ABSTRACT
        The Internet is a vast network of computers that connects
people and information all over the world. Children often know far more about
computers than their parents do. However, children need their parents'
involvement, experience, and judgment, whether the children are experienced
computer users or just getting started. This booklet provides parents with
basic information about how to use the computer to find information and
communicate with others. It describes what is needed to get started on the
Internet and points to some of the many interesting, helpful, and fun
resources available online for parents and children. The book discusses:
benefits of getting on the Information Superhighway; computer hardware and
software basics; choosing an Internet service provider or online service;
basics for exploring the World Wide Web and communicating with others on the
Internet; tips for safe Internet use--to ensure that children have safe,
productive, and enjoyable experiences on the Internet; encouraging
information literacy; supporting school use of technology; and sample
Internet sites. A glossary of computer and Internet terms is provided. (SWC)

Parents Guide to the

Internet

U.S. Department of Education

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THE WHITE HOUSE

WASHINGTON

A MESSAGE TO PARENTS
ABOUT THE INTERNET

As President, one of my top priorities is to ensure that our
children have the best education in the world. Vice President Gore
and I believe that one of the ways to accomplish this is to give
every child access to educational technology by the dawn of the
new century. This will require connecting every classroom to the
Internet by the year 2000, giving teachers the training they need
to use technology effectively, expanding the supply of high-quality
educational software, and increasing the number of modern,
multimedia computers in the classroom. For the first time in our
Nation's history, all of our children will have access to the same
universe of knowledge and the opportunity to acquire the skills
they need to succeed in the high-tech workplace of the 21st
century.

It is critical that our children have your guidance as they
learn to use the Internet. Although children can use the Internet
to tap in to the Library of Congress or download pictures from the
surface of Mars, not all of the material on the Internet is appro-
priate for children. As a parent, you can guide and teach your
child in a way that no one else can. You can make sure that your
child's experience on the Internet is safe, educational, and
enjoyable.

Of course, not all of us are familiar with computers and the
Internet. Although Vice President Gore coined the term "informa-
tion superhighway" more than 17 years ago, I am a novice when it
comes to high tech. To help you get started, I asked Secretary
Riley and the U.S. Department of Education to prepare a *Parents
Guide to the Internet*. This will give you the information you
need to help guide your child's exploration of the vast resources
on the Internet.

I commend you for helping to give America's children this
unprecedented opportunity to learn and to grow. Working together,
we can create a brighter future for them and for our nation.

Bill Clinton

Parents Guide to the Internet

U.S. Department of Education
Washington, DC

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FOREWORD

More than ever before, a high-quality education offers Americans the best path to a rewarding career and a fulfilling quality of life. As citizens of the Information Age, we must include access to technology among the elements of an education that is based on high standards of achievement and discipline. But incorporating technology into the Nation's schools is too big a job for the schools to tackle on their own. Teachers need support and involvement from parents, grandparents, business, cultural institutions and others in order to make effective in-class use of the wonders of technology.

This Parents Guide to the Internet is intended to help parents -- regardless of their level of technological know-how -- make use of the on-line world as an important educational tool. The guide cuts through the overwhelming amount of consumer information to give parents an introduction to the Internet and how to navigate it. I am especially pleased that the guide suggests how parents can allow their children to tap into the wonders of the Internet while safeguarding them from its potential hazards.

This guide was produced with the sort of collaborative effort that our schools need in order to succeed. U.S. Department of Education staff worked with leaders from parent and education organizations, the private sector, nonprofit groups and others in order to give you a clear and comprehensive overview of the Internet and its vast educational potential. In the same way, schools need support from every corner of the community in order to provide our students with a high-quality education. I encourage you to find ways for families, employers and civic organizations to pitch in and improve your local schools.

Richard W. Riley
Secretary of Education

Contents

How To Use This Booklet

For many of us, computers are exciting, but puzzling. Our children know far more about computers than we do! How do we bridge the gap between what our children know and what we know to be able to assist them with their school work and help them get ready for the information age of the next century? After all, being able to use technology is rapidly becoming a requirement for being an informed citizen and a productive worker.

