What other issues affect the well-being of the community's young people? How will you learn about these issues?

● What cultural, social, and economic factors in the community affect young people's sexual and reproductive health?

● What current programs and services exist to support the community's youth? How does the community feel about these programs? How do youth feel about them?

● Which youth have sexual health needs that are unmet by other programs? What are their primary needs and concerns?

● What does the community feel and think about youth's reproductive and sexual health?

● What current laws and regulations affect youth's access to reproductive and sexual health information and services? Who has the power to change the laws and regulations that affect youth's access to sexual health information and services?

Assess Internet issues

● What current programs and services offer Internet and computer literacy workshops to young people in the community? How does the community feel about these programs? How do youth feel about them?

● How close are the nearest commercial cyber cafés? Do youth use them? Can youth get sexual and reproductive health information in these cyber cafés?

● What level of computer literacy currently exists among young people in the community?

● Are computer skills a part of the curriculum in the community's schools?

- Does the country have Web sites that focus on adolescent reproductive and sexual health? If yes, what specific needs or groups do the Web sites target? For example, are they about teen pregnancy; HIV and AIDS; and/or GLBT youth? How would your organization's cyber café complement or link to these?

- What languages are spoken in the community? What is the primary language(s) of the youth that the organization serves? Do youth primarily speak one language and read and write another? If so, what are those languages?

A variety of methods can contribute to a needs assessment, including

- Consulting existing data and research, program documents, and evaluation findings

- Conducting surveys and focus groups, or other evaluation activities depending on the kind of information needed, staff's expertise and the budget.

Country data may be available from the Ministry of Health as well as from international sources, such as Measure DHS (www.measuredhs.com), the World Bank (www.worldbank.org), the World Health Organization (www.who.int), and UNAIDS (www.unaids.org). Local data can come from surveys by other YSOs as well as from research institutions and/or universities. Hospitals and family planning clinics may be willing to share statistics about the number of adolescents who use their services and the local incidence of STIs and/or local pregnancy rates. Finally, existing community-based youth programs may be able to provide qualitative and quantitative information about young people's health and the local environment.

When data is unavailable, it is up to you to collect the missing information that you need to inform the design of the cyber café initiative. For example, you could use a survey to collect information on local youth's sexual health knowledge, attitudes, and behaviors. Whether you collect the information through self-administered surveys, focus groups, or one-on-one interviews, assure youth that their answers will remain confidential. Then make *very sure* that their answers remain confidential.

You may also want to survey a wide range of community members, such as parents, government officials, and teachers. Their responses will supplement the information you gathered from youth. Responses can provide important information about the community's feelings about sexual health information and services for youth.

Use focus groups to gather more in-depth information on particular areas of concern. Focus groups are structured discussions, led by a moderator, on a specific issue or topic. Focus groups can provide qualitative (individual, anecdotal, and highly specific) information about how a specific group sees a topic, program, or product. Focus group information can help in developing priorities, choosing strategies, assessing clients' satisfaction, and developing educational materials, training, or evaluation tools. Members of a focus group should share one or more characteristics. For example, they could be of similar age or the same gender, or they might all be parents or GLBT. For further information on how to design and conduct a needs assessment, please consult the resources recommended at the end of this chapter.

If the needs assessment confirms 1) a lack of confidential information on sexual health issues, including HIV prevention, and 2) a desire by youth to seek this information via the Internet, the plans for the cyber café can move forward! Once you have established that the cyber café meets an actual need, you shouldn't have a hard time convincing people about the benefits of supporting the initiative.

On the other hand, the needs assessment could show that a cyber café initiative is not the appropriate strategy for meeting the needs of youth in the community. For example, another nonprofit may already have established a cyber café that is satisfying youth's sexual health information needs. If so, look at other needs identified in the needs assessment—ones not being met in the community; find a program or strategy that will best fulfill those needs.

Assuming that the assessment confirms the need for a cyber café, what next?

▶▶ 4. ENVISION THE PROJECT

Identify the target audience

Use information from the needs assessment to identify the target audience for the cyber café. Programs could focus on certain age groups, in-school or out-of-school youth, urban youth or rural youth, street youth, unmarried youth, etc. For example, Comunidad Gay San Pedrana in Honduras, identified a target audience of young members of the GLBT community, ages 15 to 25. Being specific about the target audience allows you to tailor the program to meet the specific needs of a particular group.

Make the café accessible

Make the café accessible both as to location and to hours of operation. For example, if the audience is in-school youth, evening and weekend hours are important so these young people can actually use the cyber café as intended by the initiative. If the target audience is out-of-school youth or street youth, then avoiding regular school hours may be less important. Once a specific group of youth has been identified, be sure they can get to the cyber café easily and without problems. For example, for a target audience of urban street youth, the cyber café should be located centrally to areas where most street youth hang out. Remember that distances between the cyber café and the target audience can deter youth from using the service, especially if there is no reliable source of public transportation. For example, if the target audience is rural youth, a creative solution could be a mobile cyber café—operating from a bus or truck—that could reach youth in villages located at a distance from the organization.

Include youth as partners

Include members of the target audience as partners in assessing needs, designing the program, getting it up and running, and in operating and evaluating it. By doing this, you will help to ensure that the program is and will remain important and valuable to those for whom it is designed. Doing so will also help to build respect for youth throughout the organization and the community. Youth can also have a vital impact on other important aspects of the project, such improving job skills and/or referring youth for health care services.

Develop goals and objectives

Before beginning a cyber café, everyone involved—adults and youth, staff and volunteers—must be clear about the reason (goal) for the café. With the needs assessment results in mind, you can establish specific objectives that will help in realizing the goal. For example, assume that the goal is to provide confidential access to information and a safe community space for young people at risk for HIV. Objectives and activities should ensure confidentiality; help build rapport among clients and staff, and aid young visitors in building Internet skills. Planners need to ask questions such as the following:

● Given the needs in the community, what goal(s) does the cyber café address?

● Is it to provide a safe space for youth?

● Is it to provide access to sexual health information on the Internet?

● Will the cyber café provide a space for training and workshops?

The assessment may have highlighted several needs in the target audience. Ranking these needs from top to lowest priority can be challenging. It may help to develop criteria to determine the issue or issues of most importance to the target audience. For example, if target youth are at high risk for HIV and also have little accurate information about HIV and self-protection, then giving them access to good sexual health information could be very important.

Examples of criteria to guide in prioritizing the program's focus:

● **Severity of the problem:** Is it life threatening? Does it cause permanent disability? Does it prevent youth from seeking a healthy future?

● **Frequency:** How often does the problem occur? How prevalent is the problem in the target audience and/or community?

● **Scope:** Do many young people experience the problem? Do most experience it? Or is it rare?

● **Other consequences:** Are there other social or economic consequences as a result of the problem? What impact does it have on the individual, family, and community?

● **Other factors:** What other social or economic factors affect the problem? Is their effect major or minor?

● Are resources available to support the proposed actions?

● Given existing resources, community perceptions, and current policies, can an cyber café realistically affect the problem?

Let's take the example given above—of youth's taking sexual risks and also having little HIV prevention awareness and knowledge—and apply it to the listed criteria. The problem identified among the youth is little knowledge of sexual health or HIV prevention. This problem is highly prevalent in the target audience—most youth lack this knowledge. It has consequences—youth may not act to protect themselves. HIV infected youth may become seriously ill and die. They also may infect new sexual partners. A cyber café can help to address the problem. Resources exist to support the cyber café. Conclusion: a cyber café that has the

primary goal of increasing access to sexual health information among the community's youth will be a useful and feasible project to assist youth in reducing their risk for HIV.

After going through the questions and criteria, select one or two most pressing adolescent sexual health issues as the focus of the program. The next step is to reformulate these issues as a goal. The goal should be a broad statement that reflects a long-term vision for the program but that is ultimately attainable. For example, one organization might set the goal of fighting the HIV epidemic among street youth.

Once a goal is agreed upon, develop specific objectives for the program. Objectives should guide the program towards achieving the goal. Objectives should be realistic, specific, measurable, and on a timeline. Objectives for working toward the goal of fighting HIV among street youth could include a) improving their sexual health knowledge and skills and b) improving their job-related computer skills. Then, identify activities under each objective. Now the program can work towards something it can achieve. Its progress can be assessed along the way and evaluated at the end.

Here are some examples of an objective and activities developed by Entre Amigos in El Salvador:

● **Objective 1:** Increase knowledge of HIV prevention by 25 percent over baseline among youth visiting the cyber café by the end of year one.

  ❍ **Activity 1:** Open the cyber café for youth ages 15 to 21 by month three of the project.
  ❍ **Activity 2:** Distribute 500 promotional flyers to youth ages 15 to 21 during month three of the project.
  ❍ **Activity 3:** Conduct one training each month for at least 10 youth ages 15 to 21; training will focus on computer literacy and HIV prevention; training will occur during months three through 12 of the project.
  ❍ **Activity 4:** Develop and post on the Web site one article each month on HIV prevention.

Develop a work plan

Based on the goals established for the cyber café, develop a plan that lists each objective and each activity under that objective. List when the activity will be completed, by whom, and using what resources. A work plan will help in keeping track of activities and can be revised as often as necessary.

Sample Excerpt of Work Plan adapted from El Salvador

Objectives	Activities	Resources Required	Persons Responsible	Timeframe
Objective 1: Increase knowledge of HIV prevention by 25 percent over baseline among youth visiting the cyber café by the end of year one.	Opening of the cyber café for youth ages 15 to 21	Food, music, flyers, and press kits	General Manager, Coordinator, other cyber-café team members	By month three of the project
	Distribute 500 promotional flyers to youth ages 15 to 21	Flyers, transportation stipend	Coordinator and youth leaders, peer educators and volunteers	During month three of the project
	Conduct one training each month for at least 10 youth ages 15 to 21; training will focus on computer literacy and HIV prevention	Flip charts, markers, handouts, snacks, beverages	Coordinator	Months 3 through 12 of the project
	Develop and post on the Web site one article on HIV prevention	Computer and web software	On-line peer advisors and coordinator	Monthly

Raise funds

The following box gives a broad overview of the essentials of fund-raising. For more information, visit the Foundation Center online at www.fdncenter.org.

Fund-raising If you don't have funding already, start talking to funding sources during the planning phase. Talk about how a cyber café in the organization will have a positive impact on the community and the target audience, what services the cyber café will offer, and how many people will be reached through the café. Here are tips to help in fund-raising for the cyber café initiative:

- **Do your homework.**
  Search the Web for information about government grants, foundations, and corporate sponsors. Learn as much as possible about each funding agency you want to approach. What most interests this agency? What size and type of grants does this funding agency make and to what kinds of organizations? Where will the organization's goals and ideals intersect with those of the funding agency? Pay attention to each foundation's requirements.

- **Don't apologize.**
  You and the donor share common goals, and the project for which you are requesting money will further the work of the funding agency or foundation. Remember that funding agencies are in business to provide money for worthy projects.

- **Submit a letter of inquiry or a proposal.**
  Your primary task in this letter is to describe clearly what problem(s) the cyber café will address; the approach chosen; goal(s), objectives, and activities; how you will monitor and evaluate the program; and its time frame.

- **Remember that business is different for every donor.**
  Read the agency guidelines carefully to be sure that you provide all the information requested and that you meet all deadlines. By providing all the correct information, you assist the donor agency in under standing what you wish to undertake and you expedite the grant review process.

- **Be flexible in designing the project.**
  Slight modifications may make your proposal or organization more attractive to donors. For example, if a funder is specifically interested in youth participation, you may want to highlight this aspect of the cyber-café initiative so that it stands out in the proposal

- **Be alert.**
  Communicate with other organizations that provide similar services. Know the political climate and stay abreast of popular funding issues. Funding agencies and their funding priorities are constantly changing. Funding is a competitive process, and timing can make the difference between a particular proposal's acceptance or rejection.

For more information on writing proposals, please visit
http://www.fdncenter.org/learn/shortcourse/prop1.html.
For more information on funding tips and possible funding agencies, please refer to the resources below.

SUMMARY OF CHAPTER 2. PLANNING

Setting up a cyber café requires careful and thoughtful planning, because the quality of services it offers is directly related to planning. The planning phase includes: 1) gaining the support of colleagues within the organization and members of the community; 2) assessing the community's needs; and 3) envisioning the project—that is, identifying the target audience, the café's location and hours of operation, strategies for involving youth as full partners in the entire process, developing a work plan, and raising funds. Careful attention in the beginning will help eliminate problems in the long run.

Resources

- Foundation Center—www.fdncenter.org; address: 79 Fifth Avenue, New York, New York, 10003, U.S.A.; Tel. 1.212.620.4230; Fax 1.212.691.1828.
- *Funding the Future*. Washington, DC: Advocates for Youth, 2001; available on the Web at: http://www.advocatesforyouth.org/publications/fundingthefuture.pdf (Note: to access the PDF document, you need Adobe Acrobat Reader, available online for free downloading at www.adobe.com.
- http://www.ippfwhr.org/publications/download/monographs/proposal_guide_e.pdf '

3 Setup

To provide guidance in regard to staffing, space management, hardware and software needs, Internet connectivity, and operational details of the cyber café initiative

▶▶ INTRODUCTION

Once the plan is established and funding is secured, it is time to put the plan into action and set up the cyber café. Setting up the cyber cafe can take anywhere from six months to up to a year, depending on resources available and location. The tasks range from selecting staff to technical aspects of set-up and maintenance to running the cyber café. This chapter provides basic guidance to the group of individuals who are planning the cyber café.

▶▶ STAFFING THE CYBER CAFÉ INITIATIVE

Although staffing for a cyber café will vary from organization to organization, the following positions are important for proper staffing:

- A general manager
- A cyber café coordinator
- A computer technician.

The organization should plan on regularly scheduled additional training for each volunteer or paid cyber café staff person. They will need regular training in communication and interpersonal skills, computer skills, and adolescent reproductive and sexual health issues.

Entre Amigos, from El Salvador, designated one of their young members to work as the coordinator of the Cyber café. Besides helping visitors use the internet as well as coordinate the workshops, he also makes sure visitors fill out a sign in sheet with basics questions such as: name, purpose of visit, sign in time and sign out time; this helps assess better who is being benefited from their services and how they can improve the cyber café. Those visitors who are waiting to use the services of the cyber café are also provided with information regarding other activities done by the organization. According to the coordinator, this is an excellent opportunity to recruit volunteers.

Designate a general manager

The general manager provides support and oversight to the cyber café and its coordinator. Ideally, he/she would be young and familiar with youth's reproductive and sexual health issues as well as with information technologies. If the organization decides that the general manager will be an adult staff member, then it is important to make very sure that this person enjoys working with young people. An adult with experience in working with young people will:

- Respect youth.
- Be open and nonjudgmental about young people's insights and suggestions.
- Be prepared and willing to offer support and assistance to youth.
- Be open and nonjudgmental about young people's lifestyles and sexual health information needs.

A key role for the general manager is to be a troubleshooter. She/he will be responsible for securing and maintaining space for the cyber café, maintaining funding, overseeing the budget, and ensuring that the café meets its obligations to funding sources. It is important that the general manager have organizational ability and a good perspective on how the cyber café fits into the NGO and its overall mission and work. The general manager could also be a manager for other projects of the NGO, but should plan to dedicate a significant amount (at least 60 percent) of time to the cyber café. If funding permits and the general manager needs help, consider assigning an assistant manager to oversee the cyber café full-time. The assistant manager should be a young person or an adult who enjoys working with youth.

Identify the coordinator

The cyber café must have a person who is responsible for maintaining and overseeing it on a full-time daily basis. Ideally, the coordinator will be a young person

who is well versed in computer technology and in youth's reproductive and sexual health issues. Do not allocate this position to staff that has other full-time responsibilities. The coordinator:

- Coordinates computer literacy and HIV prevention workshops.
- Advertises and promotes the café's services.
- Assesses the accuracy and reliability of Web sites to which the café refers youth.

At the same time, the coordinator makes sure that the café functions smoothly. He/she:

- Opens and closes the café on time, ensures that computers are on and working properly with functional printers, loaded with paper;
- Assigns or reserves computers, when needed;
- Tracks users' time on computers;
- Collects users' fees;
- Identifies peak and off-peak hours and reserves times for youth, workshops, classes, and other community customers;
- Enforces time limits on machines, when needed;
- Assists users in navigating the World Wide Web; and
- Stores software and serial numbers in a safe place.

The coordinator can carry out all of these tasks. However, as the cyber café becomes popular and successful, the coordinator may need an assistant. The assistant can share the above tasks and can also be responsible for the café during some hours and/or some days, so that the café can be open for longer each day and on the weekends.

The coordinator and assistant coordinator should have the following:

- Knowledge of information technologies
- Knowledge of adolescent sexual and reproductive health
- Ability to work with youth regardless of culture, socioeconomic status, ethnicity, gender, and/or sexual orientation
- Ability to work as a member of a team
- Ability to work in partnership with youth and adults
- Communication skills, such as in negotiating conflict and reflective listening
- Interpersonal skills
- Organizational skills
- Creativity

- Flexibility
- Sense of humor
- Ability to enjoy people and situations
- Willingness to empower youth to educate themselves and others.

Remember to train other staff to function as backup for the general manager and the coordinator. This will ensure that, in the event of an emergency, someone with knowledge and expertise is available to keep the cyber café open.

Identify a computer technician

It is important to have a computer technician check out the network connections and the machines regularly. If the organization already has a computer technician on staff, she/he should plan to check regularly on the computers and network connections in the cyber café. If the organization does not have a technician on staff, consider hiring a freelance specialist to check the equipment and connections on a regular basis, such as weekly or monthly. If possible, also train a staff member to handle simple trouble with the machines, because outside help can become costly if used too often.

When the café is first set up, it will need extra support from the computer technician. The café will also need extra technical support when it undergoes significant expansion or changes in hardware, software, or connections. It is also important that cyber café personnel establish a relationship with a reliable vendor.

Once key staff has been identified and/or hired, have everyone meet. They will talk about their separate roles and

Entre Amigos recruited one of the organization's young members to fill the role of technical assistant because of this person's strong interest in computer networks and computer related issues. Setting up the network and troubleshooting was a great learning process for this young person, who also assisted the computer technician with the computers installation. The technical assistant then handled all basic maintenance work while an IT professional handled major issues.

The situation was different for Comunidad Gay San Pedrana, which had no one as eager to learn. So, Communidad Gay San Pedrana has relied on a freelance network administrator. At the same time, Township AIDS Project in Johannesburg, South Africa; selected two technical assistants who work as a team: one focusing on networking issues and the other, on hardware/software related issues.

Partners in Central America have placed the cyber café inside each organization's offices, close to the entrance and to the volunteer's office. People walking into the cyber café must walk right past the volunteer's office, with its displays regarding new volunteer positions and the organization's many activities.

Partners in Central America agree that the best space for the cyber café is the one that allows users to move about easily without disturbing others. Entre Amigos has four computers facing one wall and four computers facing the opposite wall, leaving a central space where users can move around. Comunidad Gay San Pedrana's cyber café has all eight computers facing the wall opposite to the entrance; this arrangement leaves room for users to move about freely and for a scanner, printer and small utility table.

responsibilities and how they will work together. Working now to clarify who does what will help avoid misunderstandings and upsets in the future. For example, everyone needs to know exactly how the project manager will support the coordinator or what kind of help the computer technician will provide. This knowledge will help everyone work together smoothly. It may also be possible at this meeting to identify any gaps in the responsibilities. Foster good communication through regularly scheduled meetings, in person or by telephone or e-mail.

▶▶ CARVING OUT THE SPACE FOR THE CYBER CAFÉ

In planning the space for the cyber café, think about where to locate it (to make it most accessible to its target audience), how much space it will need, how to accommodate wiring, how to ensure good light and fresh air, and how to decorate it.

Identify a location

A space with easy access for the target population is the best bet for the cyber café. In addition, locate the café so that the parent organization's staff is not interrupted by users going in and out and vice versa. For example, the cyber café could open directly off the organization's main reception area, but should not be a part of that reception area. If the organization also offers key services, such as voluntary HIV counseling and testing, consider space *near* to these services but not among them.

If the organization is lucky enough to have extra space, consider also creating a small study or reading room, where youth can read, study, or do homework without interruption.

If the organization does not have enough space to house the cyber café, identify another location. It could be close by or in an entirely different neighborhood, depending on the location of the café's target audience. Remember, however, that commercial cyber cafés in the same area will affect the number of people visiting *your* café. As part of the needs assessment, learn whether a cyber café is needed in the chosen location. If not, rethink the location for the cyber café.

Ensure security

Make sure that the space selected for the cyber café is safe and will protect the equipment from intruders. If the selected space has windows and is on a ground level, for example, it may need grills or fencing to prevent theft.

It is important to protect each computer from files that the cyber café's users might accidentally or intentionally save on the computer's hard drive. Protect the hard drive either by implementing a lock system that can shut off access to the floppy drive or other external drive. Or, place the hard drive away from users' access. This last method is not helpful if users need to store information on a floppy disk. A good idea would be to use a lock system on the floppy drive or other external drive. The café's coordinator can unlock it when users need to store information in an external format, such as floppy disk or CD.

It is critically important to protect the café's machines from viruses. Don't let users insert their own diskettes into *any* computer. These disks could carry viruses. Even though the café's anti-virus system may be up to date, it is always best to avoid viruses. To protect the cyber café from infected diskettes, require visitors to use new diskettes sold by the cyber café.

Determine space

The size of the cyber café will determine the number of its computers, peripheral equipment, and furniture. A common mistake is to squeeze too much into the space. This will lead to users and staff having difficulties in moving around the workstations and in feeling safe from prying eyes. At a minimum, a workstation consists of a computer, its table, and a chair. A minimum of 45 cm. (18 inches) is

recommended as the distance between workstations that are placed side by side. Nevertheless, there are no set standards about how much space to assign to each workstation. Here are some tips, though, to help plan how to best to use the space:

- Try out the tables and the chairs (without the computers) in a variety of ways in order to see which layout works best for the space. Don't forget to include a workstation for the cyber café coordinator. His/her workstation should include a desk and room for a file cabinet or bookcase.

