This newsletter presents an introduction to the Internet. A definition of the Internet and its three principle uses—electronic mail, USENET newsgroups, and information files—are provided. A discussion on how to explore the Internet includes equipment needs, university Internet accounts, commercial vendors, navigating the Internet through the gopher, the World Wide Web, and software that gives the user a graphical interface. Examples of types of information available on the Internet and a description of six governmental resources are presented. Potential problems, including roadblocks, complications in searching, useless information, and information unsuitable to children are also discussed. (AEF)
An Introduction to the Internet

What is the Internet?
The Internet is a worldwide network of computer networks that connects university, government, commercial, and other computers in over 150 countries. There are thousands of networks, tens of thousands of computers, and millions of users on the Internet, with the numbers expanding daily. Using the Internet, you can send electronic mail, chat with colleagues around the world, and obtain information on a wide variety of subjects.

Three principal uses of the Internet are:

- **Electronic mail.** Electronic mail, or e-mail, lets you electronically “mail” messages to users who have Internet E-mail addresses. Delivery time varies, but it’s possible to send mail across the globe and get a response in minutes. LISTSERVs are special interest mailing lists which allow for the exchange of information between large numbers of people.

- **USENET newsgroups.** USENET is a system of special interest discussion groups, called newsgroups, to which readers can send, or “post” messages which are then distributed to other computers in the network. (Think of it as a giant set of electronic bulletin boards.) Newsgroups are organized around specific topics, for example, alt.education.research, alt.education.distance, and misc.education.science.

- **Information files.** Government agencies, schools, and universities, commercial firms, interest groups, and private individuals place a variety of information on-line. The files were originally text only, but increasingly contain pictures and sound.

How Do I Explore the Internet?
To access the Internet, you’ll need a personal computer, a modem (or direct link to a network), telecommunications software, a telephone line, and an Internet account. Don’t worry—this is easier than it sounds, but it still helps when you’re getting started to have a few good books on the subject, or better yet, a friend who’s an experienced “cyber surfer.” Many universities provide Internet accounts to their faculty and students at little or no cost. Commercial vendors will provide Internet service for a fee. Make sure that you access your Internet provider with a local telephone call—otherwise, long distance charges will apply.

The easiest way for new users to navigate the Internet may be through the “gopher,” a navigational system that uses a series of menus to organize and provide access to information. Unfortunately, “gopher,” while easy to use, provides text-only information. It is much more rewarding to take full advantage of the multimedia opportunities available on the World-Wide Web (WWW). This system organizes information to provide for linkages to related

National Institute on the Education of At-Risk Students

BEST COPY AVAILABLE
documents (hypertext links), which allow users to move quickly and easily to related documents.

Software such as Mosaic and Netscape give users a graphical interface and (theoretically) allow for effortless "point and click" travel through cyberspace. If you want to use programs such as Mosaic and Netscape, you will need an up-to-date personal computer and a fast modem—the faster the better—but most users find the rewards worth the extra investment.

What Information Is Available?

A world of information awaits potential users, everything from job listings to travel guides to exotic locations to movie reviews to full text versions of many of the classics. On a single session on the Internet, you can

- Take a pictorial tour of Alexandria, the main port of Egypt, and learn the history of the city;
- Visit science museums to learn about the human heart, view the earth from space, or dissect a frog;
- Listen to Bach played on the 10th largest pipe organ in the world; and then
- Visit Paris, where you can check out the Metro, visit the Louvre (yes, you can view the Mona Lisa), and drop into a sidewalk cafe—but you'll need to provide your own espresso!

As these examples show, the Internet contains a wide variety of information, much of it free. Because of copyright issues, the free material is most likely to be material in the public domain, material for which the copyright has expired, or government documents. You won't find a free copy (legally, anyway) of the latest best seller on the Internet, but you will find on-line newspapers, catalogs for mail-order companies, movie review databases, and a wide variety of government publications. Some sites will have both WWW sites and gopher sites. If you have the choice, start with the WWW site—it's usually much more interesting.

Examples of a few of the governmental resources available on the Internet are:

- The White House home page, which provides information on the First Family, White House press releases, Presidential addresses, and links to other branches of government. At the White House home page, you can even take a virtual tour of the White House and check out the oval office at http://www.whitehouse.gov!

- The Library of Congress World Wide Web site at http://lcweb.loc.gov or http://www.loc.gov provides information about its collections as well as on-line materials. You can view Civil War photographs, see an image of a draft of the Gettysburg Address, or read the transcripts of interviews from the WPA Federal Writer’s Folklore project. The Library of Congress also supports THOMAS, a service which provides full text versions of legislation, House and Senate bills, the Congressional Record, and daily proceedings of the House and Senate at http://thomas.loc.gov/home/thomas.html.