Whether your children are experienced computer users or just getting started, they need your involvement, your experience, and your judgment. This booklet is designed to provide you with basic information about how to use the computer to find information and communicate with others. It tells you what you need to get started on the Internet—a vast network of computers that connects people and information all over the world—and points you to some of the many interesting, helpful, and fun resources available online for parents and children.

You'll find that the vocabulary of computers is taken from sources familiar to us. Computer language is borrowed from travel: *superhighway, engine, cruising, surfing, navigating;* from restaurants: *menu, server,* and from the environment: *Web, mouse, windows, site.* Computer vocabulary can also be descriptive of the movement or sound made to do something on the computer: to "click" or "drag" the mouse, for example. Other words come from words used for medieval manuscripts: *icon, scroll, cursor.* In the following sections, you'll find several key computer terms in italics. They are defined in the glossary at the end of this booklet.

You can see there is a great deal of variety in the thinking behind computers. Since the computer world is constantly growing and changing, there is some variety among different systems and software, as well. As you begin using the computer, you may notice some differences between instructions given in this booklet and the system you use. Feel free to experiment and explore.

You might want to use this booklet as a tutorial to help you learn. You can use the sites suggested in various sections to try out the computer. Remember, if you have questions, your children may know the answers. Don't hesitate to ask them. That's how we encourage our children to learn. You will find that your children, local librarians, friends, teachers, and others familiar with computers will be able to help.

Have a pleasant and safe journey down the information superhighway!

What Is the Information Superhighway?

When we talk about getting online, we mean being connected to the *Internet*—a giant network of computers that connects people and information all over the world. The Internet has a lot in common with other forms of communication:

World Wide Web

- Like the U.S. Postal Service, the Internet allows anyone who knows your Internet address to send you a letter. (It's called electronic mail, or *e-mail* for short).

- Like the telephone, the Internet allows you to "chat" with other people by participating in online discussion groups.

- Like the library, the Internet contains information on almost any topic you can imagine in many formats, including books, articles, videos, and music recordings.

- Like the newspaper, the Internet can give you new information every day, including world news, business, sports, travel, entertainment, and ads.

In addition to words, one part of the Internet—the *World Wide Web* (often shortened to WWW or the Web)—is especially interesting to people because it includes pictures and sounds.

A Short History Lesson

The Internet began in the 1960s as a U.S. Department of Defense communication network. Soon after, university researchers and professors began to use it to communicate with others in their fields. Internet use really took off in the early 1990s with the arrival of the Web, which made it easier to find and view information online. Today, millions of people throughout the world are connected to the Internet. No one—no country, organization, or company—is in charge of the Internet; it's growing and being changed by its users every day.

Benefits of Getting on the Information Superhighway

A computer that is connected to the Internet allows you to turn your home, community center, local library, or school into a place of unlimited information and communication. The Internet can help your family:

- **Find educational resources**, including up-to-the minute news, copies of important documents and photos, and collections of research information on topics ranging from weather conditions to population statistics.

- **Get help with homework** through online encyclopedias and other reference materials and access to experts.

- **Increase reading skills** by providing access to interesting materials and suggestions for additional reading.

- **Improve technology and information skills** necessary to find and use information, solve problems, communicate with others, and meet a growing demand for these skills in the workplace.

- **Connect with places around the world** to exchange mail with electronic pen pals and learn about other cultures and traditions.

- **Locate parenting information** and swap ideas with other families.

- **Learn and have fun together** by sharing interesting and enjoyable experiences.

In the next few sections, we'll discuss what you need to start using the Internet.

Starting the Engine

It's not necessary to buy a computer to begin exploring the Internet. You may be able to get started using free facilities in your community. Try:

- **A public institution** such as a library or community center. Some public housing complexes also have free computer centers with online access for their residents.

- **Your children's school** or a community college or university, if you're taking a class.