- Ask people to sit and walk around each workstation in order to check out how much space there is for users to circulate and how cramped they feel while sitting at the computer. It is important that users feel secure, so they can confidently search for sensitive sexual health information.

Provide electrical wiring

Once you have found the best spatial arrangement, ask the computer technician to take a look at it so she/he can determine the best arrangement for the computer cords, wires, and connections. It is important to create a space that is comfortable for people and also that keeps wires and cords safely away from areas where people walk.

Acquire furniture

Comfortable chairs and solid tables are best for the computers, since users will normally sit at a computer for at least 30 minutes. Computer tables come in several models, some more expensive than others. The café needs tables that can hold the screen and that have space for a hard drive unit as well as for the keyboard, mouse, and mouse-pad. Some tables have a movable keyboard base, which moves into the table when not in use. Purchasing furniture for the cyber café will affect the budget, and it may be best to purchase second hand office furniture.

Decorate

Once the space has been identified, consider painting the walls in cheerful colors. Artistic youth might even be willing to provide a mural or to hang some of their own paintings. After the computers and peripheral equipment have been installed, furnish the space with things that will complement the cyber café's functionality and appeal—a bulletin board, a calendar, trash bins, posters, a wall clock, and a small table or rack for pamphlets and other educational materials. Remember that decorations can provide outreach on sexual health issues. For example, décor can include an HIV AND AIDS Web site as the first page users see when they connect to the Web. Visitors will see this and other displays regularly, so make sure everything is of high quality. Making the space friendly and lively can be fun. Seek input from youth, the coordinator, and other staff.

As a last note, provide the cleaning staff with information and training on how to clean the space and the equipment. Some computer manufacturers recommend cleaning screens with special wipes and the plastic with mild soap. The equipment needs to be dusted regularly. Cleaning will usually need to be done carefully so as not to unplug the cords and network wiring. Also, when not in use the equipment should be covered with a plastic sheath to keep the dust away.

The computers now used by the partners have a similar configuration but with 128MB RAM and 4GB hard drives; at least half of the machines include CD-ROM and CD-RW. In Central America, each partner has a black and white printer in the cyber café so users can print relevant or important pages or e-mail. Initially, partners did not believe that scanners would be important. Partners each added a scanner six months after the cyber cafés opened Now, the cyber cafés of Entre Amigos and Comunidad Gay San Pedrana each have a flatbed scanner, useful for adding documentation, stored on CDs, to their resource centers. Entre Amigos cyber café now has a color printer as well.

Partners solved software licensing issues by purchasing computers with basic software (and licenses) already installed. Most computer distributors offer sales specials and include pre-installed software packages (with licenses) if you buy two or more computers. Purchases included antivirus software, professional Microsoft applications (such as FrontPage, Excel, etc), file compression software, and other applications.

OBTAINING THE NECESSARY HARDWARE AND SOFTWARE

The number of computers and peripheral equipment to buy for the cyber café will depend on the space, budget, and the organization's ability to maintain the hardware. Ask these questions:

- Are there local vendors? Will they provide competitive quotes?

- What is the budget for the computers and peripheral equipment, supplies, software, and licenses?

- How many workstations can comfortably fit in the space?

- How many computers and peripheral equipment can be serviced regularly and appropriately?

Purchase computers and peripheral equipment

For starting a cyber café, consider having at least three computers, one printer, and a scanner. If the café's rules permit users to bring in their own disks, then also consider having a fourth computer—**not connected to the network**—to scan outside disks for viruses. This will help prevent a virus from infecting the whole network.

In budgeting for computer equipment, plan on buying *new* computers. In the long run, new computers are cheaper because they are more reliable. New and used equipment can behave erratically, leading to unexpected costs for repairs. [And technicians' time is expensive.] However, new equipment comes with manufacturers' warranties that can help with the expenses. If buying second hand equipment, make sure the supplier is reliable and will provide a warranty with the computers.

Minimum requirements of an "ideal" computer would be a personal computer with a Pentium III or IV processor; at least 128 megabytes (MB) of random access memory (RAM); 10 gigabytes (GB) of hard drive space; 8X computer disk with read-only memory (CD-ROM)[4]; four MB video card; 10/100 Ethernet card; basic sound card; 1.44 MB diskette drive; 15"monitor; and keyboard and mouse. An uninterruptible power supply (UPS) is mandatory to protect the equipment from power outages.[5]

> When the cyber cafés are closed, partners in Central America perform weekly minor maintenance and monthly major maintenance. At Entre Amigos, the young technical assistant performs basic maintenance fine-tuning and/or troubleshooting minor details, updating antivirus software, locating misplaced folders, deleting files that should not have been saved, and ensuring that network connections work properly. The IT professional takes care of major issues.

In addition to the computers, additional items will make the cyber café more efficient. The basic peripheral equipment includes a printer and a scanner. A printer allows visitors to print information found online or documents created on the computer. Printing documents found online will also contribute to the information available in the organization's resource center. A scanner is useful because, from time to time, users need to scan documents. Moreover, scanners are important for developing a Web site. Both printers and scanners can be found at relatively good prices.

Other tools to consider getting after the cyber café is up and running include:

- CD-writer (to write information on CDs, either for storage or backup)
- Digital camera (to document events at the café as well as organizational events, so they can be posted on the Web site)
- Video conferencing digital camera (to hold video conferences with others who also have these devices).

Assess the software situation

Purchase new computers with basic software pre-installed. Such pre-installed software could include, for example:

- Windows operating system
- Internet Explorer for Web navigation
- E-mail.

However, depending on the activities the cyber café will offer, you may want to consider purchasing additional software for the computers. Remember that if you are planning to use the same software in different computers, you will probably need to buy additional licenses. A list of recommended software follows. It includes the minimum package needed for operating a cyber café as well as additional software that can enhance the café's services.

Minimum software needed

a. Anti-virus software, such as McAfee (www.mcafee.com) or Norton (www.symantec.com)

b. Internet navigation software, such as Internet Explorer (www.microsoft.com) or Netscape Navigator (www.netscape.com)

c. Word processing software, such as Microsoft Word (www.microsoft.com) or Word Perfect (www.corel.com)

d. Adobe Reader, free software for viewing and printing portable document format (PDF) files (www.adobe.com)

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[4] The 'x' refers to the speed to write or read CDs.
[5] For more detailed information on computer hardware, see Chapter 5.

Additional software to make the cyber café useful for Web site development

a. Web site creation and management software, such as Microsoft FrontPage (www.microsoft.com) or Macromedia Dreamweaver (www.macromedia.com)

b. A file transfer client, such as CuteFTP (www.cuteftp.com) or IPSwitch WS_FTP (www.ipswitch.com)

c. Graphic design software, such as Adobe Photoshop (www.adobe.com) or Macromedia Fireworks (www.macromedia.com)

Additional software to make the cyber café even more useful

a. Spreadsheet software, such as Microsoft Excel (www.microsoft.com) or Corel QuatroPro (www.corel.com)

b. Database software, such as Microsoft Access (www.microsoft.com) or MySQL (www.mysql.com)

c. Accounting software, such as Intuit QuickBooks (www.intuit.com) or Quicken (www.quicken.com)

d. Desktop publishing software, such as CorelDRAW (www.corel.com) or Adobe PageMaker (www.adobe.com)

e. Compression and expansion software, such as Stuffit (www.stuffit.com) or WinZip (www.winzip.com)

f. Player to player audio and video files, such as Apple Quick Time (www.apple.com) or Microsoft Windows Media Player (www.microsoft.com)

g. E-mail software, such as Eudora (www.eudora.com) or Microsoft Outlook (www.microsoft.com).

Obtain software licenses

A license is basically a certificate of authenticity, proving that the piece of software is legally installed on the computer. It proves the software is not pirated. Shortly after the software is installed, a pop-up window will ask that you register with the software's manufacturer, either by mail or e-mail. Registering the software usually results in free or inexpensive updates. A license only has to be purchased once, not each time the software is upgraded. Print out a copy of each software license and keep these copies in a safe place.

Although software licenses are expensive, avoid using pirated software. It is illegal. Moreover, in some places, local authorities have the power to confiscate computers if they find pirated software installed on them. Finally, using pirated software sends the wrong type of message to youth using the cyber café. So, include the cost of purchasing licenses in the budget. Ensure that you can legally purchase the software the cyber café will need.

> Partners in Central America didn't find electricity a major issue except for the fact that, with computers on the whole day, power bills increased. As for phone lines, in starting up the cyber cafés, each partner purchased an extra line to use with a dial-up modem. Two years later, those phone lines are no longer dedicated to the computers. Entre Amigos and Comunidad Gay San Pedrana each purchased high speed cable service from a reliable Internet service provider. Each lowered the cost for this service by purchasing it annually instead of month-to-month.
>
> OASIS, the partner in Guatemala City, moved from cable internet to satellite access for price and reliability. Having high speed internet access allows users to download information faster, and they report feeling more satisfied with the cyber cafés.

Set up a maintenance schedule with the computer technician

Schedule the computer technician to visit the cyber café on a regular basis, to troubleshoot and provide maintenance to the machines. As the cyber café grows—in number of machines *and* users—increase maintenance visits, as needed. It's best to schedule these visits when the cyber café is not open to the public.

▶▶ GETTING CONNECTED

Ensure electricity

Electricity is *absolutely necessary* for the computers to run. So, having enough electrical outlets in the cyber café is essential. All the outlets should be in perfect condition before any of the computers, printers, monitors, or scanners are plugged in. Do not overload circuits.

Reliable power is also vitally important for the health of the machines. So, if reliable power is a problem, consider investing in a generator to keep the machines running during power outages. For example, Youth Action Rangers of Nigeria has attached generators to the computers, because its café experiences power outages several times a day.

The computers also need to be protected from power surges by voltage regulators and power surge protectors. These, too, need to be replaced periodically, depending on the frequency and strength of the surges they handle.

Connect to the Internet and choose an Internet service provider

To access the Internet, computers in the cyber café will need either 1) a modem that allows them to connect through an existing phone line or 2) dedicated high-speed access. The difference between the two is that connecting through a phone line can be slow, unreliable, and costly. Also, staff cannot make or receive telephone calls while anyone is using the line for Internet access. Still, a phone line may be easier to set up in some areas. Dedicated high-speed access, on the other hand, offers reliable, high-speed connection, for a fixed monthly price, regardless of how much time is spent online.

If you choose the high-speed connection, identify the Internet service provider (ISP) that offers the best price. It will be best to buy the service for a year or more at one time, if at all possible. In the long run, this is usually more cost effective than buying the service on a month-to-month basis.

Remember that different ISPs offer different methods of connection. Each of these methods has a price. The price will have an impact on a long-term project like this. Check the budget to determine how much money you will need to invest in order to stay connected to the Internet for at least a year. Then determine which connection method is most affordable.

Most Internet service providers offer "bundled services" (or packages) that include phone and cable services. Some ISPs even provide the Internet connection via cable modem or satellite. These packages are included in one monthly or yearly bill. The advantage of choosing bundled services is that they lower the cost. Do some research before signing up with an ISP to ensure that the cyber café gets the best services at the lowest cost. Saving money on these services may mean the café can offer more services, add another workstation, or buy that urgently needed printer or software.

SUMMARY OF CHAPTER 3. SETUP

After planning for the cyber café, is time to set it up. Key steps include: identifying and securing the appropriate staff; creating a space that is comfortable, efficient, functional, and accessible to the target audience; obtaining the necessary hardware and software; and getting connected.

4 Implementation

To guide the organization through the steps involved in implementing a cyber café, including: establishing hours of operation and rules for users; identifying additional services to be provided; launching the café; assisting visitors; and promoting, monitoring, evaluating, and sustaining the cyber café

▶▶ ESTABLISH RULES AND PROCEDURES

Setting rules and establishing procedures will permit the café to function smoothly. Users are less likely to get upset with other users or the coordinator, if everyone works according to an established set of rules. It is very important that youth have the primary voice in creating these rules. It is equally important for the parent organization to stand behind reasonable rules set by youth.

Set youth-friendly hours of operation.

Set operating hours that will make visiting the cyber café convenient for the youth who are the targets of the initiative. If youth from the target audience have participated in all stages of the planning, they should certainly be the ones to establish the hours of operation. They will know the hours and days when target youth should have top priority in the café.

Empower youth to discern scientifically-unsound websites.

Provide youth with guidelines and opportunities to discern reputable websites from fake websites. For example, have youth research on the internet for new scientific sources of information that can be added to the list of bookmarked links; provide the youth with guidelines for assessment such as the importance of checking out the author, the publisher and host organization, seeing if there is a point of view or bias and looking for referrals and references to other sources. In this way you can teach youth how to find accurate sources of information and how to discern reputable from fake.

It is very important for youth to get accurate sexual health information, yet there are many websites that provide misleading information. To facilitate access to reputable sites you can "bookmark" a list of recommended websites that youth can later access through the "bookmarks" option in the internet browser. This bookmarked list of websites should include links to nationally and internationally renowned agencies, organizations and foundations that should be used as primary sources of information. Consider "refreshing" this list by adding new sources every now and then.

Another way to help youth get the facts from reputable sources is to have the splash page of your browser link to a specific source (for example the department of health's website). Every time someone starts the internet browser the first page to appear would be that of an agency, organization or foundation. This can be refreshed on a daily, weekly or monthly basis.

Establish a way to track users' time on the computers.

The coordinator or her/his assistant can keep track of users' time on computers; or special software can be installed on each computer. This type of software allows a user access to the computer for a pre-set amount of time. It automatically logs the user off once her/his time is up. Different types of time tracking software—from the less complex to the more sophisticated—may be affordable, depending on the manufacturer and the features that the software includes.

Otherwise, volunteers or staff can track users' time manually, using a sheet of paper for logging in and logging off. This second option will be

> Comunidad Gay San Pedrana learned that the cyber café needs to be open at least three days a week and for at least six hours each day. The organization has also established separate times for volunteers of the organization to use the computers, so they won t delay most walk-in visitors access to the computers.

considerably cheaper than buying and installing software. But, it can be less reliable, depending on the number of distractions and other duties that demands the attention of cyber café staff. Unless the cyber café's budget is extensive, it may be best to begin with manually tracking, moving on to software tracking only if and when such a move becomes necessary.

> Entre Amigos opens its cyber café at 8:00 am and closes at 8:00 pm to allow access to people who work regular office hours. Entre Amigos café is open five days a week; Saturday is reserved for workshops and school groups.Entre Amigos hangs a poster prominently in the cyber café. The poster gives the hours of operation and also the rules for using the cyber café, including a code of conduct that includes:
> - Everyone must sign in before using a computer.
> - Users must contact the coordinator should anything unexpected happen during their use of the computer.
> - Users may NOT download new software or delete software from the hard drive.
> - Users must save their documents to a floppy disk.
> - Only floppy disks newly purchased from the cyber café or scanned for viruses by the coordinator may be used in the computers.
> - Users may not play music except with a headphone set.
> - No food or beverages are allowed in the cyber café.
> - Users must sign up to use the scanner, and must ask for the coordinator's assistance if they don t know how to operate the scanner.

Create rules for users.

Creating ground rules that apply to *all users* equally can help to prevent equipment failure and to ensure that the cyber café operates smoothly. Rules also allow users to fully benefit from the café. This is another area where leadership by youth—staff and/or volunteers—is essential, since most of the users will be young people.

Here are sample rules to consider for the cyber café. Partner organizations in Central America and Africa already use some or all of them.

- All users must sign in **before** sitting down at a machine. (*This is important for time tracking and monitoring as well as for evaluation.*)

- Payment must be made **in advance** before sitting down at a computer. *(At this time, users can also turn in payment coupons acquired during HIV prevention workshops, etc.)*

- Each user may use a computer for **a maximum** of 30 minutes. *(Consider adjusting the allowed amount of time to meet young people's needs, especially during non-peak hours.)*

- No food or drinks are allowed in the cyber café.

- Users may not say or do anything to make other users uncomfortable on account of gender, race/ethnicity, sexual orientation, age, appearance, or health status.

- Sound effects must remain low enough that others cannot hear the sounds. As necessary, turn the sound off, lower the volume, or use headphones.

- Youth have priority in the cyber café. *(This rule could apply either at set times and on set days, or all the time.)*

- Users must not use the cyber café for illegal activities or for activities that can make the space unsafe for others.

- Staff reserves the right to ask anyone to leave the cyber café for any reason, and at any time. *(Reasons could include: improper behavior; improper use of the equipment; damage to the equipment; use of the space for illegal activities, such as software piracy or software copying; or any other activity or behavior that disrupts the space or impedes the objectives for which the cyber café was established.)*

- If asked to leave, users forfeit the fee they have paid. *(It is a good idea to post activities that can cause a user to be asked to leave.)*

- Users who erase information, software, or files from a computer or who install or uninstall software will not be allowed on the premises again.

- Users should behave quietly, so other users will not be disturbed.

- Users must **not** try to fix computer related problems. Users **must** ask for help from staff for any computer related problem.

- Games may be played **only** on those computers assigned for games.

Rules are important to ensure that everyone has equal access to the cyber café. Rules also ensure that it remains a safe space for every visitor. Post the rules so they are visible from every workstation. Also, consider requiring that each first-time cyber café user read and sign a copy of the rules.

> Comunidad Gay San Pedrana invited adults and parents of the young people of the community to the cyber café s official launch when the number of computers rose from one to eight. The organization wanted to show parents that the cyber café was both a place for youth to meet other youth and also an educational space.

Provide additional services

The cyber café should allow each young person to:

- Establish an e-mail account

- Search the World Wide Web.

Now, what other services could the cyber café offer?

Will it offer workshops on how to use the Internet and send and receive e-mail? Will it offer workshops on how to browse the Web and how to use search engines? Will it offer workshops on HIV prevention? Will it offer guidance on assessing the quality and reliability of Web sites? If you are thinking of offering workshops on such topics, also consider teaching visitors how to use word processing and spreadsheet software. Knowing these programs will improve users' computer skills and help youth in finding and keeping a job or getting a promotion.

Here is a list of services to think about for the cyber café:

- **Online access for Internet, including the World Wide Web**—for at least 30 minutes per user, and extending to one hour, depending on the needs of the visitor and the amount of activity in the café

- **Computer use**—on an hourly basis, to students or others working on long word processing documents

- **Online searches**—for those who need to research specific topics

- **Computer literacy training**—using a computer; using a word processing program and/or spreadsheet program; sending and receiving e-mail; using a search engine; and navigating the Web

- **Professional writing seminars**—for those who need help in writing resumes or school papers

- **HIV prevention and sexual health education**—consider giving coupons for time on the computers to users who want to browse HIV prevention and sexual health education Web sites. This can provide an incentive for users to learn more about taking care of their sexual health while also learning how to use the Web. Consider developing and posting a list of HIV and sexual health related sites, including your own organization's site!

▶▶ IMPLEMENTATION—OPEN THE DOORS AND KEEP THEM OPEN

Implementation is a long word for getting the project up and running. Below are tips for doing just that.

Launch the cyber café.

The opening of the cyber café provides the perfect opportunity for its promotion. Think about holding a reception just prior to the opening of the café. Invite staff from other NGOs in the community. Invite parents, health care providers, and educators. *Most of all, invite youth!*

A reception can introduce the cyber café to the community at large. It also gives staff a chance to answer questions about the Internet and the World Wide Web, e-mail, message boards, Listservs, peer education, and the café itself. At the reception, staff can interact one-on-one with colleagues from other NGOs. It is an opportunity to discuss the possibilities of working together in the future, especially on projects using the cyber café. The reception will also allow staff to promote the cyber café and the services it can provide to colleagues, schools, and civic organizations. This is a good time to let guests know about the possibility of renting the cyber café for workshops, computer use, or online research.

For the official launch, ask youth from the community to speak about the importance of having a cyber café that especially serves youth. Keep the speeches short, and let attendees explore the cafe. Turn the machines on and run different software programs so people can see the variety of options offered by the café. Make sure

> When Entre Amigos created its cyber café program, it only provided visitors the tools necessary to navigate the World Wide Web and to use the Internet. However, monitoring during the fist weeks of operation revealed that visitors urgently needed workshops on computer literacy and on navigating the World Wide Web because most visitors (GLBT youth) never had access to computers before. Some of these first students later taught new visitors how to use a computer, how to navigate the World Wide Web, and how to use the Internet.

that staff is present—including the café's coordinator, the organization's general manager, the café assistant, and volunteers—during the reception and launch, since theirs are faces that café visitors will see most often.

Volunteers can assist by handing out fliers that promote the cyber café to people walking past the space. Even if users will normally be charged a fee, consider offering free Internet access during the first week of operation, as part of the promotional efforts. After the first week, go ahead and charge what the planning group has decided to charge.

Try to answer all questions asked by visitors. Remember that everyone is not familiar with computers, the Internet, or the World Wide Web, and this is a great opportunity to educate and excite visitors. People who are not familiar with the technology may be the most curious, and the most excited at a chance to learn. Sometimes, people do not understand the value of

computers or of the Internet. Letting them see the vast array of possibilities offered by the Internet can create new users and new supporters. Anyone can become excited and energized by the possibilities for research and communication. Newcomers to the Internet and to computer use may end up as the cyber café's best customers!

HELP USERS FIND THEIR WAY AROUND

Not everybody is computer literate. In the first weeks of the cyber café's operations, the coordinator may need to familiarize many visitors with computers, e-mail, and the World Wide Web. Providing visitors with short workshops that gradually increase their level of computer literacy is one way to assist visitors and the coordinator. Other ideas include the following:

Show visitors the on-screen help feature.

All software programs—whether they come installed on the computer or are purchased separately—include an on-screen help feature. This feature provides quick help in case a user has lost his/her way through a specific activity. Users can *always* use the on-screen help. It is nearly always found at the far right side of the top menu bar. Clicking there brings up a window that allows a search on words or topics.