If you don’t have WWW access, the Library of Congress MARVEL is a gopher-based system that provides links to a large collection of information from the Federal government, including full-text copies of Federal legislation and Congressional publications. LC MARVEL also provides links to State and foreign government gopher sites at gopher://marvel.loc.gov:70/.

- The U.S. Department of Education WWW Home Page at http://www.ed.gov, which contains links to key federal education legislation, departmental reports and materials, and information on grant opportunities. While you’re at the ED site, be sure to visit the Home Page for the National Institute on the Education of At-Risk Students, where you will find information on research activities, grant
opportunities, and special projects sponsored by the Institute. Much of the material on the ED WWW is mirrored in a gopher site, so if you don't have WWW access, just gopher to gopher.ed.gov.

- The Educational Resources Information Center (ERIC), a federally funded national information system that provides access to an extensive body of education-related resources.

The ERIC Clearinghouse on Information and Technology (ERIC/IT), sponsor of the AskERIC Project, is one of 16 ERIC Clearinghouses nationwide which provide a variety of services, products, and resources at all education levels. The AskERIC Virtual Library contains selected resources for education and general interest, including lesson plans, ERIC Digests, ERIC publications, Internet guides and directories, and AskERIC InfoGuides at http://www.ed.gov/pubs/AboutERIC/.

The ERIC Clearinghouse on Urban Education (ERIC/CUE) provides information, including full-text reports, of special interest to urban educators at http://eric-web.tc.columbia.edu/.

- The Partnerships Against Violence Network (PAVNET) is a multi-agency coalition made up of the U.S. Departments of Agriculture, Education, Health and Human Services, Housing and Urban Development, Justice, and Labor. The PAVNET agencies have joined together to improve access to ideas and resources throughout the country.

The online components of PAVNET include descriptions of promising programs to prevent or combat violence; lists of organizations that can provide assistance such as training, onsite technical assistance, or information over the telephone on violence-related problems; and the names and addresses of government and private agencies which provide funding for violence prevention programs at gopher://cyfer.esusda.gov:70/11/violence/.

- The Children Youth and Family Education and Research Network (CYFERNet) gopher server, which is maintained by U.S. Department of Agriculture's Office of Research, Education, and Extension and the National Agricultural Library's Youth Development Information Center, provides information on child, youth, and family issues at gopher://cyfer.esusda.gov:70/ or gopher://ra.esusda.gov:70:/1/.

The strange looking text we've listed after each site for example, http://www.ed.gov/ or gopher.ed.gov is the site's “address” on the Internet. With this address, you can connect directly to the location. The address also provides a clue to the location of the site. For instance, sites ending in “gov” are government sites, those ending in “edu” tend to be universities, and ones with “com” at the end are commercial sites.

What Is the Catch?

If the idea of vast quantities of information online for free sounds a bit too good to be true—well, you're partly right. While we think that the benefits of using the Internet far outweigh any problems, you should realize that there are a number of traffic jams, roadblocks, potholes, and accidents just waiting to happen on the information superhighway. For example:

- The number of Internet users is increasing faster than the system can absorb them, and during peak periods you may encounter delays due to the volume of calls. If you're having trouble connecting to a site, try again very early in the morning, or very late at night.

- Using the Internet, particularly if you want to install and use the new graphical-interface WWW programs, isn't always easy. However, most commercial Internet providers supply easy-to-use installation software.

- Navigation through the Internet is not always straightforward. Trails may lead in circles and it can sometimes be frustrating trying to find the site you want. However, a
variety of search methods are available on the Internet, you can mark your favorite sites with "bookmarks," and you may find great sites by accident, so don't despair if you get lost!

- While there is a great deal of accurate, useful information available through the Internet, there is also a great deal of inaccurate and totally useless information. Remember, anybody can post anything somewhere on the Internet. Be sure to check the source of the information you acquire.

- If you are providing students with access to the Internet, be aware that there is a great deal of information on the Internet that is totally unsuitable for children. Monitor their access to the system.

And finally, remember that the Internet is changing daily. If you're reading this *Consumer Guide* more than a year after its publication date, you should probably toss it in the recycling bin, call (800) 424-1616, and see if an update is available!

********

This *Consumer Guide*, which was prepared by Judith Anderson, is part of a series published by the Office of Educational Research and Improvement. To be added to the *Consumer Guide* mailing list, send your name and address to *Consumer Guides*, OERI, U.S. Department of Education, 555 New Jersey Ave. NW, Room 610, Washington, DC 20208. *Consumer Guides* are also available on the Internet at gopher.ed.gov or http://www.ed.gov. This document is in the public domain and may be freely reproduced in part or in its entirety without permission. Please credit OERI.

AR 95–7026