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- **Your employer,** who may encourage you to learn new online skills by using company computer equipment for a limited amount of time each day.

- **Your local shopping mall,** which may have a room with computers for use by those visiting the mall.

Some communities sponsor *freenets* to give all their members free access to a wealth of information. To see if there is a freenet in your area, have someone with Web access go to http://www.lights.com/freenet/.

Understanding the Basics

To take advantage of online offerings, you need to use a computer set up with certain *hardware* (equipment) and *software* (instruction programs for the computer) as well as online access. Internet essentials include:

- **A computer** with a monitor (screen), a keyboard for typing text and numbers onto the screen, and a *mouse*, (a small hand-controlled device for pointing and clicking to select choices on the screen). You may also want a printer, which will allow you to get paper copies of what you see on a screen.

- **A modem** (either inside your computer or as a separate piece of equipment outside) to allow your computer to communicate with other computers through the phone line. Communications software works with the *modem* to give the computer instructions for connecting to the online world.
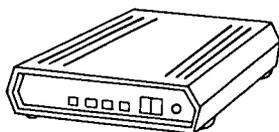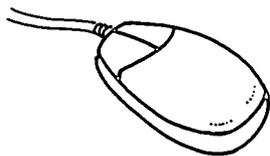
- **A connection to the Internet** through either an *Internet Service Provider (ISP)* or an *online service.* An ISP simply offers connection to the Internet, while an online service provides additional services (See below "Internet Service Provider or Online Service: Which is Right for My Family?").

- **Software for using the Internet** (may already be provided on the computer or through the Internet connection). To move around on the Web, you'll need *Web browser* software such as Netscape Navigator or Communicator or NCSA Mosaic. You'll also need software such as Eudora or cc:mail for sending and receiving electronic mail.

Internet Service Provider or Online Service: Which Is Right for My Family?

An *Internet Service Provider* (ISP) provides you with the software you need to get on the Internet. ISPs include local and regional companies, nationwide providers such as UUNet and Netcom, and telecommunications companies such as AT&T and MCI. If your family is ready to explore the Internet independently, an ISP can be a wise choice. Ask a friend with Web access to download and print for you a list of ISPs for your area using the Web address http://www.thelist.com.

Online services such as America Online and Prodigy offer members partial or full Internet access along with a number of additional resources, such as travel planning, financial management services, children's areas, and *chat rooms* in which several individuals participate in a group discussion about a selected topic at the same time. Although many of the resources available through online services can also be found on the Internet, online services organize

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them attractively and make them easy for you and your children to access with the click of a mouse. Within their own resource areas, online services can also exercise more control over what their members see and do by blocking access to certain sites and monitoring communication, particularly in children's areas.

Before you choose, you should consider:
- **Cost.** Will you pay a monthly fee for unlimited usage or are charges based on the actual time online? Will you pay the price of a local call or a long-distance call each time you go online?

- **Assistance.** If you have trouble with your connection, what kind of telephone help (sometimes called technical support) is available?

- **Contract.** Some ISPs and online services offer free trial periods or allow you to get a refund for the unused part of a service contract. This can be helpful as you experiment to find the best arrangement for your family.

Be aware that while you're online, the modem will be using your phone. You won't be able to make or receive any telephone calls until you disconnect from the Internet or unless you have a separate phone line for your modem.

Buying the Set Up You Need

If you're thinking about buying a computer set up to go on the Internet, keep these considerations in mind:

Talk with your family and decide how the computer will be used. Will you be using the computer mostly for typing (word processing) school assignments, sending e-mail, and browsing the Web? Do you plan to purchase additional software and games that will require a *CD-ROM* drive? Do you need sound and video capabilities for games and some World Wide Web sites, or can you do without these functions for a while?

Do your homework. You can get guidance about buying a computer from many sources:
- Consumer guides, computer magazines, and books available at the library.
- Family members, friends, coworkers, and computer experts at your child's school or your workplace.
- Workshops or classes sponsored by community colleges, libraries, and computer stores.
- Computer user groups.