Make manuals and users' guides available.

Manuals and user guides always come with software. They may be a helpful tool for some users. Remember that many software manuals are not well written. They can be very confusing to people who are not highly computer literate. Consider creating your own simplified guide to performing specific functions. Be sure to protect the manuals and guides from deterioration or being lost, because they are also important to the coordinator, computer technician, and others who have responsibility for the café and its machines. A way to control the usage of the manuals by visitors is to let people check out the manuals with a valid form of I.D.

> Entre Amigos actively promotes the services of its cyber café by handing out fliers in the community and local schools. Comunidad Gay San Pedrana periodically takes out advertisements in local newspapers, promoting the services of the organization and of the cyber café. OASIS promotes the services of its cyber café with flyers, distributed in local clubs patronized by GLBT youth and during outreach activities. Entre Amigos closely tracks the visitors to its cyber café. Entre Amigos includes visitors e-mail addresses in its general List serv about the organization's activities. Entre Amigos also monitors workshops and educational activities to determine the effectiveness of each activity and the educational needs of café visitors.

Consider buying special teaching aids now available for most software packages.

These come in video, CD-ROM, and DVD formats. These tools can be found at computer stores and on the Web. They can give a good step-by-step explanation of how to use a specific software package. They can be expensive, but they can also save a lot of time for staff.

Use instructional cards to try to answer frequently asked questions.

The coordinator and other staff can make instructional cards, with answers to frequently asked questions. Examples of such questions include:

- How do I save a Word document?
- How do I cut and paste?
- How do I create a search on the World Wide Web?
- What search engine should I use?
- How can I recover something I just lost?

Staff can make a whole series of cards that users can take to a computer station and use for help. Some users will still need one-on-one assistance, but many will find all they need in carefully written, clear instruction cards.

MOTIVATE USERS

When the cyber café opens, many youth may want to use the café while avoiding any Web site that focuses on adolescent reproductive and sexual health. Think creatively about encouraging the use of technology and promoting sexual health. For example, think about offering a "package" of services to users who agree to find research on sexual health topics for the organization's resource library. Or, offer free computer time to youth who attend a 30-minute presentation on HIV prevention or on safer sex. Or, if staff is working on a new publication, youth might be willing to provide online research in exchange for their names appearing in the publication and/or free time to navigate the Web for personal purposes. Or, offer free access to those who are willing to find research on a "topic of the week." Their research can then be discussed at the end of the week in a roundtable with other visitors. The organization's Web site could post links to the materials found by the youth.

▶▶ ENSURE ACCESSIBILITY

In many countries, youth can't afford the high fees associated with accessing the Internet through commercial cyber cafés. In any cyber café, charging even a small fee may still be a barrier for some youth. There are many ways to address this issue.

Provide free use to youth.

One way is to allow young people to use the computers for free and to charge a fee to adults and/or professionals. In this case, the organization would need to establish the age range defining those entitled to free use. (For example, the World Health Organization defines a young person as anyone whose age is 13 to 24.) The ages set for the cyber café should certainly include its target audience. It might include those ages 13 to 19; 10 to 24; or some other age range. Those who fall outside the age range would be charged a fee. You may want to consider whether or not to discourage use by children *below* the preferred (target) age range. Remember that a fee would be a deterrent to children's using the cyber café.

Offer to exchange work for computer time.

Consider implementing Internet "trade-offs" for those youth who can't afford to pay for cyber café services. They can contribute to the organization in other ways, such as volunteering, performing research on the Web, or assisting in workshops.

Different organizations will have different ways to solve this issue. For example, Entre Amigos, in El Salvador, provides volunteers and staff with free Internet access for a certain number of hours each week. Those who go over their time must pay a minimum fee. The best advice is that staff should assess the situation carefully. In the end, remember that the cyber café is there to help young people in the community. To that end, it is important to encourage as many youth as possible to use the cyber café. If the organization cannot afford to allow youth free access to the Internet, then it is vitally important to find other ways for them to pay for their use of the café's services.

Consider offering computer games.

Some visitors will be more interested in playing games than in going online. If the budget allows, buy one or two computers to be used just for games. Charge higher fees to users of these computer, including youth.

Keep an Eye on the Details.

Keeping the cyber café up and running is an ongoing activity that depends directly on the teamwork of coordinator, project manager, and computer technician. The moment the people start using the computers, all sorts of things can happen. A user might inadvertently move folders or toolbars to another place. Users may download software that they are not supposed to download or misplace a saved document. These issues cannot be avoided, no matter how carefully the rules are enforced. That is why the computer technician will need to come regularly to make sure that the systems are clean and free of unnecessary files. ["Unnecessary" files are those that the café's users might have accidentally or deliberately saved to the hard drive, rather than to a disk that they purchased from the café for that purpose.] At the same time, the coordinator will have ongoing work to assist users with using the software and to help them find and save their documents properly.

It would be a good idea to create a list of tasks to be done daily, weekly and monthly by cyber café staff. This will help in avoiding problems and will enable staff to tackle issues before they grow to be huge problems.

> Entre Amigos charges a minimum fee for using the cyber café. Volunteers can use the cyber café s services for up to five hours each week; after that, they, too, are charged a fee for using the computers in the cyber café.

Daily activities

- Make sure paper and other supplies are on hand.
- Make sure that all computers and peripheral equipment work properly.
- Provide instruction cards to help users in navigating the Internet.

Weekly activities

- Update message boards.
- Meet with the general manager about cyber café activities and issues.
- Offer workshops to users.
- Maintain computers (computer technician).
- Scan hard disks for unnecessary files and delete any found.

Monthly activities

- Meet regularly with all cyber café staff members and volunteers to share information about activities and issues.

Promote the Cyber Café.

How will the organization promote the cyber café? Who will the promotion target? How much money can be allocated for this purpose? Who will be in charge of promotional activities? Knowing the target audience will help in identifying the right methods of promotion. Here is a list of possible audiences for the cyber café:

1. Youth
2. Members of specific communities, such as GLBT youth, teen parents, youth who have dropped out of school, and street or homeless youth
3. Schools
4. Members of the local community
5. Owners of small businesses
6. People with disabilities
7. Women's groups
8. Communities of faith
9. Other NGOs and community-based organizations
10. Civic organizations
11. Trade unions
12. Government agencies.

What tools will staff use for promotion? The answer may depend on the target audience. Or, it may relate directly to where the parent organization is located, since different methods of promotion work best in different settings. Here is a list of possible tools for the promotion of the cyber café, depending on the size and type of the community. Choose what will work best.

1. E-mail and/or Listservs
2. Flyers
3. Posters
4. Community message boards where local people post classified ads or messages
5. Organizations' message boards
6. Local newsletters
7. Local newspapers
8. Local radio stations
9. Public service announcements with local media
10. Jam sessions
11. Village assemblies
12. Fairs
13. Recommendations by users.

▶▶ MONITOR AND EVALUATE

It is important to monitor and to evaluate the cyber café initiative. Monitoring allows the organization to 1) ensure that the project is moving forward as intended, 2) keep track of how the cyber café is being used, and 3) check on young people's needs. Then the program can be modified as needed. Evaluation is equally important to assess whether or not the cyber café is meeting its goals and objectives. Results of evaluation can be used, not only to improve the cyber café, but also to raise funds and to improve program strategies and/or policies.

There are many ways to monitor and evaluate the effectiveness of the cyber café initiative, from simple tracking systems to rigorous research, conducted by evaluation professionals. The type of evaluation will depend on the goals and objectives of the initiative, the organization's resources, and the expertise it can muster. If the goal is modest in scale, such as making HIV prevention information and referral available to young people at the cyber café, then monitoring and outcome evaluation can determine whether the goal is being met and how well. However, if the goal is more ambitious, such as to decrease HIV infections among youth, then monitoring, outcome evaluation, *and* impact evaluation will be necessary.

▶▶ MONITOR ACTIVITIES

To monitor the cyber café's activities, create a systematic way of tracking what staff does, when, and how. Usually, this means developing a set of forms that capture the needed information and that are easy to use and quick to fill out. Avoid creating elaborate mechanisms that collect unneeded information.

To figure out what to track, or what process indicators to monitor, look at the objectives and planned activities. From this, identify what will be important to know in order to gain an understanding of what is going on and whether activities are occurring as planned. For example, staff could track the number of:

- HIV prevention workshops held
- Youth attending each workshop
- Youth visiting the café each month
- HIV prevention pamphlets distributed in the café each month
- Referrals made to health services by peer advisors

- Visitors to the organization's Web site each month
- Visitors to an HIV-specific Web site each month.
- Top ten reasons why youth come to the cyber café.

Staff might also need to track the day and time of each workshop.

Monitoring doesn't capture only numbers. It also goes to the quality of what is being offered and whether it is meeting the needs of the target audience. Capturing this information will allow staff to alter or fine-tune the cyber café, as it goes along, so that it better meets youth's needs.

- How much of the HIV prevention information was actually shared? Did the workshop go as planned?
- How did youth assess the workshop? What did they say about it at the time in evaluation forms they were asked to fill out?
- Are youth getting the assistance they need in searching the Web? Are they finding the information they need? What would help them to have a better, more positive experience in using the cyber café?
- Are youth comfortable when they come to the cyber café? What do they like or dislike? What makes them feel comfortable or uncomfortable?

Much of this information can be gathered from self-assessment surveys—simple forms that youth are asked to fill out. For example, every youth who attends an HIV prevention workshop could be asked to fill out a simple assessment that shows how she/he felt the workshop went and what youth would suggest that could make the workshop even better. For example, on one random day each week during one month, and then on one random day each month thereafter, cyber café users could be asked to fill out a simple assessment form before they leave. The form could also give them an opportunity to say whatever they wanted to say, such as that they:

- Felt comfortable or uncomfortable
- Wanted to be able to do other activities on the computers
- Wanted more space
- Felt that there are areas that need to be improved at the cyber cafe

The point is to capture the feelings of users and to get a sense of whether the café is meeting youth's needs. If not, monitoring could indicate how to improve the café.

Evaluate the cyber café initiative.

Outcome evaluation measures *results*. For example, if the goal of the cyber café is to improve youth's access to HIV prevention information, an outcome evaluation should indicate whether young people have improved HIV awareness and knowledge, including learning where to get HIV prevention information. Evaluation would need to answer such questions as:

- Compared to baseline, are more young people in the community aware of where to get HIV prevention information?
- Compared to baseline, can young people identify more sources of HIV prevention information?
- Compared to baseline, have more youth reported finding HIV prevention information?
- Compared to baseline, has youth's awareness and knowledge regarding HIV prevention increased?

Impact evaluation, on the other hand, examines *progress* made toward long-range goals. Often these goals relate to health indicators. Impact evaluation is the most expensive type of evaluation and takes time to achieve. Impact evaluation normally follows participants for months or years after the program has ended.

Impact evaluation addresses such questions as:

- Compared to baseline and/or to youth in a control community, did fewer sexually active youth report sexual intercourse in the last month?
- Compared to youth in a control community, did a smaller percentage of youth initiate sex?
- Compared to youth in a control community, did more youth report condom use at most recent sex? Consistent condom use?
- Compared to youth in a control community, was there a change in the incidence of HIV among youth?
- Compared to youth in a control community, were STD rates lower?

BASELINE:
refers to data collected at the beginning of the program, which is later compared to data collected at the end of the program in order to assess change that has occurred during the life of the intervention.

CONTROL GROUP:
refers to a group of young people similar to those who are being reached by the intervention but who are usually in a separate geographical area and who are not participating in the program being evaluated.

- Compared to baseline and/or to youth in a control community, was there a decrease in the number of new sexual partners reported by youth?
- Compared to youth in a control community, did the pregnancy rate decrease?

Often, evaluation can be carried out using a variety of methods, including surveys for quantitative data, and interviews or focus group discussions for qualitative data. Quantitative data gives an understanding of the changes resulting from the project, in terms of *how many* or *how often.* Qualitative data provides a glimpse of *why* or *how* those changes took place. Both are important to providing a complete picture of the results or impact of the cyber café.

Any evaluation should be practical and careful with regard to the limits of available resources. If the project requires outside experience, the organization may be able to find help at a local college or university. Departments of social sciences, psychology, education, and public health may have professors and/or graduate students who will help. Often, graduate students are eager for experience and will work for lower fees than those charged by accredited professionals. Or, the organization could permit the graduate student to use the data for a thesis or dissertation in exchange for her/his work. But if the prospective evaluation is large and complex, invest in a professional, respected evaluator to ensure a sound evaluation that will provide valid results. **Most of all, it is critical to incorporate the evaluation plan—from the very beginning—into the design of the cyber café.** Otherwise, an impact or outcome evaluation may simply be impossible due to a lack of baseline data.

Work towards sustainability.

Sustaining the cyber café means making sure of adequate resources—both for users and to keep the café running. This can be a challenge. Look at sustainability for the cyber café from the very beginning. For example, charging realistic fees can prevent finding one day that there are not enough funds to pay the computer technician to keep the machines running. Working towards the sustainability of this project requires creativity and *thinking outside of the box*.

When raising funds, always be clear about funding goals and needs for the cyber café. Funding sources are more inclined to give—and even to give big—if they hear exactly what is needed (the cost of a new computer or the fee for one year's Internet service provider), and if they are ASKED. Never forget to ask people for money. If you don't ask, you will not receive!

While the organization is actively involved in efforts to raise funds to offset the cyber café's costs, plan on charging a small (or symbolic) fee to those in your target audience who cannot pay much for the use of the cyber café. In order to cover costs, explore a wide range of other fund-raising activities, such as:

- **Special events**—host a fund-raising event, a dinner or small party, for individuals particularly interested in issues of youth and/or in HIV prevention.
- **Rent out the cyber café**—for daylong conferences or as a business center.
- **Offer special hours**—when people outside the target population can use the cyber café for a higher fee.
- **Conduct a mail campaign**—for people who may support the organization.
- **Seek sponsorship**—from local companies or local radio or television stations.
- **Seek a partner organization**—that will share expenses in return for a portion of the cyber café's services.

For example, Entre Amigos successfully marketed the cyber café to neighborhood schools for computer literacy training. Renting the cyber café to the schools has allowed Entre Amigos to cover expenses related to the café, such as electricity, maintenance, and the Internet connection.

Resources

To know more about teaching youth to discern scientifically sound websites from fake ones, check out these pages:

http://www.library.jhu.edu/researchhelp/general/evaluating/

http://www.loc.gov/rr/business/beonline/selectbib.html

SUMMARY OF CHAPTER 4
IMPLEMENTATION

Once the cyber café is ready to open, it is important to set rules and procedures to help ensure that the cyber café functions smoothly. Use the café's launch as an opportunity to promote its services. During the first few weeks of operation in particular, be prepared to spend extra time with visitors, orienting them to the café, its software programs, user manuals, and services such as e-mail or workshops.

To ensure that the cyber café promotes youth's access to sexual and reproductive health information, find creative ways to encourage the use of the technology while, at the same time, highlighting sexual health information and minimizing barriers to access (such as high user fees). Café staff should closely monitor daily activities in the café, ensuring that supplies are on hand, computers are working well, and users are comfortable with the café and its services. Staff promotes the cyber café, monitors and evaluates cyber café activities, and works toward sustainability by raising funds, partnering with other organizations, and/or using cost-recovery systems (such as user fees).

5 Personal Computers: Basics of PCs & Networking

To serve as a reference to the reader regarding the components of the personal computer as well as the benefits of networking two or more computers together

▶▶ INTRODUCTION

This chapter provides an overview of components of the personal computer and looks at the benefits of creating a network of computers. The components described below are also included in the glossary at the end of this manual. However, this chapter provides more detailed information for the reader.

▶▶ PERSONAL COMPUTERS

A personal computer (or PC) is a relatively inexpensive computer, designed for an individual user.

Personal computers can range in price from a few hundred to thousands of dollars. All PCs rely on microprocessor technology. This technology enables manufacturers to put the entire central processing unit (CPU) on one small chip. The CPU is where all the commands and processes of the computer take place. Personal computers are used for communication via e-mail, word processing, accounting, and desktop publishing as well as for running spreadsheet and database management applications. PCs are also used to play computer games and to access the World Wide Web.

Personal computers first appeared in the late 1970s, and the Apple II manufactured by Apple Computer, appeared in 1977. During the late 1970s and early 1980s, new models and competing operating systems seemed to appear almost daily. In 1981, IBM entered the market with its first personal computer, the IBM PC. As the IBM PC became the personal computer of choice, many other companies built IBM PC clones. These are computers that are internally almost the same as the IBM PC, but that cost less. Because IBM clones use the same microprocessors as IBM PCs, they can run the same software. By contrast, Apple's computers use entirely different software. Today, Apple computers and PCs share the market for personal computers.

Although personal computers are designed as single user systems, it is common to link them together to form a network. In a computer network, two or more computers are wired together so they can access and share information. Such networks are often called local area networks (LANs).

Computers vary in power. Usually the more powerful the PC, the more expensive it is. More computer power means more capacity to run programs faster or to run several different software programs at once.

All computers have several basic parts. Some parts are called *user interface* and include the mouse, the keyboard, the screen, the printer, the scanner, and the cords that connect these devices with each other and to the power supply. Inside the computer "box" is the CPU, the mother board, etc.—the *components*.

Desktops and laptops

What is the difference between a desktop and a laptop? Both are PCs. The term *desktop* refers to a computer that sits on a desk or table, either at the office or at home. Desktop computers usually have four main components: the monitor, the hard drive (encased inside a box usually called *mini-tower*), the keyboard, and the mouse.

The term *laptop* refers to portable computers that the user can hold and operate on his/her lap. The laptop computer

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CHIP:
A microelectronic semiconductor device consisting of many interconnected transistors and other components

OPERATING SYSTEM:
software that controls the execution of computer programs and that may provide various services

MICROPROCESSOR:
integrated circuit semiconductor chip that performs the bulk of the processing and controls the parts of a system

was designed to be carried around. The first laptops were designed for professionals who travel and need to "take the office with them" so they can access data and make presentations. However, laptop manufacturers now design laptops, not only for professionals, but also for students and non-professionals. Since laptops take less space than desktop computers, some people prefer the laptop. However, laptops are more expensive and offer less when compared to a desktop computer in the same price range.

Hardware

Hardware refers to computer components, user interface, and peripheral equipment. Software, on the other hand, consists of programs or applications installed in the computer.

Some hardware—such as the memory and the microprocessor—are internal and essential to the computer's operation. Other components, external to the computer, may also be essential to using the computer; these include such equipment as the monitor, mouse, and keyboard. Other peripheral equipment may also be desirable, but not essential, such as the printer, scanner, external zip drive, internal CD drive, and/or internal modem. Internal peripheral devices are often referred to as integrated peripherals.

Independent of the type of computer, be it a laptop or a desktop, an IBM clone or an Apple, the hardware has the same structure and function. A common list of hardware components are listed below and then described individually thereafter.

- HDD (Hard disk drive)
- Disk
  - CD-ROM (compact disk-read only memory)
  - CD-RW (compact disk-read write)
  - DVD-ROM (digital video disk-read only memory)
  - DVD-R (digital video disk-read)
- Disk drive
- Display screen or monitor (depending on whether for a desktop or a laptop computer)
- Keyboard
- Mouse
- Printer
- Scanner
- Modem

Other external equipment that can be connected to the computer is also considered hardware.

1. **Hard disk drive—**The HDD is the mechanism that reads and writes data on a hard disk.

2. **The disk—**A disk is basically a plate on which data can be encoded. There are two basic types of disks—magnetic disks and optical disks.

   Magnetic disk On magnetic disks, data is encoded on the disk's surface. Users can record and erase data on a magnetic disk many times, just as they can on a cassette tape. Magnetic disks come in a number of different formats:
   - Floppy disk—This is a 3.5 or 5.25 inch portable disk. The typical 5 1/2-inch floppy disk can hold 360KB (kilobytes) or 1.2 MB (megabytes); 3 1/4-inch floppies normally store 720KB, 1.2MB or 1.44MB of data. Floppy disks fit in the drive in the front of most desktop computers. In laptop models, the floppy disk drive can either be built-in or it can be an external unit that connects to the laptop.

   - Hard disk—The hard disk comes already installed inside the computer. It is where all applications and data are stored. It can store anywhere from 20MB to more than 10GB (gigabytes) and is also from 10 to 100 times faster to access than are floppy disks. When someone buys a computer, its specifications tell the capacity of the hard disk drive (for example, 80MB, or 80 megabyte hard disk drive; 20GB, or 20 gigabyte hard disk drive).

   - Removable cartridge—A removable cartridge is a hard disk encased in a metal or plastic cartridge. It can be removed just like the floppy disk. Removable cartridges are very fast, although usually not as fast as the fixed hard disk. They are usually employed when the user must back-up massive amounts of data that will not fit on a floppy disk. Data stored on a removable cartridge can be edited, just as can the data on the hard or the floppy disk.

EXTERNAL ZIP DRIVE:
A disk drive from Iomega Corporation which takes removable hard disks of up to one gigabyte

MAGNETIC TAPE:
memory device consisting of a long thin plastic strip coated with iron oxide; used to record audio or video signals or to store computer information

- Removable mini-drives—In early 2000, mini-drives (hard drives that are minuscule in size compared to the ones installed inside the computers) began to show up on the market, thanks to new technologies that have allowed reducing the size of the hard drive while increasing the amount of data it can hold. Mini-drives, in various capacities, are sold as key chains. The user can store or download information on the mini-drive by connecting it to any computer. Once connected, the computer recognizes the mini-drive immediately as another hard drive and offers access to its contents. Mini drives are sold under different names, depending on their manufacturer.