Become familiar with computer features so you can decide what makes sense for your family. A computer's capabilities depend on:
- the size of its memory, measured in megabytes (MG) of RAM (random access memory),
- the speed of its processor, measured in megahertz (MHz),
- the size of its hard drive, measured in mega bytes or gigabytes (GB), and
- the speed of its modem, measured in kilobits per second (Kbps).

The greater these capabilities, the more quickly you'll be able to move around the Internet, look at Web sites, save, and print files—the more expensive you'll find the set up.

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Decide whether to invest in new or used equipment. When you buy a new computer, you'll generally receive everything you need to go online immediately. You'll probably be advised to buy the biggest hard drive, the most memory, and the fastest processor and modem that you can afford, so your computer has enough capacity to work well now and in the future. You'll spend somewhere between $1,200 and several thousand dollars.

For several hundred dollars, in contrast, you may be able to buy an older model used computer and a printer, and add a modem and communications software. This set up may be all your family needs to write letters and school reports, use e-mail, and browse the Web. Of course there will be tradeoffs in terms of speed and performance, and you may run a higher risk of equipment breakdown. Some stores specialize in refurbishing used equipment, or inspecting it and replacing worn parts. If you take this route, find out what parts are new before you buy and ask whether you can get a warranty. Also, with any used set up, make sure that any software that is included is licensed, rather than an illegal copy.

Add upgrades over time. You can buy additions you want or need later and install the upgrades yourself as you learn more about working with computers. Before you buy software, ask someone you know with Web access to check a site like **Tucows** http://www.tucows.com or **Stroud** http://www.stroud.com to learn what free and low-cost programs are available through the Internet.

Navigating the Journey

On any trip, you need a map with guideposts to navigate well. This section offers some basics to help you begin to explore the World Wide Web and communicate with others on the Internet.

Surfing the Net or Cruising the Superhighway

When you go on the Internet, you may have a specific destination in mind, or you may wish to browse through the Web, the way you would browse through a library or a catalog, looking for topics or things that interest you. This browsing is often called surfing the Net or . cruising the Superhighway. There are several ways to get around on the Web.

- **Using Web addresses.** To get to a special destination, such as one of the sites described in Sites Along the Way on p. 11, you'll type in an *internet address* in the space provided on the Web browser. Web addresses, sometimes called uniform resource locators (*URL*), begin with http://, which stands for *hypertext transfer protocol.* After you type in the Web address, it may take awhile for the site's *home page* to appear on the screen, especially if it includes many pictures. Once it does, you'll probably see several choices you can click your mouse on to take you further into the site. (If you type in an address incorrectly, or too many people are trying to use a site at once, you'll get an error message on your computer screen. Just try again).

- **Following links.** Many sites include *hypertext links* to other sites with related content. When you click on one of these highlighted areas, your computer will connect to another Web site without your having to know or type its address.

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- **Using search engines**. *Search engines* are programs that you can select from your Web browser to enable you to search the Internet by keywords or topics. If you or your child are interested in finding out more about Jackie Robinson, for example, you can click on a search engine, enter his name, then pull up several Web sites for further exploration.

Using the Internet To Do a School Project

Assignment: Write a 2–3 page essay on the life of Jackie Robinson. Include facts about his life, his greatest accomplishments, and why you believe he deserves a place in history.

Here's how you can find the information to do this project:

- Sign onto the Internet; once connected, *click* the mouse on the search key.

- From the *menu*, select a *search engine* based on your topic. (Here we have selected AltaVista).

- At the subject box, type in Jackie Robinson and *click* on the search key.

Netscape [AltaVista Search: Simple Query Jackie Robinson]
File Edit Go Bookmarks Options Directory Window Help

Location http://www.altavista.digital.com/

Search the Web and Display the Results in Standard Form

Jackie Robinson°   Submit
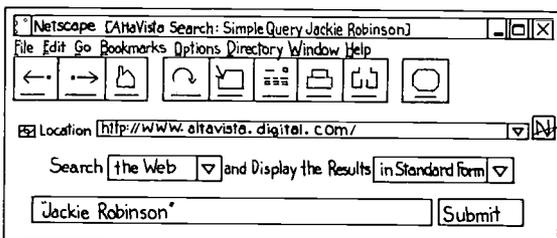
- Review search results: "Found 1 *category* and 19 *site* matches for Jackie Robinson."

- Select one or all site matches (all sites are underlined). Each *site* has additional *sites* for more information.

- Print or *download* all the information you need for the essay.

- Use this information to write the report.

Examples of search engines include:
Infoseek
http://www.infoseek.com

Webcrawler
http://webcrawler.com

Yahoo
http://www.yahoo.com

Yahooligans (for children)
http://www.yahooligans.com

You can find these search engines and many more at the All-in-One site http://www.albany.net/allinone/ or your Web browser's *home page*. If a search on one doesn't produce good results, try another.

- **Using bookmarks**. As you look through the Internet, you'll probably find sites you'll want to revisit. If so, you can create a *bookmark* by saving the address on your computer, usually with just a click of the mouse. The help feature on your Web browser can give you specific instructions. When you want to return to the site, you'll just click its address on your list.

Saving Information from the Internet

In your travels on the Internet, you'll probably come across information you want to keep. You can either make a paper or "hard" copy directly from the Web, or you can *download* a copy of the information onto your own computer.

- **Printing a copy**. While you're looking at the information you wish to print, you can click on the print command or *icon*, and the printer connected to the computer will print a copy for you. Using the mouse, you can also highlight the information you would like to print and click on the print command or icon. Text usually prints quickly, but graphics can take a long time. If you don't need the images, you may wish to check your online help feature to see how to remove them before printing.

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- **Downloading a copy.** If you'd like to be able to use the information you've found on the Internet on your own computer (perhaps to include it in a report or send it by e-mail to someone else), you can use your mouse to click on a command or icon to download it. Be careful, though. When you travel online, you can bring back *viruses,* or programs that can destroy your personal files and software. For protection, it's important to buy—and regularly update—an anti-virus program. For added safety, download files and e-mail messages to a disk and do a virus check before copying the information to the hard drive inside your computer.

Electronic Communication

The most popular online activity is communicating with individuals and groups through e-mail, listserv, and Usenet newsgroups.

- **E-mail.** You and your children may want to send notes to friends and family. To send an e-mail message, you'll need the e-mail address of the person to whom you are sending a message. E-mail addresses often start with a version of the person's name and continue with the "at" sign (@), the Internet service provider's name (usually abbreviated), a period (called "dot"), and a three-letter extension. Extensions include *com* for businesses, *edu* for educational institutions, *gov* or *mil* for the federal government, o*rg* for nonprofit organizations, and *net* for networks. Make sure that when you type an address, you key it exactly as it is given to you—copy the capitalization, spacing, and punctuation. Some examples of e-mail addresses are:
jdoe@ed.gov
cbass@school.edu
sgreene@nonprofit.org

> **Important:** It's a good safety precaution to make up names and never use your real name in order to make it difficult for strangers to contact you and other family members by phone or in person.

- **Listservs.** You can use e-mail to participate in discussion groups focused on topics that interest you. When you put your name on a *listserv,* you can read all the messages sent to members of the group, and you, too, can send messages to the entire group. Each group has an administrator who sets the rules for how the group will operate. If the listserv is moderated, the administrator will also keep the discussion on track and make sure participants treat each other courteously, or follow *Netiquette.* A list of listservs and the e-mail addresses for subscribing to them is available from http://www.list.com/.

- **Usenet newsgroups.** Usenet is a system of thousands of special interest groups that allows people to post messages for anyone else to read. Readers can respond by posting a general message or sending an e-mail to the author of an earlier message. Unlike listservs, *usenet newsgroups* do not require people to subscribe; however, newsgroups must be registered with Usenet. You can probably find newsgroups through your Internet Service Provider. Most ISPs let you search for newsgroups that interest you by using keywords. Try "parenting," for example. Because Usenet newsgroup messages can take up a lot of space, ISPs aren't able to carry all newsgroups. If you know of a newsgroup that you can't find through your ISP, ask to see whether it can be added.