Optical Disk

The optical disk comes in three basic forms:
- CD-ROM (computer disk read-only memory)—This is a type of optical disk capable of storing up to one gigabyte of data, although the most common size CD-ROM is 650MB. A single CD-ROM has the storage capacity of 700 floppy disks and enough memory to store about 300,000 pages of text. CD-ROMs are particularly well-suited for large software applications that support color, graphics, sound, and video. When a CD-ROM is purchased, it is already filled with data that can be read but not modified, deleted, or written over. The drive that read these disks may have a speed of 2x, 4x, 8x, 12x and 16x. The higher the figure, the faster the drive will read the data of the CD-ROM.

- CD-RW (computer disk rewritable)—This is an optical disk on which the user can write, over a period of time. The user can treat the CD-RW disk just like a magnetic disk, writing and re-writing data onto it over and over. These disks can hold up to 80 minutes of sound or 750MB of data.

- DVD-ROM—This is a new type of read-only compact disk that can hold a minimum of 4.7GB, enough for a full-length movie. The DVD-ROM has capacity from 4.7GB to 17GB and access rates of 600 KB per second to 1.3 MB per second. One of the best features of the DVD-ROM drive is that it is compatible with CD-ROMs. This means that DVD-ROM players can play old CD-ROMs, CD-I disks, and video CDs, as well as new DVD-ROMs. Most computers are now sold with a DVD-ROM drive, so the user can see a movie as well as access information stored on DVD-R disks.

- DVD-R (DVD-Recordable)—This is a disk that can record data only once. Then the data becomes permanent on the disk. Two additional DVD-R disks include the DVD-RG (for general use) and the DVD-RA (used for mastering DVD video or data and not normally available to the public). Panasonic, Toshiba, Apple, Hitachi, NEC, Pioneer, Samsung, and Sharp support DVD-R, DVD-RW, and DVD-RA.

In general, accessing data from a disk is not as fast as accessing data from main memory. However, disks are much cheaper than buying additional RAM. Also, unlike RAM, disks hold stored data, even when the computer is turned off. Consequently, disks are the best storage medium for many types of data. Another storage medium is magnetic tape. These are used only for backup and archiving because they offer only sequential access. That is, to access data in the middle of a tape, the drive must first read all the preceding data.

3. **Disk drive—**The disk drive is a device that reads data from and writes data onto a disk.

4. **Display screen or monitor—**The monitor or display screen allows the user to read text, see images, watch movies, etc. It is the device through which users can see what they are doing with the computer. Most display screens work on the same principle as a television screen and use a cathode ray tube (CRT). Consequently, the term CRT is often used in place of display screen. Monitors are classified in three ways—by color capability, screen size, and definition.

Color:

Monochrome—A monochrome monitor actually displays two colors, one each for background and foreground. The colors can be black and white, green and black, or amber and black. Monochrome monitors were once popular and are still used by some companies.

Gray-scale—A gray-scale monitor is a monochrome monitor that displays different shades of gray.

Color—A color monitor may display anywhere from 16 to over one million different colors and tones. Color monitors are sometimes called RGB monitors because they accept signals for red, green, and blue. Color monitors are the most popular, for either desktop or laptop computer.

Screen size

Besides color, the second most important aspect of a monitor is its screen size. Just as with the television, a monitor's screen size is measured diagonally (the distance from one corner to the diagonally opposite corner). The screen size can be misleading because there is always an area around the edge of the screen that can't be used. Therefore, manufacturers must now also state the viewing area (or amount of screen that is actually used).

Resolution

After screen size, the third important aspect of a monitor is its resolution (how clearly it depicts images). Images on the monitor—whether words, numbers, or graphics—are depicted by tightly packed dots (pixels). Resolution indicates how densely packed the pixels are. In general, the more pixels a monitor displays (expressed as dots per inch), the sharper the image. Today, most monitors display 1024 by 768 pixels or higher levels of resolution. Usually, most offices and businesses use monitors with a resolution of 800 by 600 pixels and up to 16 million colors and tones (limited by the amount of video RAM in the computer). Some expensive monitors (mostly used in the printing, video and graphic design industries) display 1280 by 1024, or even 1600 by 1200, pixels.

5. **Keyboard**—This component has a set of typewriter-like keys. It allows the user to enter data into the computer. Computer keyboards look similar to those of electric typewriters but contain additional keys. Computer keyboards contain 1) alphanumeric keys (letters and numbers); 2) punctuation keys, such as comma, period, and semicolon; and 3) special keys, such as function keys, control keys, arrow keys, etc. There is not a standard computer keyboard, although many manufacturers imitate the keyboard of the IBM PC. Some models are cordless, meaning that the keyboard is connected to the computer without cords of any kind.

6. **Mouse**—This is the name for the small device that controls the movement of the cursor or pointer on a display screen. The mouse rolls over a hard, flat surface; as one moves the mouse, the pointer or cursor on the screen moves as well. The mouse's name comes from its shape, which looks a bit like a mouse, with a connecting wire resembling the mouse's tail. Generally speaking, the mouse contains one, two, or three click pads located either on top of it or on its sides. These pads have different functions, depending on the program being used. Newer models also include a scroll wheel for scrolling up or down through long documents or through internet pages. The mouse comes in three basic models:

Mechanical—This type has a rubber or metal ball on its underside that can roll in any directions. Mechanical sensors within the mouse detect the direction the ball is rolling and move the screen pointer accordingly.

Opto-mechanical—This is similar to the mechanical mouse, but uses optical sensors to detect the movement of the ball.

Optical—This uses a laser to detect the mouse's movement and must be operated along a special mat with a grid that provides a frame of reference. The optical mouse has no moving parts. It responds more quickly and precisely than the mechanical or opto-mechanical mouse, but it is also more expensive.

The mouse can also be classified by how it connects to the computer:

Serial mouse connects directly to the port or connection, usually located at the back of the computer box. This is the simplest type of connection.

PS/2 mouse connects to a PS/2 port, also located behind the back of the desktop or laptop.

USB mouse is a newer model. The USB port, also located in the back of the computer, is an evolved version of the serial port. The USB port is smaller and takes less space than a serial port and is also easier to connect.

PIXELS:
the smallest discrete component of an image or picture on a computer screen (usually a colored dot); the greater the number of pixels per inch the greater the resolution

PORT:
A channel or channel endpoint in a communications system

USB:
Universal serial bus, an external peripheral interface, standard for communication between a computer and external peripherals over an inexpensive cable

SERIAL:
(port) A connector on a computer to for attaching a serial line connected to peripherals and communicating via a serial protocol; devices that can be connected to a serial port include mouse, scanner, and monitor, etc.

Cordless mouse isn't physically connected to the computer at all. Instead, it relies on infrared to communicate with the computer. The cordless mouse is more expensive than the serial mouse. However, eliminating the cord can sometimes be very convenient.

Laptops have a built in mouse that does not look like at all like a mouse; it usually comes in the form of a small protruding button, in colors such as bright green or blue so the user can find it easily. This small button can be moved with one finger, just as a mouse can be moved with the hand. The "click" function is accomplished by using one or two pads located near the keyboard. Laptops also offer a connection for an external mouse. Newer laptop models have a pad (the user moves his finger just as a mouse would move on a mouse pad) instead of the "protruding button."

Peripherals or Accessories

Besides these essential components, computer users often purchase additional devices, such as a printer and a scanner.

1. Printers

This is the device that prints text or illustrations on paper. There are many different types of printers. However, in terms of the technology they use, printers fall into three categories: dot-matrix, ink jet, and laser printers.

Dot-matrix—This type of printer creates characters by striking pins against an ink ribbon. Each pin makes a dot, and combinations of dots form characters and illustrations. Dot matrix printers are still used in many places and can print a variety of documents.

Ink-jet—This type of printer sprays ink at a sheet of paper. Ink-jet printers produce high-quality text and graphics. Most individuals buy this kind of printer for home use. Models vary in quality, from affordable, standard printing to more expensive, photo quality printing. The higher the quality, the more expensive the printer will be.

Laser—This type of printer uses the same technology as modern copiers. Laser printers produce very high quality text and graphics. They come both in black and white and in color models. The laser printer achieves a better look than the ink-jet and far, far better than the dot-matrix printer.

2. Scanner

A scanner is a device that can capture text or illustrations that have been printed either on paper or on other media. It works by translating the information into data that the computer can identify and use. A scanner digitizes whatever it is scanning, which can then be stored in a file, displayed on a screen, and manipulated by users. Some scanners have the capability of scanning text, not as image, but as actual text through a system known as optical character recognition (OCR). This is highly useful because, instead of re-typing a long document, one can simply scan it in.

Scanners differ in the following respects:

Scanning technology—The technology used in the scanners will determine its price. Scanners that utilize less technology are more affordable than those with better technological capabilities. High-end scanners process images faster and more accurately; that's why they are more expensive.

Resolution—The higher the resolution the more expensive the scanner will be. Typically, scanners support resolutions from 72 to up to 600 dpi.

Bit depth—Each pixel is represented by a number of bits. The greater the bit depth, the more colors or gray scales the scanner can represent. For example, a 24-bit color scanner can represent colors more accurately and vividly than an 8-bit scanner.

Size and shape—
• Some scanners are small hand-held devices that one moves across the paper. Such hand-held scanners are often called "half-page scanners" because they can only scan two to five inches at a time. Hand-held scanners are adequate for small pictures and photos, but they are difficult to use in scanning an entire page of text or graphics.
• Larger scanners include machines into which one feeds sheets of paper. These are called sheet-fed scanners. Sheet-fed scanners are excellent for loose sheets of paper, but they are unable to handle bound documents.

DPI:
dots per inch; a metric measure of print and screen resolution

BAUD:
How many bits a modem can send or receive per second

BPS:
bits per second; a measure of data transmission speed over a communications medium

- A second type of large scanner, called a flatbed scanner, is like a photocopy machine. It consists of a board on which one lays books, magazines, and other documents to be scanned.
- Overhead scanners, also called copy board scanners, look somewhat like overhead projectors. The user places documents face-up on the scanning bed, and a small overhead tower moves across the page.

3. Modems

Short for modulator-demodulator (*mo-dem*), the modem is a device or program that allows a computer to send data over telephone or cable lines. Computer information is stored digitally and sent in the form of analog waves. A modem converts between digital and analog formats. Besides connecting computers for e-mail or data transfer, the modem also allows computers to connect to the Internet and to navigate the World Wide Web.

External modems usually sit outside the computer and can best be described as "the box that flickers and beeps." Since the mid-1990s however, external modems have gradually been replaced by internal modems. With an internal modem, the phone line connects at the back of the computer. For computers that lack the internal modem, the external modem connects to an RS-232 port (on nearly all PCs).

Aside from modems' transmission protocols, the following characteristics distinguish one modem from another:

Bps (bits per second)—This is how fast the modem can transmit and receive data. At slow rates, modems are measured in terms of baud rates. The slowest rate is 300 baud. At higher speeds, modems are measured in terms of bps. The fastest modem currently runs at 57,600 bps, although such a modem can achieve even higher data transfer rates by compressing the data. Obviously, the faster the transmission rate, the faster one can send and receive data. However, a computer cannot receive data any faster than it is being sent. If, for example, the device sending data sends it at 2,400 bps, the receiving computer gets it at 2,400 bps. It is not always useful, therefore, to have a very fast modem. In addition, some telephone lines cannot transmit data reliably at very high rates.

Voice/data—Many modems support both voice and data. In data mode, the modem acts like a regular modem; in voice mode, it acts like a regular telephone. Modems that support a voice/data switch have a built-in loudspeaker or microphone for voice communication.

Auto-answer—An auto-answer modem enables a computer to receive calls while its user is absent. This is only necessary for those offering some type of computer service that people call to use.

Data compression—Some modems perform data compression, which enables them to send data at faster rates. However, the modem at the receiving end must be able to decompress the data.

Flash memory—Some modems come with flash memory rather than conventional read-only memory. This means that communications protocols can be easily updated.

Fax capability—Most modern modems can send and receive faxes.

To get the most out of a modem, the computer needs a communications software package that simplifies the task of transferring data.

In most industrialized countries, digital modems are replacing analog modems. This means faster connection and faster data transfer. In most cases, with digital modems the user can be on the phone and connected to the Internet at the same time.

▶▶ NEW TECHNOLOGIES

At this time, new devices are coming on to the market almost daily. Most are not popular, because they are highly expensive. Over time, the price of many of these items may come down, bringing them within range of the average PC user. Some of these newer technologies are described below.

1. Digital Projectors

These devices, known as digital light processing (DLP) projectors are slowly becoming more common, not only in office environments but anywhere there is a need to project a computer screen's content onto a larger viewing surface. Several models are available although they are still very expensive. The way they work is very simple—a cord connects the computer to the projector, and everything on the monitor also is displayed through the projector onto a screen or wall.

2. Flat Panel Computer Monitors

The market is seeing a surge in new computer monitors

that not only display more accurate colors but also are flat, instead of "boxy." These monitors, better known as *flat screens* or *flat panels* are becoming more popular because they save space on the desk when compared to monitors that are shaped like boxes. The price of flat screens, however, is still quite high.

▶▶ NETWORKING THE PERSONAL COMPUTER

Most cyber cafés have more than one computer. Think about how great it would be if these computers could share information.

When computers are connected to each other, they can:
- Share a single printer
- Use a single Internet connection
- Share files such as images, spreadsheets and documents
- Allow users at different computers to play games together
- Send the output of a device like a DVD player or Webcam to another computer.

PCs can be connected in a variety of ways. You can:
- Wire the building or house with data cables
- Run cables across the floor between computers in the same room
- Install some form of wireless network
- Link computers through power lines
- Link computers through phone lines
- Walk diskettes back and forth between computers. This is inexpensive but tiresome.

Each of these methods has advantages and disadvantages. However, all (except physically carrying diskettes between computers) require that computers be configured to share printers, files, and an Internet connection as well as be protected by a layer of security. Additionally, computer networking will largely depend on one's budget, geographical location, and available options.

The configuration process is similar for any form of networking. The computer setup, however, may vary slightly, depending on the operating system and the capabilities of the computers. The best way to figure out how to create a network may be to hire a consultant or to follow the on-screen help of the computer operating system.

Networking Theory Basics

To install a network, there are three basic steps:
- Choose the technology to be used for the network. Will the network be based on phone lines, standard Ethernet, power lines, or wireless? Other technologies include Token Ring and FDDI, but they are not recommended unless managers already have *extensive* experience with that particular technology.
- Buy and install the hardware.
- Configure the system and get everything working together correctly. This last step is extremely important. It is also educational. If you understand the configuration process, you will understand everything the network is capable of doing for you. Most networking kits include an installation CD that makes configuration easy.

Networking Technologies

Phone line networking—This type of networking, also known as *HomePNA*, is easy to install, inexpensive, and fast. One advantage is that it doesn't require additional wiring.

What are the pros and cons of phone line networking?

The advantages:
- It's easy to install.
- It's inexpensive.
- It's standardized.
- It's reliable.
- It operates at a constant 10 megabits per second, even when the phone is in use.
- It requires no additional networking equipment (such as hubs or routers).
- It supports up to 25 devices.
- It is fast enough for bandwidth-intensive applications, such as video.
- It is compatible with other networking technologies.

DVD PLAYER: a device (internal or external) that can play DVDs

DVD: digital video disk; a recording (as of a movie) on an optical disk that can be played on a computer or a television set

WEBCAM: an accessory that, connected to the computer, can transmit images and or video through the internet; permits live video conferences

TOKEN RING: technology popularized by IBM in the mid eighties and used to create computer networks

It works on Macs and older PCs (in addition to Windows systems).

The disadvantages:
- Each computer needs a nearby phone jack. Otherwise, you will have to run phone extension cords or install new wiring.
- Even though it operates at a very reasonable 10Mbps, it is still 10 times slower than Ethernet (100Mbps). If your users need to send big amounts of data between computers, you may want greater speed.
- There is a physical limit of 1,000 feet (304.8 meters) of wiring between devices, and the overall area of coverage should not exceed 10,000 square feet (929 square meters).
- Some users report voices sounding "funny" or of a lot of background noise on the telephone once the network is installed.

Standard Ethernet Networking—Ethernet is the most popular networking system available today. It is also one of the widest ranging systems. The equipment needed for an Ethernet-based network can be as simple as two network interface cards (NIC) and a cable, or as complex as multiple routers, bridges, and hubs. It is this versatility that makes it so useful to businesses.

What are the pros and cons of Ethernet networking?

The advantages:
- It is the fastest networking technology (100Mbps).
- It can be inexpensive if the computers are close to one another.
- It is extremely reliable.
- It is easy to maintain after it is set up.
- The number of devices that can be connected are virtually unlimited.

- Technical support and information are widely available.

The disadvantages:
- For more than two computers, you'll need additional equipment.
- It can be expensive if wiring and jacks need to be installed.
- Set-up and configuration can be difficult.
- The technical jargon and the number of options can be confusing.

Power line networking—Like phone line networking, power line networking is based on the concept of "no new wires." It is convenient because, while not every room has a phone jack, there is always an electrical outlet near a computer. In power line networking, computers connect to one another through the outlets. Because this networking method requires no new wiring and the network adds no cost to the electric bill, power line networking is the cheapest method of connecting computers in different rooms.

What are the pros and cons of power line networking?

The advantages:
- It's inexpensive.
- It uses existing electrical wiring.
- It's easy to install.
- A printer, or any other device that doesn't need to be directly connected to a computer, also doesn't have to be physically near any of the computers in the network.
- It doesn't require that a card be installed in the computer (although there are companies working on PCI-based systems).

FDDI:
fiber distributed data interface; an old networking standard, used to create networks between two or more computers; incompatible with current networking standards

MBPS:
megabits per second

HUB:
a device connected to several other devices, similar to the hub of a wheel

ROUTER:
A device which forwards packets of information between networks

BRIDGES:
a device which forwards traffic between network segments

BANDWIDTH:
a data transmission rate; the maximum amount of information (bits/second) that can be transmitted along a channel

NETWORK INTERFACE CARD:
An adapter circuit board installed in a computer to provide a physical connection to a network

PCI:
a standard for connecting peripherals to a personal computer

The disadvantages:
- The connection is rather slow, 50Kbps to 350Kbps.
- The performance can be affected by other power use.
- It can limit the features of the printer.
- It only works with Windows-based computers.
- It connects to the electrical outlet via rather large devices.
- It can only use 110 volt standard lines.
- It requires that all data be encrypted for a secure network.
- Older wiring can affect performance.
- If the power supply is not constant, this type of network won't work properly.

Wireless Networking—This type of networking technology uses radio signals to broadcast information from one computer to another. Wireless networking can be extremely easy, especially for computers in different areas of an office or home. It also makes it a whole lot simpler to move computers around. For example, a laptop with a wireless network card is completely portable.

This networking technology is up-to-date, one of the most advanced. There are four types of wireless networks, ranging from slow and inexpensive to fast and expensive. They are Bluetooth, IrDA, HomeRF, SWAP (Shared Wireless Application Protocol), and WECA (Wi-Fi).

Bluetooth is a standard developed by a group of electronics manufacturers that allows any sort of electronic equipment, from computers and cell phones to keyboards and headphones, to make its own connection, without wires, cables, or any direct action from a user. Bluetooth-enabled areas are best known as "hot spots", meaning, for example that anyone with a laptop that has Bluetooth can pick up the signal and connect to the Internet.

IrDA (Infrared Data Association) is a standard for devices to communicate using infrared light pulses. This is how remote controls operate, and the fact that all remotes use this standard allows a remote from one manufacturer to control a device from another manufacturer. Since IrDA devices use infrared light, they must be in direct line of sight with each other. Although one can purchase and install an IrDA-based network capable of transmitting data at speeds up to four megabits per second (4Mbps), the need for line of sight limits the usefulness of an IrDA network.

HomeRF and SWAP (RF means radio frequency) includes six voice channels, based on digital enhanced cordless telecommunications (DECT). Although inexpensive and easy to install, this technology is relatively slow. Moreover, physical obstructions, such as walls or large metal objects can interfere with communication.

Wi-Fi (for wireless fidelity) allows devices to communicate at a speed of 11Mbps, whenever possible. If signal strength or interference is disrupting data, the Wi-Fi will drop back to 5.5Mbps, then two (2Mbps) and finally down to one (1Mbps). Though it may occasionally slow down, this keeps the network stable and very reliable. However, this technology is expensive and can be difficult to set up.

▶▶ UPGRADING THE HARDWARE OF THE PERSONAL COMPUTER

Periodically, someone must bring the hardware of the computer(s) up-to-date. Consider how fast manufacturers update their products—updates are usually available in less than a year. Sometimes the upgrades are important, sometimes they are not. The component that is upgraded most often is the random access memory (RAM). Adding RAM increases the memory in the computer and allows it to process tasks faster. Sometimes, people upgrade the motherboard and use a faster processor. All in all, upgrading the hardware of a computer implies investing money in order to increase performance.

▶▶ PERSONAL COMPUTER MAINTENANCE

Most computer users don't think about problems that might occur. Once the problem arises, repairs can be costly and time-consuming. Users can take preventive measures to lessen the likelihood of problems.

MOTHER BOARD:
the main circuit board for a computer, also known as Central Processing Unit Board

RAM:
random access memory, the most common computer memory which can be used by programs to perform necessary tasks while the computer is on

SURGE:
sudden or abrupt strong increase in electric power

Human error sometimes causes computer failure. Sometimes, environmental factors (or a combination of human and environmental factors) cause computers to malfunction. Some of these factors include:

- Excessive buildup of dust
- Exposure to heat or magnetic devices
- Viruses, transmitted via the Internet or shared disks
- Static electricity, electric shock, or a power surge
- Carelessness, such as spilling liquids into a computer, or bumping or dropping the hard drive casing
- Software that has been configured or set up incorrectly
- Incorrect handling of upgrades

Here are some tips to help you avoid computer malfunctioning.