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Caution: Most newsgroups are not moderated; no one keeps the discussion focused on the topic or exercises control over inappropriate behavior. Some topics are not suitable for children.

Children with Special Needs

Children with special needs can often benefit from the use of assistive technology to support communication, self-expression and positive social interaction. Parents and teachers tell stories of children who overcome obstacles and achieve success online—the child with a writing disability who wins second place in a nationwide writing contest or the teenager with a learning disability who becomes an electronic pen pal with a scientist across the country who shares his fascination with fossils

Technology is available to help people with special needs. If your child has a mobility or sensory impairment, for example, you may decide to replace the mouse with another device for giving the computer commands. A joystick, for instance, can be controlled with the entire hand. Other devices require only a single finger for control. Magnifying the screen can help individuals with low vision, while voice synthesis technology can read screen information to those who are blind.

The ERIC Clearinghouse on Disabilities and Gifted Education operated by the Council for Exceptional Children offers information about disabilities and accommodations. Call 1–800–328–0272 or TTY 703–264–9449, send e-mail to ericec@cec.sped.org, or visit the Web site http://www.cec.sped.org/ericec.htm.

Other Web sites are also helpful. For example, Winners on Wheels is a team-oriented youth program that uses learning and fun to promote self-esteem and independence in children with disabilities http://www.wowusa.com/. Visit http://www.isc.rit.edu/~easi/ which provides information on adaptive computer technology for individuals with disabilities. Starbright, another site, applies the latest advancement in technology to positively affect the lives of disabled children http://www.starbright.org.

Tips for Safe Traveling

Like most parents, you probably have rules for how your children should deal with strangers, which TV shows, movies, and videos they're allowed to watch, what stores they're allowed to enter, and where and how far from home they're allowed to travel. It's important to make similar rules for your children's Internet use and to be aware of their online activities.

You'll also want to make sure that surfing the Net doesn't take the place of homework, social activities, or other important interests. You might even set an alarm clock or timer if you or your child tend to lose track of time. This section offers tips for ensuring that your children have safe, productive, and enjoyable experiences on the Internet.

Interacting with Others on the Internet

Just as we tell our children to be wary of strangers they meet, we need to tell them to be wary of strangers on the Internet. Most people behave reasonably and decently online, but some are rude, mean, or even criminal. Teach your children that they should:

- **Never** give out personal information (including their name, home address, phone number, age, race, family income, school name or location, or friends' names) or use a credit card online without your permission.

- **Never** share their password, even with friends.

- **Never** arrange a face-to-face meeting with someone they meet online unless you approve of the meeting and go with them to a public place.

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- **Never** respond to messages that make them feel confused or uncomfortable. They should ignore the sender, end the communication, and tell you or another trusted adult right away.

- **Never** use bad language or send mean messages online.

Also, make sure your children know that people they meet online are not always who they say they are and that online information is not necessarily private.

Limiting Children to Appropriate Content on the Internet

Even without trying, your children can come across materials on the Internet that are obscene, pornographic, violent, hate filled, racist, or offensive in other ways. One type of material—child pornography—is illegal. You should report it to the Center for Missing and Exploited Children by calling 1–800–THE LOST (843–5678) or going to http://www.missingkids.org/.

While other offensive material is not illegal, there are steps you can take to keep it away from your children and out of your home.

- Make sure your children understand what you consider appropriate for them. What kinds of sites are they welcome to visit? What areas are off limits? How much time can they spend, and when? How much money, if any, can they spend? Set out clear, reasonable rules and consequences for breaking them.

- Make online exploration a family activity. Put the computer in the living room or family room. This arrangement involves everyone and helps you monitor what your children are doing.

- Pay attention to games your older child might download or copy. Some are violent or contain sexual content.