- **Do not place a PC directly on or near a cooling or heating source**, such as air conditioner or heating vents. Either excessive heat or cold can damage a PC.
- **Don't position a PC where an air conditioner will blow cool air directly onto the unit** (as the temperature drops, static electricity may build up and condensation is possible).
- **Avoid direct sunlight**; it can damage a computer.
- **Do not place a PC where water can splash onto the components or drip down into them**. For example, avoid placing the PC near open windows or under hanging plants.
- **Keep the air vents of the PC clear of obstructions** to allow free circulation of air.
- **Do not smoke around a PC**.
- **Do not connect the PC directly to a wall outlet**; instead, connect it to a surge protector and connect the surge protector to the wall outlet. Surge protectors prevent electrical surges from destroying the hard drive and erasing data.
- **Replace the surge protector as often as necessary to protect the computer.** Even though most surge protector models have a light that goes off when the device is no longer functional, surge protectors wear out with time (or with the amount of electrical surges they handle).

- **Clean dust from the inside of the computer.** Dust buildup can seriously hamper a PC's ability to cool down. Even when one never opens the computer's case, dust can still get in through the drive openings. Follow these directions:
  - Clean dust from the inside of a computer with compressed air, blowing dust <u>away from</u> the motherboard and other components.
  - <u>Never</u> blow compressed air directly into a floppy drive. This can lodge dust in the drive, causing it to malfunction.
  - If you are unfamiliar with this type of maintenance, take the computer to a professional trained to maintain computers.
- **If you must move a PC from one location to another, be extremely careful.** Even small bumps or sudden moves can dislodge chips and expansion boards.
- **Repair or replace the cooling fan inside the computer, if it is no longer working properly.** The power supply inside the computer converts 120 Volts alternating current (AC) coming from the wall outlet to the direct current (DC) that the computer uses to operate. Since all electronic devices inside the computer receive their power from the power supply, if the computer has a stalled cooling fan, it will lead to overheated components that eventually fail. Overheating produces a burning smell or sometimes the computer will reboot itself all of a sudden.
- **Keep the root directory organized and clean.** Only keep the system's startup and software initialization files in the root directory. Application files and their data belong in a directory separate from the root directory.
- **Do not store data files in the same directory that stores software**. This will guard against the possibility of accidentally erasing or overwriting a software file.
- **Keep a set of backup rescue disks for the operating system**.
- **Keep backup copies of original software**, either on CD, DVD or floppy disk.
- **Save all documentation that comes with PC and its components**. Refer to the documentation if something goes wrong.

- **Do not compress the hard drive**. Compressed hard drives are more likely to be corrupted than are those that are not compressed.

- **Keep backup copies of any important data on a removable medium**. Hard drives can fail and having important data on more than one medium can save a lot of stress and headaches.

- **Install a virus scan program that automatically scans for viruses every time the system boots up**. Run the antivirus software periodically to detect and get rid of viruses. The experts recommend running the antivirus at least once a week. If there is a virus in your system, try to locate its source (the Internet or an external disk) to avoid contaminating the rest of the computers. Once the virus has been quarantined by the anti virus software, make sure it gets deleted from the computer system. Early detection of the contamination and its source will help you avoid spreading the virus among the rest of the computers, especially if they are in a network.

- **Do not download any files from the Internet unless you are certain the source is safe** (not transmitting viruses).

- **Do not use any storage media, such as floppy disks and optical disks that have been used in another computer.** Use them only if you are *cer - tain* that the other computer is free of viruses. Even so, scan them for viruses.

- **Create a "guide" to let users know the protocols for the use of the cyber café.** Protocols should include using floppy disks, downloading software from the Internet, creating folders on the computer, and storing personal files in the computer. If users are allowed to use their own disks, make sure the antivirus software is set to scan every disk *every* time it is inserted in the computer, this process is usually very quick and takes just a couple of minutes. Microsoft Windows offers a tool that allows the computer administrator to block the downloading of files from the Internet and/or to block storage of files in the computer. This tool can be customized to allow users only to navigate the Internet.

SUMMARY OF CHAPTER 5. PERSONAL COMPUTERS: BASICS OF PCS & NETWORKING

A personal computer (PC) is a relatively inexpensive computer, designed for an individual user and in the form of desktop or laptop. Hardware includes the tangible parts of any computer, either internal or external, such as monitor, mouse, keyboard, and peripheral equipment, such as printer, scanner, external zip drive, internal CD drive, and/or internal modem. Software is the "instructions" a computer needs to perform a specific task. These instructions are installed in the computer and allow users to write documents, perform calculations, or design Web sites. New technologies are continually emerging.

Other things covered in this chapter include information about installing a network, adding RAM to up-date the computers, and computer maintenance to minimize the damage caused by human error and/or environmental factors.

CHAPTER 5 APPENDIX

Use the chart below to help you navigate through the different ports in your desktop computer or laptop, this will help you identify the right port for the right computer peripheral or device.

Port Name	Port Picture	Used to Connect	Description
Serial		Older Mouse, older Digital Camera, older Handheld	9-pin, male
Parallel		Printer, Scanner	25-pin, female
PS/2		Mouse, Keyboard	6-pin, female
Monitor (VGA Port)		Monitor - Flat Panel or Regular	15-pin, female. Attached to a Video card.
Power		Low voltage DC Power Adapter	
Phone Modem (RJ-11)		Phone Line	Attached to a 56K Modem card
10/100 Ethernet (RJ-45 NIC)		DSL Modem or Cable Modem or Network	Attached to an Ethernet PCI card (NIC card). Looks like oversized phone jack
TV		TV Converter	4-pin female
USB		Laptop Docking Station, USB Port Replicator, USB Sound Blaster, Printer, Keyboard, Mouse, Digital Camera, Handheld, External CD/DVD/RW Drives, External Battery, External Hard Drive, Anything with USB connector	USB symbol
Stereo Sound In & Out		Computer Speakers, Microphone, Stereo Headphones	Usually located three together. Attached to a Sound card

These two symbols below represent the two most popular ports in computers these days. Many devices such as digital cameras have cords that connect to either one of these ports. Most desktop computers and laptops feature both ports.
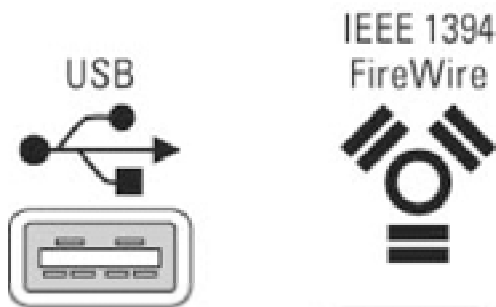
The picture to the right illustrates the different ports and connections you can usually find behind a computer case. Some of them are colored in order to be easier idendify. In a laptop these connections and ports have the same shape although they might be located not only on the back but also on the sides.
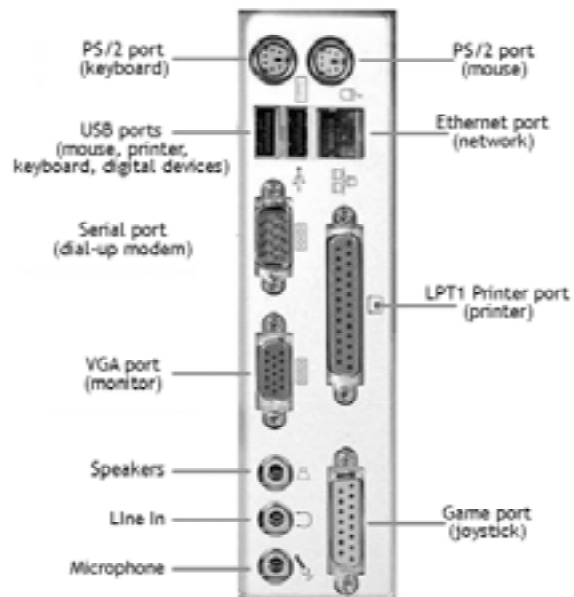
6 Internet Basics

To introduce the Internet and its different component, including the World Wide Web and the electronic exchange of information between computers around the world

▶▶ INTRODUCTION

If you're involved in starting a cyber café, you probably know what the Internet is already—a worldwide system of computer networks. People can log on to the Internet to exchange information with each other. Hundreds of millions of people across the world have access to the Internet. This makes the Internet a great way to share information about HIV prevention and to build a community of support for those infected with or affected by the virus. This chapter discusses some technical aspects of the Internet, including getting on the Internet as well as its components. For basic information about computers, please refer to Chapter 5.

▶▶ COMPONENTS OF THE INTERNET

The Internet has several tools for sending and receiving information and for communicating with other users. The main tools that cyber café visitors will use include:

- World Wide Web
- E-mail
- Chat and instant messaging
- Message boards
- Listservs.

Readers who are familiar with these tools should feel free to skip through to any tools about which they are less familiar.

The World Wide Web

The World Wide Web is a collection of pages of information, called Web sites, including pictures, text, interactive technologies, and even short movies. Web sites are written in HTML (hypertext markup language) so that they may be universally accessed over the Internet, by using hypertext transfer protocol (HTTP). HTML is a "common language" that people all over the world use when creating Web sites.[6] For more information on creating a Web site, please read Chapter 7, on Web design.

In order to find a Web site, users must rely on a Web browser, which is a computer program that interprets (translates) HTML to what users see when they visit a Web site—pages of pictures, text, and interactive technologies. The most popular Web browsers are Internet Explorer and Netscape Navigator, but other browsers unique to Internet service providers (ISPs) and text-based browsers, may be helpful when computers are older or an Internet connection is slow.

Web browsers' interfaces differ; but generally, each browser consists of a space where the user types in a uniform resource locator (URL), defined as the "address" of the Web site. The URL is the same as addressing a letter on an envelope—one writes the URL in the space and presses "enter" or clicks "go." This delivers the user to the Web site. A browser also typically has a "back" and a "forward" button. The user can thus direct the browser to sites already visited and forward again to sites visited later.

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[6] Software such as MacroMedia Dreamweaver saves files with the suffix HTM. This is actually the same as HTML. However, it is important to note that the suffix affects search results on the World Wide Web.

back/forward button

URL

Bookmarks

This sample page shows the URL (http://www.yahoo.com) in the Web browser, Internet Explorer. Browsers also usually include a section labeled "bookmarks" or "favorites." This is where users can store the URL of frequently visited sites. By browsing through the favorites, one avoids having to type the URL over and over again.When setting up the cyber café, the coordinator and peer educators may want to "bookmark" a few URLs so young people visiting the café will find it easy to find valuable HIV prevention sites. It may also be useful to set up the browser's home page (the page that comes up when the browser first opens) to the organization's Web site.

It's easy to find information when someone is given a Web address by an offline source, but what about searching for sources on the Web? That's what search engines are for. Search engines are Web sites set up specifically to catalog information on the Web. If a user goes to a search engine and types in a topic, the search engine will pull up information based on the keywords typed in. The most popular search engines are www.google.com and www.yahoo.com. Globally, each search engine has benefits and disadvantages. It is good to use different search engines to locate different types of information. Depending on the cyber café's location, a local or national search engine may be best for some users. For example, such a search engine in South Africa is www.aardvark.co.za. Be careful however, some search engines may bring up results because an owner of a Web site has paid to be listed rather than because the site is the most reliable or the most highly recommended. Most search engines have a page that lists the criteria used to bring up results. Encourage users to check this out before relying on the results of a particular search engine.

Web site example: www.youthresource.com

AmbienteJoven is a Web site that offers support, information, and resources for Latino gay, lesbian, bisexual, and transgender (GLBT) youth and for Latino young men who have sex with men. The Web site provides information, pictures, and interactive technologies, including online polls, surveys, and bulletin boards. These are designed to engage users to visit the site. The site is bright and interesting, and people who come to the site say they have a positive and interactive experience while finding the sexual health information they need. The Web site is listed in several search engines, including www.terra.com and www.alltheweb.com. In the cyber café at Entre Amigos in El Salvador, staff has set up www.ambientejoven.org as the home page of every browser. Thus, GLBT youth at the cyber café are able to find pertinent sexual health information easily, without having to sort through millions of pages on the World Wide Web.

E-mail

Electronic mail (e-mail) gives people a way to talk with each other privately over the Internet. The system works like sending a postal letter, but it is *much* faster. Normally, e-mail is received within seconds of being sent! For many people, using e-mail has replaced the postal system, especially for fast, informal communication.

In order to send e-mail, one must establish an e-mail account. E-mail accounts may be available through the cyber café's Internet Service Provider (ISP). Or, each young person can get an e-mail account from any of several free Web sites, including www.hotmail.com and www.mail.yahoo.com. Once someone signs up, he/she will receive an e-mail address. Once he/she receives this address, the youth will be able to send and receive e-mail.

To send e-mail to anyone, you need his/her e-mail address. Simply fill in the person's e-mail address and click n "send." You've just sent your first, fast, private, immediate letter! You can even send files via e-mail. Simply click on the paperclip option (or attach files) on most browsers. This will take you step-by-step through attaching a file.

Peer education programs, like that offered by AmbienteJoven, recognize that many people may not find all the information they need on a Web site. Many youth have individual questions or feel that general information may not apply to *their* situation. So, Web sites for particular populations with specific issues also offer online peer education. People visiting the Web site can send E-mail to trained peer educators (see preceding chapter). Visitors can write private letters, about their individual concerns around sexual health and HIV AND AIDS. Responsive, trained peer educators can provide highly effective assistance to youth. This is especially so for youth who feel that they have unique or individual issues and/or who do not want to share their concerns on a message board or in a face-to-face situation.

OTHER FORMS OF
▶▶ COMMUNICATION

Message boards and Listservs

A message board is a high-tech form of a bulletin board that is available through a Web site. People post notes on the board. The public can read these notes. Then, other people may respond, and their notes are also available to the public. A message board is a good way to establish an online community (see next page, top, for screen shot of listserv). Many people may write in on the same issue, and people can see notes posted by others who are interested in the same issues. Message boards also spur continued interest in a Web site. If someone places a message on a message board, people will visit the site repeatedly to see new postings and new information on the issue. This will increase the number of people who repeatedly visit the site, and is also an indicator of the site's effectiveness. A Listserv is similar to a message board, except that all the messages are sent via e-mail and only those on the Listserv see the messages. This is an effective way to reach a group of volunteers, especially for communication about a sensitive topic. However, users must be reminded that any e-mail can be forwarded. For highly sensitive information, avoid the use of Listservs.

Online chatting and instant messaging

A form of communication that is even quicker than e-mail is called online chatting. This can include use of a chat room—where many people interact with each other at the same time—or it can mean chatting one-on-one (see next page, bottom, for screen shot of listserv). With online chatting, the user opens up a program where she/he can type in something that goes immediately to the recipient(s). They receive the text immediately and can write back immediately. This technology is especially popular with young people, so it's important that café staff, peer education coordinator, and peer educators learn to use it. Remember, however, that in countries where Internet connections are slow or where few people have access to the Internet, chatting may not yet be popular. Nevertheless, this is a particularly valuable way of communicating between young people who live in separate areas of the country or world. It is also less expensive than a conference call. Some popular and free technologies for online chatting include America Online Instant Messenger (www.aol.com) and MSN instant messenger (www.msn.com). Other chat programs are also available on the World Wide Web.

Getting on the Internet

Internet browsers, such as Microsoft Internet Explorer or Netscape Navigator, get users on the Internet. Browsers typically come pre-installed in computers. So, the moment the organization buys any new computer, at least one of these two browsers should be already installed. Getting online also depends on having an Internet Service Provider. The ISP allows a connection through a phone line. Since these providers vary from region to region, find out which providers work locally, which are consider most reliable, and which are most cost effective. Then hire the services of one of them.

SUMMARY OF CHAPTER 6. INTERNET BASICS

The Internet has several tools for sending and receiving information and for communicating with other users. The main tools that cyber café visitors will use include:

- The World Wide Web, a collection of pages of information, called Web sites, including pictures, text, interactive technologies, and even short movies. Web sites are written in HTML (hypertext markup language)

- E-mail, electronic mail that gives people a way to talk with each other privately over the Internet

- Chat and instant messaging, a form of communication that is even quicker than e-mail

- Message boards, a high-tech form of a bulletin board that is available through a Web site

- Listservs, where messages are sent via e-mail to subscribers and only those on the Listserv see the messages

- Internet browsers, such as Microsoft Internet Explorer or Netscape Navigator, that let users browse the Internet.

7

Web Design Basics

To provide information on the importance of having a Web site; key elements of Web site design, including structure and components; and tips for creating a functional site for the organization

▶▶ INTRODUCTION

A Web site is nothing more than a location on the World Wide Web. The site's pages contain digital information in the form of text, graphics, pictures, video and interactive components. The elements on a Web site can vary. Contents will depend on what the organization wants to say and how. Picture a Web site as a magazine—some magazines are very simple and some have a lot of details and graphics. Some are easy to read and some are highly technical.

▶▶ WHY DEVELOP AN ORGANIZATIONAL WEB SITE?

Web sites are added to the World Wide Web everyday. Most new companies include a Web site in their marketing package. Few want to be left out. As more and more people gain access to the World Wide Web, Web sites are turning into a major way for people to get information on other people, companies, products, news, and ideas. Having an online presence is an important tool for nonprofit organizations. It is like a business card or an annual report—only offering much more information and facts about the organization. It is one of the best ways to reach many people these days, especially youth. Not having a Web site says to many people, especially young people, that *this* organization is not "with it" or is out of date—and *not* a place to go for the latest information on HIV and AIDS, other sexually transmitted infections (STIs), or other sexual health issues.

An organizational Web site offers many benefits.
It will:

Expand the organization's reach.
The World Wide Web brings the ability to tell (relatively inexpensively) the ideals and goals of the organization to others anywhere in the world. Just go online and type in any search engine the word "nonprofit." You'll get an immediate flood of sites for all sorts of nonprofit organizations worldwide —all of them on display for funding sources, partners, and clients to view.

Increase visibility.
A Web site lets others know about the organization's work and achievements. This visibility can be a first step in fostering a partnership with other nonprofit organizations working in the same or related fields. These partnerships can be local, regional, national, or international because the Web gives access to a wide field of potential partners.

Offer unlimited space for information.
There is no limit on the amount of information to share. Web sites can range from a short summary, like a printed brochure, all the way to vast and expansive sites. Web sites can provide information, offer full text documents, and also invite visitors to post messages on message boards.

The more information, graphics, and interactive components the Web site contains, the more it will show up in search engines. This means it will draw more visitors. On the other hand, it can also cost more in design and programming. However, the high fees charged by a professional designer can be avoided, if staff designs the Web site. To do so, follow the simple tips below.

Every Web site will vary according to its objectives. Nevertheless, here are some basic content areas to consider for the site:

● Logo and slogan

● The organization's mission

● The organization's goals and objectives

- In-depth information on the organization's initiatives and activities
- Information and resources
- Links
- Contact information, including e-mail address, physical address, and phone number

Basic Structure of a Web Site

Just like a building or the human body, a Web Site has a structure. Its elements are organized within that structure. The elements (text, graphics, and pictures) are usually contained inside a table. Imagine a four-seat kitchen table: each side contains a plate and a cup, a knife and a fork, with salt and pepper shakers in the center. Just so, a Web site's structure is also divided and subdivided. The divisions fall in rows and/or columns displaying different characteristics, depending on their purpose. Rows and/or columns can each contain a different element of the Web site. Each row or column can also have a different background color and a black or colored border.
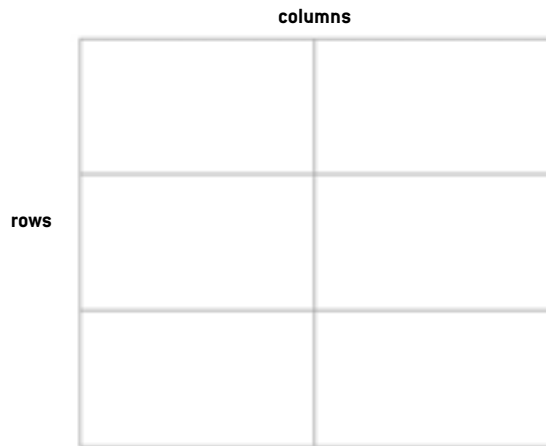
columns

rows

Example of table with TWO columns and THREE rows

To help organize content, sites usually follow a structure that meets the site's needs. Structure normally consists of:

- Header and main navigation bar
- Secondary navigation bar
- Center page
- Footer
- Index page
- Secondary pages
- Frames

Header and Main Navigation Bar

The first component in a typical Web site table is called a "header." It is here that the logo, slogan (if the organization has one) and main navigation bar are located. The logo and slogan identify the site and make it unique among other Web sites.

The main navigation bar (usually in the form of graphics) contains hyperlinks (better known as links) to pages within the Web site that describe in detail the main departments, services, programs, and/or information offered by the organization.

The main navigation bar also usually contains links to a page describing the philosophy, goals, and objectives of the organization. This page is usually called "about us." Finally, the main navigation bar will contain another link to a page with contact information, just in case someone wants to get in touch with the organization. This page is usually called "contact us."

Secondary Navigation Bar

Most Web sites also have secondary navigation bars, usually sitting usually on the left side of the page. The secondary navigation bar provides links to pages that do not describe the organization and its structure; but rather provide temporary information. Typical links in the secondary navigation bar include: new events, conferences, annual reports, ongoing activities, and calendars. For example, if the organization is having an activity, such as a fund-raiser, this would be the place to add the link.

Center Page

The third section of the typical Web site table is usually in the center of the page. It usually forms a square and features a main or primary piece of information. This is where visitors normally find links to important research and data, or to communities and stories about the communities.

Footer

At the bottom of the center page lays the table's footer. Here is where to provide the physical address of the organization, copyright notices, and sometimes, a list of all the links contained in the site. This last is done because some browsers may not download graphics. This section also usually offers terms of use and disclaimers.
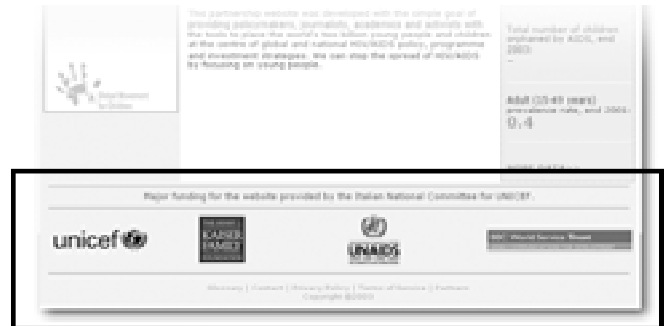
Secondary Pages

The secondary pages are those pages connected to the links on the front page. Basically, they use the same structure: a header with the logo; slogan and main navigation bar; a secondary navigation bar; center; and footer. The main area displays information about the link or section the visitor is currently viewing. The link that led to this secondary page now becomes the title. This avoids confusing the visitor. For example, if a visitor clicks on the link for services, it will bring up the page entitled "Services." However, the link will not now be included in the main navigation bar on the page, "Services" because the visitor is already viewing the information and doesn't need that link.

Secondary pages can link to other secondary pages. For example, the section that describes HIV prevention information can also provide links to separate pages with information on condom effectiveness, HIV testing, and local HIV AND AIDS treatment services.

There is no limit to the amount of information a site can provide to the visitor. However, it is important to orient the visitor with a well-designed and organized site.

Frames

Finally, a popular component to add to the table is the frame. Frames are basically windows inside the table. The window allows the visitor to view information without opening another page. This is because the page opens inside the window within the current table row or column. Designers and Internet users have mixed

feelings about frames, because the way the information is displayed varies depending on the browser. In fact, some browsers do NOT display frames. This means that if a site has frames, the content will not show up as intended.

WEB SITE COMPONENTS: ESSENTIALS AND NON-ESSENTIALS

There is not a simple, single design for every Web site. However, certain basic elements can help to make the Web site both successful and functional. These essential elements include text, graphics and pictures. Other components that are not essential for a fully-functional Web site include message boards, chat applications, and other components like animation and video streaming.

Before designing the Web site, remember that, even though more and more people have access to computers these days, not all computers are new models. Many people do not have a high-speed connection to the Internet. For example, a typical user might have a computer that is two or three years old. The user may be using a dial-up connection (modem) that limits his/her access to the more technologically demanding Web site features.

The level of technology available to typical visitors to the organization's Web site is an important considera-tion in designing the site. If most users have limited technology capability, it will be better to design a simple site where they can get all they need. Visitors with faster computers and faster connections will still be able to use the simple site. But, if the site is too complex, many of your target users may not be able to visit it successfully.

Text

Text has no measurable impact on how fast a page opens. In fact, if the page only has text, it will open faster than one with pictures. However, a magazine can be boring when it has pages and pages of text with no color or graphics. Therefore, although the site can rely heavily on text, it should also use pictures, graphics, and color to share information.

Graphics

Graphics can help make a site more interesting by making information more visual. Everything that is not text or a picture falls into the category of graphic. A graphic usually has one or more colors, design elements (such as drawings, logos, or graphs) and text (such as the buttons in a navigation bar). However, for the site to be functional, it is important to keep graphics to a min-imum. Use few graphics and make sure they are small. The more graphics on the Web site, the slower the page will open in the visitor's browser. This means he/she will have slower access to the Web site. It also means that impatient users will click to move away from the site because they don't want to wait for it to open. Don't convert to a graphic format something that can be well said in plain words (text). Use only the graphics you really need.

Pictures

Another visual tool is the picture. As with graphics, however, remember that pictures can increase the time it takes to open the site in the visitor's browser. Sometimes, a picture or series of pictures is important to illustrate an idea or to publicize an event. Then, use small (but easy to see) pictures. Especially if using a series of pictures, create "thumbnails"—pictures that, once clicked, will open into a bigger size in a separate window. Limiting the number of pictures is a good way to decrease the time needed to open a page.

Now, let's talk about non-essential components of a Web site. These components are features that are not needed for a functional site. They can be included as the site evolves over time, in order to improve the visitor's experience.

Message board

A message board is nothing more than a space within the site where users can write and post messages for other visitors to read and respond. Some Web sites use message boards as places for online discussions, where visitors can exchange opinions about a specific topic.

The nature of the Web Site will determine whether a message board is appropriate. However, many experts consider message boards a good way to let visitors to the site share opinions and ideas. Most organizations do not host the message board themselves, but contract this service out to another service provider. This will include a link in the Web site so visitors can access the board. High-end Web sites, such as those of newspapers or magazines, will usually have their own proprietary message board that is commercially designed. This option is not only more expensive but also unnecessary. A relatively inexpensive way to tackle the price issue, if

you decide to have a message board, is to open one using a free service, such as Yahoo (www.yahoo.com) or Hotmail (www.hotmail.com).

Animation, sound and video streaming

Other components that could further enhance the Web site include animation, sound, and video streaming. These are more technologically demanding. Sound comes in the form of snippets or bits of sound attached to the site or to elements of the site. For example, background music or action sounds might occur when the visitor interacts with an element of the page, such as a button.

Video can be attached to the Web site in different forms, depending on the quality desired. Remember that the higher the quality the more time it takes to load. The most popular audio and video encoding standards used online are MPGE (moving picture experts group). Some Web sites use video to offer visitors the chance to take a look at an event that took place in the past, such as a conference.

Animation and sound can contribute to making the experience of viewing a Web site more dynamic. However, unless the visitor has the necessary equipment, such as a sound card, he/she may be unable to enjoy these features. Moreover, without high-speed Internet access, these features can take a long time to download. These elements may enhance the experience of the visitor. However, a Web site can be useful and attractive without animation, sound, and/or video.

Tips and Common Mistakes

Designing the organization's Web site can save money in designer's fees. However one of the most important drawbacks is that most people don't know how to begin, or when to stop. They may design a Web site that takes too long to load or is too difficult to read and navigate. And, it may take the novice much longer than it would take a professional designer. To get people to stay at the Web site, read its content, and keep coming back, please read on.

Test your site with the most popular Internet browsers.

Internet browsers are translation devices. They take documents written in the HTML language and translate them into formatted Web pages. The result is similar to providing two professional human translators with the same document. Each will translate it correctly, but they will probably not use exactly the same words in doing so. Thus, it is very difficult to build a Web page that will display well on every browser. In fact, it is nearly impossible to build a Web page that shows perfectly on every version of every browser running on computers throughout the world. So, the first step is to decide which browsers are important to your Web site and its visitors. That could mean building a Web page to suit the latest version of the two most popular browsers (Internet Explorer and Netscape)*, but not necessarily if another browser is widely used locally.

In the end, designers need to test the Web site on the browser or browsers identified as most important, to see how they display. Sometimes, differences in display are not important. At other times, the difference can ruin a layout, design, or interactive component (such as forms to collect data; message boards and chat applications). As you design the site, test it every so often, in order to troubleshoot any possible problems arising along the way. You want to ensure that the site will be as useful and as protected from browser related problems as possible.

Don't waste time formatting text.

Unlike the text in newspapers and magazines, which is set in one unchangeable size, the text size in a Web site is dictated by the settings in the visitor's browser. Consider this when laying out text. For example, it doesn't matter if the text is set to read as 12 point Times New Roman. The visitor's browser may be set to display text as 9 point Verdana or to display as "large text." (This is a browser setting used by people who have problems reading small print.) Text size also depends on the size of the screen, which can vary from a small laptop to a 19-inch screen. So, unless you use a Cascading Style Sheet (basically, a coding embedded in your HTML document that overrides the browser's settings and displays your settings), you have little control over how text shows up on the visitor's screen. So, don't waste a lot of time in formatting text.

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*According to a recent survey, 75 percent of worldwide users rely on Internet Explorer, 24 percent on Netscape, one percent on other browsers. Interesting Web statistics,*www.w3.org*

Some general guidelines to follow when laying out text include the following:

- Lay out text in 9 or 10 point Verdana (a font used often on well-designed Web sites).

- Avoid italics, (They don't read well on screens. Instead, use **bold face** for emphasis.)

- Use mostly black text. When using colored text, make sure the color sufficiently contrasts with the background color. Screen readers—devices used by people with vision problems—will be unable to read text if there is not enough contrast between the background and the letters.

- Use one consistent color for linked text (text that will link to another page inside or outside the document). Using different colors will confuse visitors.

- Do not lay text on colored background. This is difficult to read, especially a large block of text.

- Do not use too many different text families. (A text family is a group of fonts that have the same characteristics, for example Times New Roman is a family consisting of Times New Roman Regular, Times New Roman Italic, and Times New Roman Bold). Use no more than three different text families to have a consistent look. Instead of using different families, use different variations within the same family: for example, headers in Verdana Bold, followed by subheaders in Verdana Roman, and body text in Times New Roman.

Graphics—use some but not too much.

Just as with magazines, graphics, such as logos or illustrations, give life to a Web site. They keep the page from looking boring. They add color, contrast, and interest. Graphics also help guide readers from the most important point to the least important.[7] However, a common mistake is to overload the page—using too many graphics and making it slow to download on the visitor's browser. An even more common mistake is to overuse animation graphics. Animation graphics make a Web page look dynamic. Too often, however, animation creates confusion—a chaos of little things moving around, flashing, and blinking. Overuse of animation graphics can confuse visitors and discourage them from staying or coming back to the site.

- Rely on the following guidelines to use graphics correctly and to optimize the site for all browsers and visitors:

- Graphics can be saved in different degrees of quality. Use a low or high level of quality, depending on the importance of the graphic to the site.

- Avoid very large graphics. Small graphics load faster and take less space on the page.

- Use gray scale or black and white graphics, reserving colors for key graphics that help the site to have a powerful impact on visitors.

- Use "ALT tags" in the graphics. The ALT tag provides the name and/or description of the graphic. It allows visitors whose browsers cannot load the graphic to know what the graphic is. Screen readers read ALT tags aloud, helping users with visual disabilities to understand.

- Use few multicolored graphics, animated graphics, and blinking graphics. They distract; so, limiting these graphics can help the visitor stay focused on what he/she is reading.

Pictures—be selective, prioritize, and economize.

With pictures, be even more careful than with graphics. Pictures usually are slower to download than are graphics because pictures contain more digital information than graphics.

Here are a few tips if you are using pictures:

- Just as with graphics, pictures can be saved in different degrees of quality. Use a low or high level of quality, depending on the importance of the picture to the Web site.

- Using big pictures will make the Web site slow to load. However, you cannot avoid this by scaling the picture down. For example, if you use a big picture and scale it down to post it on the Web site, it will take the same time to load as if you used the picture in its original size. It's best to avoid big pictures. (This is not true of the small pictures in a thumbnail gallery. See below.)

- Using gray scale pictures will help the Web site load faster. Use few color pictures.

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7 This is called creating a hierarchy of structure.

- As with graphics, use "ALT tags" to assign names or descriptions to the pictures, so that those who have difficulty viewing the picture will still know what the picture is about.

- For a gallery of pictures, create a thumbnail gallery first. Then link each thumbnail to the bigger version of the picture that can load in a pop-up window. Providing a pop-up window allows the visitor to enlarge the picture if she/he is interested. This is also more user-friendly than forcing users' browsers to download lots of pictures.

With care and common sense, you can design a Web site that is functional, engaging, and visually pleasing. If you don't feel confident enough to design the Web site, hire the services of a professional. However, you might be surprised at what you are able to create if you give it a try!

SUMMARY OF CHAPTER 7. WEB DESIGN BASICS

A Web site is nothing more than a location on the World Wide Web. An organizational Web site offers many benefits, such as expanding the organization's reach, increasing visibility, and offering unlimited space for information.

Every Web site will vary according to its objectives. Nevertheless, basic content areas can include: logo and slogan; the organization's mission; the organization's goals and objectives; in-depth information on the organization's initiatives and activities; information and resources; links; and contact information. Sites usually follow a structure that includes: header and main navigation bar; secondary navigation bar; center page; footer; an index page, secondary pages; and frames. Essential elements of a Web site include text, graphics, and pictures. Other non-essential components include message boards, chat applications, animation, and video streaming.

Pitfalls include:

- Incompatibility with the most popular Internet browsers

- Wasting time formatting text

- Using too many graphics so that pages are not easy to load

- Using poor quality or too many pictures

Resources

To know more about designing a site that is accessible to all users, check out the Code 508 guidelines @ *www.section508.gov.*

To know more about HTML software go to:
www.macromedia.com
www.adobe.com

To setup a free message board for the Web site, check out:
www.hotmail.com
www.yahoo.com
www.bravenet.com

To get a better idea of how foundations use sound and video to broadcast events online, check out the Kaiser Network @ *www.kaisernetwork.org*

To learn more about the Internet, go to *www.w3.org*

8

Developing an Online Peer Education Program

To guide the organization through the steps involved in recruiting, training, and working with online peer educators to promote sexual health and HIV AND AIDS prevention, including safer sex

▶▶ INTRODUCTION

Once the cyber café is set up, start thinking about additional support to offer young people visiting the café and accessing online information about sexual health and HIV/STI prevention. One kind of support is online peer education. Online peer educators are young people who are trained in HIV/STI prevention and who offer support, referral for services, and information to young people visiting the Web site and/or the cyber café.

Does the cyber café need this sort of intervention? Studies show that teenagers receive much of their information about sexuality and sexual expression from other young people and from the media. Studies also show that they are more likely to use condoms when having sex if they believe their peers use condoms.[8],[9] Therefore, peer education—youth talking with other youth about healthy behaviors and providing resources, information, and support—is a valuable approach for preventing HIV/STI and unintended pregnancy among youth.

Many youth who are at risk for HIV/STI and/or for involvement in unintended pregnancy, go to the Internet for information about sexual health. Many seek community with youth who are in similar situations to their own. Getting information via the Internet can be more comfortable than talking face-to-face with someone about highly personal matters. Therefore, peer educators who are available online to answer questions and give support may make both the Web site and the cyber café more valuable to other young people.

▶▶ WHAT DO ONLINE PEER EDUCATORS DO?

Online peer educators can work in a variety of ways, depending on the needs of the cyber café. It is important to survey the young people in the target community to learn how and why they access the Internet. Do they primarily search the World Wide Web for factual information? Do they go to chat rooms to talk with others? Are they looking for support on individuals' Web pages? Are they looking for a message board so they can interact with many other youth? Or do they prefer private e-mail correspondence? Do they feel that they can best get information from youth or adult experts? The answers to these questions will influence the direction of an online peer education project. It can also inform how the online peer educators interact with young people.

Peer educators can use several methods to support their peers, as illustrated in the chart below.

Provide information, support, and referral via e-mail.

Peer educators can respond to young people who write to the Web site in search of support and information. This gives youth visiting the site a private and personalized way of getting information on sexual health issues, including HIV and STIs. For example, peer educators at www.youthresource.com, a Web site of Advocates for Youth by and for GLBT youth, post short autobiographies and offer support, information, and services around issues that concern them. A young person can look through these autobiographies, select the peer educator that he/she feels best able to relate to regarding the issues

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8 DiClemente RJ. Predictors of HIV-preventive sexual behavior in a high-risk adolescent population: the influence of perceived peer norms and sexual communication on incarcerated adolescents' consistent use of condoms. Journal of Adolescent Health 1991; 12:385-390.

9 DiClemente RJ. Psychosocial determinants of condom use among adolescents. In: DiClemente RJ, ed. Adolescents and AIDS: A Generation in Jeopardy. Newbury Park, CA: Sage Publications, 1992.

she/he is dealing with, and write to that peer education for information and support.

Youth also have the option to send e-mail to the site's general inbox. A peer educator will answer the e-mail. Using personalized e-mail is highly effective in reducing youth's isolation and offering individualized support. It is, however, a poor option if the site has many people writing in and few or none to write individual responses.

If the online peer educators can give individual e-mail responses, it might still be helpful to post the answers to frequently asked questions (FAQs) in a central location in the cyber café and on the Web site. This can help to reduce the number of these repetitive questions. It will also give the peer educators a quick, easy, and accurate response to use.

Methodology	Insures confidentiality	Offers personalized support	Helps high volume	Is Easy to Maintain	Is Non Intrusive
E-mail intervention	X	X			X
Chat room	X	X			
Message Board	X	X	X		X
Website	X		X	X	X

Conduct chat room interventions.

Sometimes, peer educators regularly visit Internet rooms—where people chat with others online in search of friendship and/or community. The peer educators are supposed to intervene gently, offering support and information about HIV prevention. Peer educators at NOVAM, the Northern Virginia AIDS Ministry (in the United States), spend time daily in the cyber café. They reach out to young people chatting online at DCM4M (chat rooms for men who want to meet other men in Washington, DC). Peer educators identify themselves as health educators and offer information about safer sex and about local HIV and AIDS services. This type of intervention can be highly effective if done respectfully. However, chat room interventions can be ineffective if peer educators come across as "preachy" or uninterested in others, or determined to force certain behaviors or decisions on people.

Host a message board.

A message board is an online bulletin board. People can post questions and comments on the bulletin board. Peer educators can respond to questions and comments. Anyone visiting the board can see questions and answers. Visitors often begin ongoing dialogue with one another. Peer educators at www.scarleteen.com monitor a message board that encourages youth to write about sexual health issues. Young people can view the messages that others post. They develop a sense of community when they see that others have the same issues and concerns as they have. The message board is valuable chiefly for creating online community. It is also an effective way of answering a question that one person might ask but that many might have.

On the other hand, monitoring and supervising a message board is time-consuming, yet important. People often need quick feedback. Or, someone may post inaccurate information. The peer educator (or whoever monitors the board) needs to remove misinformation as rapidly as possible. Finally, some youth may feel the need for more privacy than the message board offers.

Create current resources.

The organization may need a Web site that offers factual information about sexual health issues, including HIV prevention and education. It can also offer information on the developmental and other issues affecting

For example, peer educators at YouthResource.com, a website for GLBTQ youth, post bios of themselves offering support, information, and services around issues that concern them. Young people can look through these bios, select the peer educator they relate to the most regarding the issues they are dealing with, and writes them about their information and concerns. Young people also have the option of writing an e-mail to the general inbox and having a peer educator write them back.

Peer educators at NOVAM, an organization in Northern Virginia, U.S.; spends time each afternoon in their cyber café reaching out to young people chatting to each other online at DCM4M chats (chats for men looking to meet other men in Washington, DC). They make their presence known as a health educator and offer information about safer sex and HIV prevention that are local.

youth. Peer educators at www.AmbienteJoven.org, another project of Advocates for Youth, write monthly articles for the Web site. Once a year, peer educators meet and draw up a list of topics that the community (Latino GLBTQ youth) has asked about. Peer educators aim at a readable, interesting, and relevant mix of serious issues. The peer education coordinator posts one article each month on the Web site, along with links to other sources of more information on the same topic.

This method is effective for communicating accurate information that people will need across time. Providing Web-based information may also be something to consider if the organization has few resources and wants to reach as many people as possible. The primary drawback is that the material needs to be carefully checked for accuracy before it goes up on the Web site. Moreover, it needs to be checked periodically to see if the information it offers is dated or has been overturned by other information. For example, until recently, HIV prevention information usually recommended the use of spermicides with condoms. More recent research highlights the dangers of spermicidal products as an HIV prevention method. (Spermicides can irritate the lining of the vagina and/or the anus, actually facilitating the transmission of HIV.) An article that still recommends using spermicides with condoms for HIV prevention would need to be altered or removed.

Remember that non-interactive information is not enough when a young person feels that he/she is in a unique situation or needs affirmation and support.

Peer Educators at AmbienteJoven.org write monthly articles about issues that are of concern to them. At the beginning of the year, the peer educators met and drew out a list of topics their community needed/wanted to hear about- aiming for a readable, interesting, and relevant mix of serious issues such as club drugs to more light hearted issues such as the "levels" of homosexuality. The peer education coordinator posts one article each month written by the peer educators to the website - offering relevant information in a language peers are familiar with.

Offer combined Internet interventions.

The peer educators may recommend combining some of these intervention methods to create the program that is most appropriate for the target youth. If youth use the Internet in ways that make several methods appropriate, encourage the peer educators to develop an intervention that uses all those methods. The Internet is an ever-changing venue, and the intervention should adapt over time, accordingly.

WHOM SHOULD YOU SELECT TO BE PEER EDUCATORS?

It's important to select peer educators with whom young people targeted by the intervention can identify. The peer educators should be a part of the target community. The following criteria may be helpful in selecting peer educator. Peer educators should:

- Represent the age, gender, race/ethnicity, sexual orientation, and socioeconomic background(s) of the target population.
- Speak and write in the language(s) of the target youth.
- Feel enthusiasm for working with the target group.
- Feel enthusiasm for working toward the goal of the project.
- Be open-minded and nonjudgmental. Peer educators will be "meeting" young people dealing with a whole range of issues.
- Be leaders in the community—already knowing what's going on and feeling empowered and able to help.
- Be available to work within the pay structure offered and the hours required.
- Be knowledgeable about HIV and AIDS prevention and other sexual health issues.
- Be knowledgeable about the Internet and comfortable with the ways the target population uses the Internet.

In the end, knowledge about HIV and AIDS prevention and other sexual health issues as well as Internet expertise are less important than any of the criteria listed above them. Technical knowledge, like knowledge about sexual health issues, can easily be taught. Enthusiasm, open, nonjudgmental attitudes, and leadership abilities are less easily taught.

Begin by advertising the peer education program inside—within the organization and among the cyber café users. Ask youth if they might be interested, and if they know of others whom they think might be effective. Then, post an announcement online, and in places in the community where young members of the target population get together.

Peer education programs usually have an application process that includes a written application and a one-on-one interview. These two parts of the application process allows for assessing aptitude, enthusiasm, and ability. Make sure that the interview includes asking

how the youth expects to benefit from the program and sharing how he/she will benefit from as well as how the program will benefit from the experiences of this particular young person.

▶▶ WHAT STRUCTURE SHOULD THE PEER EDUCATION PROGRAM HAVE?

A peer education coordinator

The structure of the peer education program will depend on the available resources. At the least, it should include a coordinator. This is someone who will manage the training of the online peer educators, provide support, keep in regular touch with them as they work with youth over the Internet, and assist when problems or crises arise while they work.

The peer education coordinator is not (and should not be) the same as the cyber café coordinator. She/he should be experienced in working with young people, dedicated to the success of the program, yet flexible in meeting the individual needs of the peer educators. Finally, the coordinator should be available to work with peer educators while they work for the organization.

Time commitment

Peer educators should be willing to make a commitment to the program. In return for training and support, peer educators can be asked to commit to working for a certain amount of time for the project. Just be careful not to take advantage of youth or youth's inexperience. For example, it would be fair to ask the peer educator to commit to providing peer support online for two hours a week for three months after training is completed. (This would amount to about 24 hours of work, in return for his/her training.)

Job description

As with any other employee (paid or volunteer), it is best to have a job description for the online peer educator. The job description will detail hours, compensation and benefits, job duties, training, and supervisor. A young person needs this information in order to be able to decide whether to accept the job, to do a good job, and to perform to her/his best ability.

Job description should include:

- Beginning date
- Hours to be worked
- Compensation and benefits

- Job duties (what the peer educator is supposed to do, such as check e-mail and answer questions from young people; actively intervene in chat rooms and on message boards; work with education coordinator; and attend weekly training and/or meeting)
- Training details
- Supervisor
- Competencies expected (what the peer educator must know or learn, such as using e-mail, writing articles, performing searches as well as communication and interpersonal skills)

Resources and support

It is important to provide resources for the peer educators. Depending on the program and the services it provides, peer educators will need:

- Training in HIV prevention education
- Training in interpersonal skills, such as negotiation, communication, and conflict resolution
- Training in computer skills
- E-mail address
- Uninterrupted time on a computer in the cyber café
- A method for reporting on work performed
- A private place and time to discuss confidential issues arising from the work
- Immediate support in a crisis (for example, if a youth threatens—via e-mail or message board—to commit suicide)
- Ways to contact a supervisor
- Ways to work (and relax) with the program's other peer educators
- Positive and constructive critiques of performance and opportunities to give the supervisor feedback.

Peer educators at www.youthresource.com, a U.S. based Web site for GLBT youth, were selected from a pool of applications from around the country. Applicants were chosen based on the following criteria:

- Interest in and experience with HIV prevention and GLBT issues
- Familiarity and comfort with the Internet
- Availability for the amount of time needed for the work
- Membership in the groups targeted by the Web site.

Peer educators at www.youthresource.com are volunteers. In exchange for their work, they receive a trip to Washington, DC, for training; opportunities for scholarships to attend conferences; and opportunities to network at a national level.

HOW WILL THE PEER EDUCATORS RECEIVE TRAINING?

Many effective training modules on for HIV/STI prevention peer education programs are currently available. There is no need to re-invent the training for an online intervention. Select a training that is appropriate for the program, that fits the organization's values, and that addresses the issues of the target population. Resources on training peer educators, as well as a sample training agenda, is available at the end of this chapter. However, there are some specific considerations to address when working online. These are detailed in the next few pages.

ONLINE TRAINING CONSIDERATIONS

Online communication is different than talking face-to-face or by telephone. In most peer education programs, youth are trained to see body language and hear tones. These can help peer educators identify the unstated needs for information or support of other young people. A peer educator can also repeat back what he/she believes the other teen is asking. This helps the peer educator to be sure of responding appropriately. Online, people usually have ways of writing that reveal their needs. Through training, peer educators can identify virtual "body language." Problems can arise when:

- The peer educator has not been trained in identifying virtual body language.
- Literacy levels differ between the peer educator and the youth seeking help.
- Ways of talking about difficult issues like sexual health differ between the peer educator and the young person.
- Either uses slang or local idiom that the other misinterprets.

Therefore, peer education training must include: online etiquette (manners); how to work to move people offline to friendships and services in the real world; develop peer education skills; how to modify working methods for an online environment; and how to solve problems.

Online etiquette (manners)

Often, people who are active online seem to be speaking a different language when they chat or use instant messaging or e-mail. It's important that peer educators are aware of the local "lingo" around being online. In fact, you may want them to develop a list of these terms during their training. For example, does LOL mean laughing out loud or lingering online? A list of terms and their definitions can prevent misunderstanding and a potentially hurtful exchange. The online peer educators could also use a working list of local sexual health terms and local sexual health issues.

Whether peer educators are using online or sexual health slang, they need to be careful to write clearly. They need to remember that some of the youth may not be familiar with these terms. When in doubt, peer educators should clarify by using several terms. This may be, after all, their only chance to share sexual health information with the particular young person. So, it's better to say, for example "*coitus interruptus*, withdrawal, or 'pulling out'" than to use only one term that the other young person might not understand. If peer educators don't know what someone is asking about, they should say so. It is always important to give people the information they need. To do so, youth have to understand what their peers are asking.

Moving people offline

While young people can create a thriving and supportive online community, online support is no substitute for friendships with peers in the real world. Nor is it a substitute for professional support in the real world. Peer educators should always provide youth with offline resources—such as peer support groups. Even if young people do not attend meetings or support groups immediately, just knowing about them can empower youth and give them hope.

Peer education skills: RASP methodology

RASP is a method of answering questions online, clarifying online language, and directing people to real world resources:

- Reflect
- Affirm
- Share
- Provide resources and information.

Peer educators may find it helpful to respond using the RASP methodology when they receive e-mail that ask questions and share concerns.

Reflect

REFLECT by repeating back whatever the young person is asking. This helps in several ways:

- It lets him/her know whether the peer educator understands the question.
- It lets her/him know that the peer educator is listening.
- It helps the peer educator clarify exactly what the young person needs.

> **Example:**
>
> **A young person writes:** *I'm worried that I might have HIV. I had unprotected sex yesterday. What do I do?*
>
> **The peer educator says:** *Hello! Thank you for writ - ing. You're concerned you might have HIV because you had unprotected sex yesterday. Is that right?*

Affirm

The peer educator should then AFFIRM the step the young person has taken by writing. Many young people make "first contact" around HIV and AIDS issues through the Internet, and the peer educator may be the first person the youth has talked to around these issues.

Examples of affirmation can include:
I think it's great you want to know whether you are okay. Or, *This is an issue many young people face.*

The peer educator should also affirm any feelings the youth talks about:
A lot of people feel what you are feeling right now. Or, *It's okay to worry or feel upset about this situation.*

Affirmation does **not** include value-laden statements or opinions or efforts to force someone to do something. For example, it is **not** affirmation to say, *You must come out to your parents!* Affirmation supports and acknowledges the young person's courage in working through or wanting to work through his/her issues.

Peer educators should NOT share their own values or opinions about a particular issue. If peer educators wish to discuss values around an issue, they should discuss a range of values and encourage the young person to speak with a mentor, parent, or other trusted adult about the issue.

> **Example:**
>
> **A young person writes:** *I'm worried I might have HIV. I had unprotected sex yesterday. What do I do?*
>
> **The peer educator says:** *Hello! Thank you for writ - ing. You're concerned you might have HIV because you had unprotected sex yesterday. Is that right? It's good that you're concerned about your health and your body.*

Share

The reason young people are coming to peer educators instead of to adults is because they want to speak with someone who shares their experiences and understands their "world." Sharing experiences and information can be a valuable way of helping young people come to terms with issues. However, there are important things to remember about sharing information.

- Peer educators should be careful NOT to share too much personal information.
- Peer educators have a right to privacy.
- Peer educators are not "friends" or "pen pals"; they are educators.
- Peer educators should NEVER share their own last name, address, phone number, instant messenger name, or personal e-mail address.
- If a question or comment makes a peer educator uncomfortable, it should be passed on to the program coordinator.

> **Example:**
>
> **A young person writes:** *I'm worried I might have HIV. I had unprotected sex yesterday. What do I do?*
>
> **The peer educator says:** *Hello! Thank you for writ - ing. You're concerned you might have HIV because you had unprotected sex yesterday. Is that right? It's good that you're concerned about your health and your body. I have also been in situations where I've been worried I might have HIV—so, you're not alone.*

Provide Resources and Information

Providing resources and information is a critical part of online services. Resources and information can include:

- Online or offline reading (starting with the organization's resources and moving outward to other resources)
- Area youth groups, community groups, or student groups and their meeting times or contract information
- National hotlines to call for further information or support.

Peer educators and organization staff should strategize a list of resources that will be relevant and useful to the target community.

Example:

A young person writes: *I'm worried I might have HIV. I had unprotected sex yesterday. What do I do?*

The peer educator says:

Hello!

Thank you for writing. You're concerned you might have HIV because you had unprotected sex yesterday. Is that right? It's good that you're concerned about your health and your body. I have also been in situations where I've been worried I might have HIV—so, you're not alone.

It's true that having unprotected anal, oral, or vaginal sex can transmit HIV. The best thing you can do to lessen your concerns is to get tested for HIV. There are clinics that will provide anonymous and confidential testing for HIV, and you can find them by calling a hotline in your area.

Remember that it can take from three to six months for the virus to become detectable by testing, so please consider getting tested now and then six months from now, just to be sure.

In the meantime, you might want to consider abstinence (that is, refraining from vaginal, oral and/or oral sex) or having safer sex (that is, consistent use of condoms and dental dams to perform anal, vaginal and/or oral sex). If you'd like information on how you can protect yourself and your partner(s) from HIV, check out this Web site: www.sexetc.org.

If you find out you are HIV-positive, remember that many resources exist for positive young people. You can ask about support at the clinic where you get tested. Please write again and we can give you additional places to visit.

Thanks so much,

A Peer Educator

Modifying working methods for an online environment

The peer education coordinator(s) may work from elsewhere than in the cyber café. Or, the hours of the peer education coordinator may not overlap with some or all of the peer educators. Be sure to set up a system so that peer educators will feel able to ask questions and receive information and support from the other peer educators *and* from the peer education coordinator. Daily and/or weekly check-in will help. Some groups find it effective to set up a private message board where peer educators can post their concerns, questions, and issues around peer education. Other groups host an online check-in for all the peer educators. Remember that sometimes a phone call or face-to-face meeting is critically important—and worth a thousand e-mails. If a peer educator seems non-responsive or upset, just pick up the phone. Call and ask; see what's happening. Or set up a time to have coffee together, so that you can talk in a non-threatening environment. It may be a simple misunderstanding, or the peer educator may be feeling neglected. Meeting and talking can really help to solve problems.

Problem solving

Peer educators have to deal with certain "on the job" issues. These issues include online safety, meshing personal and professional life, and dealing with youth in crisis. The next section provides some strategies for dealing with these issues.

▶▶ ONLINE SAFETY

Peer educators are young people who are online in visible positions. The peer educators and the organization must work together to ensure that they are protected from sexual predators and from people who want to violate their privacy. It's important to establish safety measures. Such measures could involve:

- Not using one's real name for online interventions
- Not posting information online that will help identify a peer educator (such as where she/he goes to school, lives, etc.)
- Setting limits on how many times a peer educator can interact with any particular online visitor
- Reporting potential predators to the authorities immediately

- Setting reasonable working hours, so peer educators are working in the cyber café only when other people are around.

ADDRESSING THE NEEDS OF PEER EDUCATORS

Interacting with peers around issues of HIV and AIDS is an intense process. Peer educators will need ongoing support and information. Additionally, many young people may be active online both personally and also as peer educators. The peer educators may worry about their online personal life clashing with their online professional life, especially if they live in a small community. Peer educators may need encouragement to set boundaries and limits. Offer them resources and support.

- Peer educators should always use a different personal e-mail address than the one they use for peer education.

- Peer educators should limit the number of times they interact with any individual. They aren't "pen pals."

- Peer educators should set reasonable distinctions between those they date and/or are friends with and those who are clients. If someone writes in who is a personal friend, it might be better to let another peer educator handle the response. This will help keep friendships distinct from work. It is also in line with the way adult professionals work. Doctors, for instance, do not treat family or close friends simply because emotion can blur judgment.

- Peer educators should not share too much about themselves. They should **not** give personal information. The peer educator should not answer personal questions just because someone has asked.

- Offer resources and be ready to step in and give support if a peer educator is having difficulty with an issue or an online client.

- Offer ongoing support and education to the peer educators. They, too, may have problems that they need to share and process. Give peer educators space and opportunities to develop a mutually supportive group.

- Provide a weekly "debriefing" session. Let peer educators get together and talk about what has happened during the week so that they can support each other.

- Offer links to other groups of peer educators doing the same type of work.

Peer educators at www.youthresource.com a U.S. based website for GLBT youth, were selected from a pool of applications from around the country based on the following criteria: interest in and experience with HIV prevention and GLBT issues, familiarity and comfort with the internet, amount of time needed to dedicate to the site, and representation of the groups targeted within www.youthresource.com

Peer educators at www.youthresource.com work for the website on a volunteer basis, but in exchange for their work they receive a trip to Washington, DC for a 3 day training, opportunities for a scholarship to other conferences, and networking opportunities at a national level.

- Provide ongoing training on peer education techniques and on computer technology. Assist peer educators to keep their skills current.

- Post a list of frequently asked questions (FAQs) and the recommended answers. Give peer educators good resources to refer to as they work with youth online.

Providing a support system for the peer educators will help them when they encounter issues that are difficult. It will help them to grow in knowledge and skills. And, it will help the organization to keep them safe as they work online to help other youth.

HELP! IT'S A CRISIS!

On occasion, peer educators may run into online crisis situations and need immediate help. It is important to have policies in place for these situations. Give peer educators guidelines on how to handle situations, such as suicide threats or attempts, reports of sexual assault and/or sexual abuse, reports of physical abuse, concerns about a potential predator, and or issues of safety in the cyber café. Make the procedures clear. Talk with the peer educators about the procedures. Practice the procedures in weekly peer meetings.

When a crisis incident arises, the involved peer educator will also need time to talk about it afterward. The coordinator needs to listen and ask appropriate

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Resources

A complete guide to training peer educators, only needing some modification to make it appropriate for working online is the following: *Guide to Implementing TAP (Teens for AIDS Prevention): A Peer Education Program to Prevent HIV and STIs.* This training guide, from Advocates for Youth, is available online in full text: http://www.advocatesforyouth.org/publications/tap.htm.

questions. Make sure the involved peer educator is okay with what happened and how he/she responded. Make sure the peer educator has support around the incident. Discuss the incident in the weekly peer educator meeting, praising the involved young person for his/her performance. If the procedure wasn't followed, debrief with all the peer educators to make sure the procedure will be followed next time. Do this without blaming or naming the peer educator involved in the crisis incident. If the procedure didn't work, debrief with all the peer educators to identify what went wrong and how to avoid the problem. Revise the procedure and practice the new rules with everyone.

SAMPLE TRAINING AGENDA
FOR A ONE-DAY TRAINING

9am - 9:30am	Introduction and Ground Rules; Ice Breaker; Set Expectations for the Day
10am - 12 noon	HIV Transmission and Prevention
12 noon - 1pm	Lunch Break and Discussion: why are you involved in peer education?
1pm - 1:30pm	Discussion of set up Online Peer Education Program; Setting Expectations of Peer educators and Staff
1:30pm - 2:30pm	Introduction of RASP Methodology and Exercises to Practice RASP
2:30pm - 2:45pm	Break
2:45pm - 3:15pm	**Discussion:** What Resources Are Best to Recommend Online for Young People in the Community?
3:15pm - 4:15pm	Exercises on Communicating Online
4:15pm - 4:30pm	Break
4:30pm - 5pm	**Discussion:** Special Concerns—Crisis E-mail, Personal Involvement, etc.
5pm - 5:30pm	Wrap Up

SUMMARY OF CHAPTER 8. DEVELOPING AN ONLINE PEER EDUCATION PROGRAM

Online peer educators are young people who are trained in HIV/STI prevention and who offer support, referral for services, and information to young people visiting the Web site and/or the cyber café. It's important to select peer educators from the target community.

An online peer education program should include: a peer education coordinator, responsible for training and supporting the peer educators; job descriptions for the peer educators and resources to support their work; training for online peer educators in HIV/STI and other sexual health issues as well as in online etiquette, moving people offline and into real world health care services, interpersonal skills, modifying working methods for an online environment, and solving problems that arise during peer education interactions.

The online safety of the peer educators is important, and the coordinator must take measures to protect them from sexual predators. Peer educators also need guidelines for dealing with crises, such as youth who e-mail threatening suicide or talking about having been sexually assaulted, so that peer educators and the coordinator are equipped to handle each crisis appropriately.

9 Creating a Program to Build Youth's Skills

To provide information on creating and implementing a program to build youth's computer literacy, thereby improving their prospects for employment

▶▶ WHY CREATE A PROGRAM TO BUILD YOUTH'S SKILLS?

It is important to think about going beyond the first two goals of the cyber café which are (1) to offer youth access to the World Wide Web and (2) to encourage the creation of a safe and supportive community. Remember that the other two goals are to involve youth and to increase youth's computer literacy and job-related computer skills (see page nine). Research shows that when young people have high aspirations, they have more positive reproductive health outcomes1. By building the computer skills of youth—especially their ability to take care of computer problems—managers and planners of the cyber café also promote a more hopeful future for these youth. As they become more skilled, they become more employable. As a "reward," the cyber café also acquires a small group of skilled users who may be able to solve many of the hardware problems that inevitably crop up whenever many users rely on the same equipment.

Many young people live in poor areas of cities or in struggling rural areas. Too often, they don't have access to the kind of training they need to get a job with a real future. A cyber café that targets such youth can help them with workshops to build their information technology (IT) skills. Such workshops also offer youth a more hopeful future and enjoyable opportunities to learn and also provide gifted youth from impoverished areas with challenges they might otherwise lack.

Moreover, a program that focuses on building youth's skills in the field of information technology can be very appealing to today's young women and men. They are often drawn to computer technology. Most of them don't want to seem computer illiterate (or "un-savvy"). This is one reason why programs to build computer skills attract and engage youth. Many youth are eager to learn to use spreadsheet software, for example, and to acquire other job-related skills.

One of the most important challenges facing any program is to build skills that provide youth with hope for the future—skills for which there is a significant and growing demand. At the same time, the program should offer opportunities for career growth and diversification. This challenge may be even more difficult during times of high unemployment. Thus, it is critical to make decisions about the focus of the skills training. Skills should be geared for entry-level employment. Consider:

- What types of entry-level jobs are in demand?
- For what types of entry-level employment can the program train youth within a reasonable amount of time?

At the same time, the program should ignite youth's interest, involvement, and actions in bridging the "digital divide."

To implement such a program, planners should consider the following steps:

- Involve youth—both females and males—in planning, researching, developing, implementing, and evaluating the program.
- In cooperation with youth, set clear, achievable goals, objectives, and activities for the program.
- In cooperation with youth, create and test a pilot version of the training curriculum. It should increase IT skills of both male and female participants.
- Train those who will work with youth in the IT skills program.
- Engage the active participation and commitment of local and national businesses, schools, and nongovernmental organizations to secure guided internships for program participants.

- With the partners (see number 5, above), develop a guided IT internship program that will extend the technical training of each participant, while also providing on-the-job professional experience.

- With the partners, establish an e-network to highlight employment opportunities for the youth who have completed the program.

- Create an active electronic network (or virtual community) of professionals and organizations across the region to improve youth's access to employment.

- Plan to increase access to computer and Internet technology for younger boys and girls, perhaps through a mentoring program. As they mature, these young people may well be the next generation of IT interns.

CASE STUDY:
PROGRAMA PARA O FUTURO
▶▶ (PROGRAM FOR THE FUTURE)

On March 19th, USAID/Brazil, along with the Academy for Educational Development (AED) and local organizations "Casa do Passagem", "Porto Digital", "L-TNET Brasil" and "CDI Pernambudo" launched *Programa para o Futuro*,[10] an 18-month pilot program in Recife, Brazil. Through the program, private and public sector organizations commit to improving employment opportunities in IT for disadvantaged youth, especially young women.

Like many other nations, Brazilians experience a wide gap between the rich and the poor.[11] Poverty is pervasive in Brazil, and an important result of poverty is lack of education and marketable skills. In other words, as desperately as they need jobs, many of Brazil's poorest people lack the skills to get jobs. Many children,

especially from poor families, enter the educational system late, attend school irregularly, and drop out early. Child labor, due to poverty, is also common in Brazil, where about 15 percent of all children ages seven to 14 work. At the same time, IT is one of Brazil's fastest growing industries. As a result, workers with IT skills are in great demand, especially those with basic, entry-level, technical support skills.

Programa para o Futuro targets disadvantaged young women and men, age 16 to 21. It works to increase youth's job skills, decrease violence against youth, prevent HIV infection, and lessen child labor. This program also expands youth's access to information and communication technology (ICT), in an environment that promotes continuous learning and creativity. Specifically, the program identifies and recruits youth. It provides training in entry-level IT skills that are in high demand with employers. It offers participants additional education in Portuguese, math and English. It also prepares youth for employment by offering life and workplace related skills, mentoring, electronic networking, and internships with schools, private companies, and NGOs. Through a network of collaborating partners, youth also gain opportunities for employment.

SUMMARY OF CHAPTER 9.
CREATING A PROGRAM TO BUILD YOUTH'S SKILLS

Many young people live in poor areas of cities or in struggling rural areas. Too often, they lack access to training they need to get a job. A cyber café that targets such youth can help them with workshops that build their information technology (IT) skills. By building the computer skills of youth—especially their ability to take care of computer problems—managers and planners of the cyber café also promote a more hopeful future for these youth. A program in Recife, Brazil, called *Programa para o Futuro*, exemplifies this approach. It addresses the future of disadvantaged youth by improving their employment opportunities in IT through training, education, internship opportunities, and job placement.

VIRTUAL COMMUNITY:
a community or group of people that interact with each other through the Internet and not in person

ICT:
information and communication technology, the study of the technology used to handle information and aid communication

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Glossary of Computer Related Terms

Below is a glossary of common computer and Internet technology terms. For additional words and definitions, please visit www.webopedia.com. For HIV and STI related terms, please visit www.ashastd.org/stdfaqs/glossaryindex.html.

Bandwidth—A data transmission rate; the maximum amount of information (bits/second) that can be transmitted along a channel

Baud—How many bits a modem can send or receive per second

Bluetooth—A type of wireless network connection technology

BPS—Bits per second; a measure of data transmission speed over a communications medium

Bridge—A device which forwards traffic between network segments

Browser—*Web browser,* a software application used to locate and display pages on the World Wide Web

Bundled services—Packet of different services offered for one price; bundled services are usually cheaper than buying each service separately.

Byte—Unit of digital information or data storage, equaling eight bits, used especially to represent a number or a character of the alphabet

CD-ROM—Short for *Compact Disk, Read-Only Memory*, a round, optical disk capable of storing large amounts of data and protected from being erased or changed by users

CD-RW—Short for *Compact Disk-Re Writable,* an optical disk that allows the user to write over previous data

CD writer—Electronic device capable of recording data into the CD

Central processing unit (CPU)—The components of the computer that perform its tasks; memory and the microprocessor; also known as the "mother board"

Chat room—A channel on the World Wide Web or *room*, where users communicate interactively in a chat session; the term *room* promotes the chat metaphor.

Chip—A microelectronic semiconductor device consisting of many interconnected transistors and other components

Components—The parts of a computer, such as microprocessor, modem, keyboard, etc.

Computer disk—Square or round plate on which data can be encoded

Computer literacy—Knowledge or expertise in the handling of computer hardware or software

Computer network—Two or more PCs, wired together so they can share information

CRT—Cathode ray tube (see 'monitor')

Cyber café—A space that allows visitors to access both: 1) the World Wide Web to view pages and 2) the Internet to send or receive E-mail

Data compression—Process of eliminating space between data bits so that more can be packed into a disk

Desktop—The computer that sits on a table or desk, including its monitor, central processing unit (in the minitower), the keyboard, and mouse

Digital camera—A camera that stores the images in digital format, usually in some sort of memory device that can later be attached to the computer for viewing or downloading

Digital projector—Projects a monitor's content onto a larger viewing surface, such as a screen or wall

Disk—Basically a plate on which data can be encoded; two basic types are magnetic disks and optical disks.

Disk drive—A device that reads data from and writes data onto a disk

Display screen—A monitor; a device that visually displays text and images, allowing the user to see, for example, what he/she is doing at the computer or the results of a search

DLP—Digital light processing

Dpi—Dots per inch; a metric measure of print and screen resolution

DVD—Digital video disk; a recording (as of a movie) on an optical disk that can be played on a computer or a television set

DVD player—A device (internal or external) that can play DVDs on the computer

DVD-ROM—Digital video disk read-only memory

DVD-R—Digital video disk read

E-mail—Short for *electronic mail,* the transmission of messages over communications networks, such as the Internet

Ethernet—Popular networking system

Excite—A search engine for the World Wide Web

External zip drive—A disk drive from Iomega Corporation which takes removable hard disks of up to one gigabyte

FDDI—Fiber distributed data interface; an old networking standard, used to create networks between two or more computers; not compatible with current networking standards

Floppy disk—Portable disk, used in a disk drive separate from the CPU to write and save files

Focus group—A research method that brings together a small group of people to discuss an issue, a product, or a media message (such as an advertisement) under the guidance of a trained interviewer.

Footer—Information placed at the bottom of a printed or online page

Frame—A window within a Web site; the information in this window can be changed without affecting the content of the page that includes the frame

Freelance specialist—A person who works, as a consultant, for different clients

Gigabyte—A unit of measure for digital information that amounts to 1,024 megabytes

Google—A World Wide Web search engine and directory, like Lycos or Excite

Graphics—Anything on a Web site that is not selectable text, it can be a picture or any other image.

Hard disk—Comes installed in the computer and is where all applications are stored

Hard disk drive—The HDD is the mechanism that reads and writes data on a hard disk

Hardware—Computer components, user interface, and peripheral equipment

Header—Content at the top of a printed or online page

HomeRF—A type of wireless networking technology that relies on Radio Frequency

HTML—*Hyper-text markup language*, the code used to create Web sites

HTTP—*Hyper-text transfer protocol*

Hub—A device connected to several other devices, like the hub of a wheel

Hypertext—Language used to link to other documents or pages on the World Wide Web

ICT—Information and communication technology, the study of the technology used to handle information and aid communication

Integrated peripherals—Peripheral devices built into the computer box, such as an internal CD drive and internal modem

Internet—A global network connecting millions of computers

Internet Explorer—One of the most popular Internet browsers

Internet service provider (ISP)—A company that specializes in providing access to the Internet and World Wide Web for a fee

Information technology (IT)—Career field concerned with all aspects of computer technology, especially within a large organization or company

IrDA—Infrared data association; a type of wireless networking technology that relies on infrared light pulses

Keyboard—Component with typewriter-like keys for inputing data and/or commands

Kilobyte—1025 bytes

Laptop—A portable computer that includes monitor, keyboard, and microprocessor in one compact unit

Link—On a Web site, a reference to another document; these are also called *hot links* because they take you to other documents when you <u>click</u> on them.

Local area network (LAN)—A small network of computers, such as all those in one business or one NGO

Lycos—A popular World Wide Web search engine and directory

Magnetic disk—A disk that contains data encoded on its surface that can be written, erased, written over, and re-written again and again

Magnetic Tape: memory device consisting of a long thin plastic strip coated with iron oxide; used to record audio or video signals or to store computer information; used mostly for backup and archiving

Mbps: megabits per second, a unit of data rate

Megabyte—A unit of measuring digital information storage, equaling 1,048,576 bytes

Message board—On the World Wide Web, a Web site where people can post comments and see other people's comments, usually posted instantly

Message board client—Software used to create and manage a message board

Microprocessor—Integrated circuit semiconductor chip that performs the bulk of the processing and controls the parts of a system

Mini-drive—a tiny hard drive, often sold as a key chain, that can be connected to a computer's hard drive to store and/or download information

Mini-tower—The box that houses hard drive and the central processing unit of a desktop personal computer

Modem—Short for modulator-demodulator (*mo-dem*); a device or program that allows a computer to send data over telephone or cable lines

Monitor—Another name for the computer's display screen

Mother board—The central processing unit or CPU

Mouse—Small device to control movement of the cursor (or pointer) on a monitor

MPGE—Moving picture group of experts

Navigator bar—Area containing links used to navigate the rest of a Web site

Net—Another word for the Internet

Netscape Navigator—One of the most popular Internet browsers

Network interface card—An adapter circuit board installed in a computer to provide physical connection to a network

Operating system—Software that controls the execution of computer programs and that may also provide various services

Optical character recognition (OCR)—Technology used in scanners to input text and/or images from printed material

Optical disk—Briefly, CDs and DVDs

PCI—A standard for connecting peripherals to a personal computer

Peripheral—A computer device, such as a CD-ROM drive, scanner, or printer, that is not an essential part of the computer (such as memory or the microprocessor)

Personal computer (PC)—A small, relatively inexpensive computer designed for the individual, rather than a large, complex computer like those used in industry and government operations

Pirated software—Software that is illegally copied and distributed without the original manufacturer's consent or knowledge and without paying fees to which the manufacturer is entitled

Pixel—The smallest discrete component of an image or picture on a computer screen (usually a colored dot); the greater the number of pixels per inch the greater the resolution

Port—A channel or channel endpoint in a communications system

Printer—A computer device that prints text or illustrations on paper

Random access memory (RAM)—The most common computer memory, which can be used by programs to perform necessary tasks while the computer is on

Removable cartridge—A removable hard disk, encased in a cartridge and used to store large amounts of data

Resolution—How clearly a monitor displays images, defined in pixels

Router—A device which forwards packets of information between networks

Scanner—A device that captures text or illustrations already printed on paper or other media

Screen reader—Computer device used by some libraries to allow people with vision problems to search the World Wide Web; the device reads the text on a site and the user moves the screen reader to determine what text it will next read.

Search engine—A program that searches Web sites and documents for specified keywords and returns a list of the documents where the keywords were found

Serial—(port) A connector on a computer through which a serial line connects peripherals; devices that connect to a serial port include mouse, scanner, monitors and others

Software—Computer instructions, applications, or data

Software license—A code or number that proves the software has been legally acquired; it is introduced during the software's installation, so that it will unlock and become operational

Sound card—A device that can be attached to the computer (internally) and that allows the user to listen to music or other sounds

Surge—Sudden or abrupt strong increase in electric power

Token ring—Technology popularized by IBM in the mid-1980s, used to create computer networks

Troubleshoot—Process of fine-tuning a computer or of addressing a computer problem

Uninterruptible Power Supply (UPS)—A power supply that includes a battery, to maintain power in the event of a power outage

Uniform Resource Locator (URL)—The global address of documents and other resources on the World Wide Web

Universal Serial Bus (USB)—An external peripheral interface standard for communication between a computer and external peripherals over an inexpensive cable

User interface—The mouse, keyboard, screen, printer, scanner, and the cords that connect these devices with each other and to the power supply; the parts of the computer with which the user works

Video conference—A meeting or conference in which people in different geographical areas can see each other and talk by means of video cameras and TV screens

Virtual Community—A community or group of people that interact with each other through the Internet and not in person

Webcam—An accessory that, when connected to the computer, transmits images and or video through the Internet

WiFi—Wireless fidelity; a type of wireless networking technology

World Wide Web—A system of Internet servers that supports documents formatted in a markup language called HTML; supports links to other documents as well as graphics, audio, and video files; may also be called "the Web"

Zip drive—A high-capacity floppy disk drive, developed by Iomega Corporation; the disks used with these drives can hold from 100MB to 1GB of data

Appendix B: Setting Up a Cyber Café: A Step-by-Step Questionnaire

Using a questionnaire to provide step-by-step guidance through the process of planning, setting up, and implementing a cyber café

OVERVIEW OF THE SETTING UP PROCESS

Planning, Set-Up, and Implementation

People involved

- **Client or Target Audience**—The ultimate user(s) of the cyber café
- **Cyber Café Coordinator**—The person in charge of day-to-day running of the cyber café.
- **Cyber Café Manager**—The person in charge of providing support and assistance on an as-needed basis, to the Cyber Café Coordinator.

Planning

This section provides guidance in the process of encouraging a cyber café initiative in your organization; as well as in assessing needs, identifying a target audience, and developing goals for the project.

1. **Plant the seed internally.** Meet with colleagues and discuss the potential benefits of a cyber café for the organization, the community, and youth in the community. During the meeting, try to get answers to the following questions:

    1) Where do the members of the organization stand in regards to new technology? They believe:

       • New technology is particularly useful for any organization.
       • New technology trends are somewhat useful for the advancement/development of any organization.
       • New technology trends are absolutely critical to the advancement/development of any organization.

    2) Where does staff stand in regards to working with youth? Staff says

       • Working with youth is not particularly important for any organization.
       • Youth volunteer in my organization, but they don't have a voice in the processes and decisions of the organization.
       • I involve youth in some of the processes and decisions of the organization.
       • I involve youth in all the processes and decisions of the organization.

2. **Plant the seed externally.** Meet with colleagues from other organizations; community leaders, parents, and teachers. Meet with youth. Discuss about the potential benefits a cyber café can bring to the organization, the community in general, and youth in the community. Try to get answers to the following questions.

    1) Where do adults stand in regards to new technology? They believe:
       • New technology trends are particularly useful for any organization.
       • New technology trends are somewhat useful for the advancement/development of any organization.
       • New technology trends are absolutely critical to the advancement/development of any organization.

    2) Where do youth stand in regards to working with organizations? Youth say

       • Working with youth as partners seldom happens in any organization.
       • Youth volunteer in many organization, but they don't have a voice in the processes and decisions of the organization.
       • Youth participate in some of the processes and decisions of some organizations.
       • Youth participate in all of the processes and decisions of some organizations.

3. **Assess needs.** Assess the needs of the community and the community's youth. Will a cyber café fulfill some or all of those needs. Assess issues around youth's reproductive and sexual health as well as their access to and use of the Internet. The answers to these questions will help in tailoring the focus of the cyber café.

    ■ What is the budget for the needs assessment? _____
    ■ What methods will be used for the needs assessment?
         ❏ Data research
         ❏ Evaluation
         ❏ Surveys
         ❏ Focus groups
         ❏ Other

    This is a list of possible questions to answer during the needs assessment process, feel free to answer all or some of them, or to add your own.

Youth's Reproductive and Sexual Health Issues

    ■ What is the national, regional, and local situation for young people in terms of their reproductive and sexual health conditions?
    ■ What reproductive and sexual health issues are of most concern to youth in our community? What other issues affect young people's well-being?
    ■ What local cultural, social, and economic factors influence young people's sexual and reproductive health?
    ■ What current programs and services exist to support young people in our community? How does the community view these programs? How do youth perceive them?
    ■ Which youth have sexual health issues and needs that are not currently being met by other programs? What are their primary needs and concerns?

■ What community attitudes and perceptions exist regarding youth's reproductive and sexual health?

■ What current policies regarding youth also influence their access to reproductive and sexual health information and services?

Internet Issues

■ What current programs and services offer Internet and computer literacy workshops to young people in our by the community? What is the opinion of youth regarding these programs?

■ How nearby are commercial cyber cafés? Do youth use these cafés? Can youth get sexual and reproductive health content in these cyber cafés? Or is content restricted?

■ What level of computer literacy currently exists among young people in our community?

■ Are schools in our community currently teaching computer skills as part of the curriculum?

■ How many youth in our community could be reached by implementing a cyber café program like this one?

4. **Envision the project.** Give shape to the project, according to information gathered in previous steps.

■ Who is our target audience?

_____

_____

■ Write a list of goals and objectives to be achieved by this project.

■ Develop a work plan.

Where are the funds coming from?

❏ We need to develop a fund-raising plan.

❏ We have already identified specific funding sources.

❏ We already have funding or a funding commitment.

LIST FUNDING SOURCES

_____

_____

APPENDIX B. QUESTIONNAIRE

Set Up

This section will provide guidance in staffing, space management, hardware and software needs, Internet connectivity, and operational details of the cyber café initiative. The questions assume that you are already beginning to set up the project. If the organization is not ready to set up the project right now, keep reading. The questions may provide useful information when that time comes.

1. **Who is more likely to be assigned to be the coordinator for the cyber café? The manager?**
   - ❒ Members of the organization
   - ❒ Volunteers

2. **Have you found a manager and a coordinator for the project?**
   - ❒ Need to find the coordinator
   - ❒ Coordinator already identified
   - ❒ Need to find the manager
   - ❒ Manager already identified
   - ❒ Need to find both the manager and the coordinator

   _____

3. **Who will be assigned as technical assistant?**
   - ❒ Inside source _____
   - ❒ Outside source _____

4. **Have you identified the space where the cyber café will be set up?**
   - ❒ Yes
   - ❒ Existing office space will be adapted to accommodate the cyber café.
   - ❒ No, need to identify space

5. **What security methods will be used to protect the cyber café?**
   - ❒ Existing security system
   - ❒ Need to set up a security system

6. **Put the tables and chairs according to the layout you think is the most appropriate for the space selected. Now test the space with staff to determine whether the layout works.**
   - ❒ Layout works fine
   - ❒ Need to re-distribute tables and chairs

7. **Are there any Internet connections ready for the cyber café?**

    ❐ Internet connections exist and are ready to use

    ❐ Internet connections exist but need to be adapted for the cyber café

    ❐ There are no Internet connections for the cyber café. We need to work on that.

8. **Write a list of the decorative items planned for the space designated for the cyber café.**

    _____

    _____

    _____

    _____

9. **How many pieces of equipment are you planning to buy and assign to the cyber café?**

    ❐ Two computers, one printer, and one scanner

    ❐ Four computers, one printer, and one scanner

    ❐ Six computers, one printer, and one scanner

    ❐ Other

    ❐ SPECIFY OTHER _____

    _____

10. **What will be the configuration of the computers? (RAM, HD, motherboard, etc)**

    _____

    _____

11. **What peripherals are you planning to add?**

❒ Printer   ❒ Scanner   ❒ CD-ROM   ❒ Zip Drive

❒ OTHER _____

12. **What software are you planning to have installed on the computers? Select one or more, as applicable**

❒ Web Browsing
   • Internet Explorer   • Netscape Navigator

❒ Anti-Virus
   • Mcafée®   • Norton's®

❒ Word processing
   • Microsoft Word®   • Word Perfect®   • Microsoft Works®

❒ Spread Sheets
   • Microsoft Excel®   • Lotus 123®   • Microsoft Works®

❒ Desktop Publishing
   • Microsoft Publisher®   • Corel Draw®   • Aldus Page Maker®

❒ Web Design
   • Macromedia® Dreamweaver®   • Coffee Cup® HTML Editor
   • Macromedia® Homesite®   • Microsoft® FrontPage®

❒ Photo Editing
   • Adobe® Photoshop®   • Ulead® Photo Impact®
   • Paint Shop Pro®   • Roxio Photo Suite®

❒ Utility software
   • WinZip®   • Adobe® Acrobat®
   • Netmeeting® Video Conferencing

   • SPECIFY OTHER _____

   _____

13. **Rate power outlets in the space designated for the cyber café.**

   ⌐ Power outlets are in good condition.

   ⌐ Power outlets need to be fixed and adapted for the cyber café.

14. **Some areas might not have a reliable source for electricity. This means using a power generator.**

   ⌐ Electricity in area is reliable, no need for power generators.

   ⌐ Electricity in area is faulty and not reliable, power generator(s) need to be budgeted.

15. **In order to connect to the Internet, the café will need a phone line, DSL modem, cable modem or antenna (for satellite connections).**

   ⌐ Cyber café will use _____

16. **In order to connect to the Internet, the café will need an Internet Service Provider**

   ⌐ Internet service is ready to use.

   ⌐ Internet service needs to be purchased.

17. **Before going to the next step, check out these details:**

   ⌐ Make sure the layout is comfortable enough for people to move around easily.

   ⌐ Make sure that cords and wires don't interfere with people's movements. This could cause accidents—to people and to machinery.

   ⌐ Make sure there is enough illumination and ventilation.

   ⌐ Test the network to make sure all computers are connected, and that each of them communicates with the printer and/or scanner.

   ⌐ Make sure all software is installed and working properly.

   ⌐ Make sure the Internet connection is working properly.

   ⌐ Make sure there is at least one message board displaying all the information about workshops as well as the hours of operation of the cyber café.

APPENDIX B. QUESTIONNAIRE

IMPLEMENTATION

1. **What hours will the cyber café operate?**

   ⌐ **9:00 a.m.–5:00 p.m.**   Monday through Friday

   ⌐ **9:00 a.m.–5:00 p.m**.   Monday, Wednesday, and Friday

   ⌐ **12:00 p.m.–5:00 p.m**.   Monday through Friday

   ⌐ **12:00 p.m –5:00 p.m**.   Monday, Wednesday, and Friday

   ⌐ **9:00 a.m.–12:00 p.m**.   Saturdays

   ⌐ OTHER SCHEDULE FOR WEEKDAYS

   _____

   _____

   ⌐ OTHER SCHEDULE FOR WEEKENDS

   _____

   _____

2. **Has the organization created ground rules for the users of the cyber café?**

   ⌐ No

   ⌐ Yes

   ⌐ LIST GROUND RULES

   _____

   _____

   _____

   _____

3. **What activities will take place in the cyber café?**

    ⌐ Online access

    ⌐ Online research/investigation

    ⌐ Computer literacy training

    ⌐ Professional writing/resume writing

    ⌐ Word processing

    ⌐ Playing games

    ⌐ Other

    ⌐ SPECIFY OTHER _____

    _____

4. **What is the expected launch date?**_____

5. **What activities are planned for the launching?**_____

    _____

    _____

6. **Make a list of the people,** members of the community and members of other nonprofit organizations, as well as possible future funding sources, that you think need to be present during the launching. Don't forget to include young people.

7. **After the launch, remember to keep an eye on the details. Here is a small guide:**

   Day-to-day activities
   a. Monitoring and gathering evaluation data
   b. Making sure supplies are handy (such as paper for the printer)
   c. Providing resources for users' assistance in navigating the Internet
   d. Making sure the message board is updated with schedules for workshops and training

   Weekly activities
   a. Brief check in meeting, to discuss issues regarding the cyber café
   b. Workshops—held once a week

   Monthly activities
   a. IT visits every month, to make sure computer equipment and network are working smoothly.
   b. Monthly meeting to discuss issues regarding the cyber café
   c. Monitoring and gathered evaluation data should be compiled, tabulated, analyzed and formally shared with staff, partners and the community on some regular basis meeting or gathering

8. **How will you promote the cyber café?**

   ❒ E-mail and Listserv

   ❒ Flyers

   ❒ Posters

   ❒ Community message boards

   ❒ Organization's message board

   ❒ Local newsletter advertisement

   ❒ Local newspaper advertisement

   ❒ Local radio station public service announcement

   ❒ Other

   ❒ DESCRIBE OTHER _____

9. **Select the activities the cyber café will use to generate revenue.**

   ❐ Special events

   ❐ Renting the cyber café to other groups

   ❐ Charging a higher fee to people outside the target population

   ❐ A mail campaign to supporters of the organization

   ❐ Printing documents for a fee

   ❐ Scanning pictures for a fee

   ❐ Other

   ❐ DESCRIBE OTHER _____

10. **Monitoring.**

After looking at the objectives and planned activities for your cyber café, what processes will you monitor?

_____

_____

_____

_____

With what frequency will you circulate surveys to assess the quality of the services provided?

   ❐ Daily

   ❐ Weekly

   ❐ Monthly

   ❐ Other _____

11. **Evaluation**

What type of evaluation will be used to evaluate the cyber café?

    ⌐ Outcome (measures results)

    ⌐ Impact (measures progress)

What type of method will be used to carry out the evaluation?

    ⌐ Surveys (measures quantitative data)

    ⌐ Interviews and/or focus groups (measures qualitative data)

What would you evaluate?

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