- Look into software or online services that filter out offensive materials and sites. Options include stand alone software that can be installed on your computer, and devices that label or filter content directly on the web. In addition, many Internet Service Providers and commercial online services offer site blocking, restrictions on incoming e-mail, and children's accounts that access specific services. Often, these controls are available at no additional cost. Be aware, however, children are often smart enough to get around these restrictions. Nothing can replace your supervision and involvement.
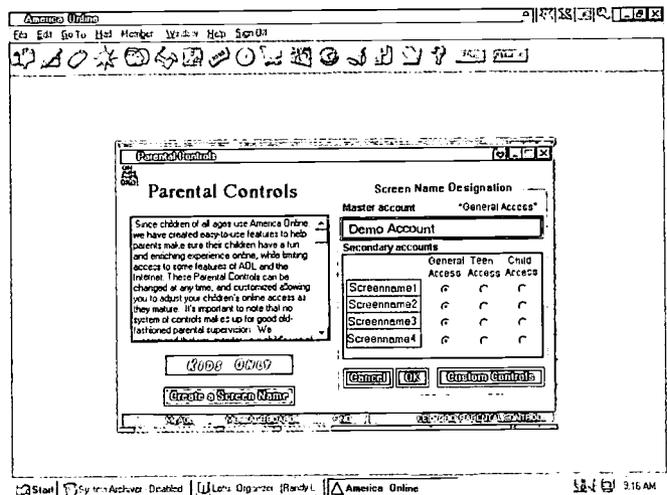
- Find out what the Internet use policy is at your local library.

- Ask about the Internet use policy at your child's school.

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Encouraging Information Literacy

Show your children how to use and evaluate information they find on the Internet. Not all online information is reliable. Some individuals and organizations are very careful about the accuracy of the information they post, but others are not. Some even mislead on purpose. Remind your children not to copy online information and claim it's their own or copy software unless it is clearly labeled as free.

Help children understand the nature of commercial information, advertising, and marketing, including who created it and why it exists. Encourage them to think about why something is provided and appears in a specific way. Steer your children to noncommercial sites and other places that don't sell products specifically to children. It is important to be aware of the potential risks involved in going online, but it is also important to keep them in perspective. Common sense and clear guidelines are the place to start.

Supporting School Use of Technology

You can encourage your children's online activities at home and at school. Talk with your children, school staff, and other parents about what online experiences are already part of classroom activities and what is being planned. Get involved by:

- Helping schools get technology, including used equipment from government agencies or businesses. For information on computer recycling, visit http://www.microweb.com/pepsite/Recycle/recycle_index.html and the Computer Recycling Project at http://www.voicenet.com/~cranmer/recycling.html.

- Helping your school and community participate in **NetDay**, a grassroots volunteer effort to wire schools so their computers are networked and have Internet access http://www.netday.org/.

- Sharing your expertise by volunteering in the classroom or organizing training for teachers and other parents.

- Asking your local PTA to set up a "family night" on computers, technology, and the Internet.

- Helping schools develop "rules of the road" that are discussed with students before they go online.

- Joining the school's technology planning group.

Special Opportunity for Schools

In May 1997, the Federal Communications Commission (FCC) approved a rule (known as the E-rate) giving schools 20 to 90 percent discounts in access charges to the Internet and telecommunications services, including wiring school buildings for the Internet. (The amount of the discount depends on how many low-income students a school serves and whether it is located in a rural, suburban, or urban area). Starting in January 1998, more than $2 billion a year will be available for the discounts (see http://www.fcc.gov/learnnet/ and http://www.ed.gov/Technology/ for more information).

To apply for a discount, a school must have a technology plan that explains how the school will integrate technology into the curriculum. The plan must also address hardware, software, training, and maintenance issues. As a parent, you can play an active role in helping your school develop a technology plan.

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Sites Along the Way

This section offers a sampling of some Internet sites waiting for you and your children. (Addresses are current as of November 1997, but may change at any time. If an address does not work, use the search feature on your Web browser to enter the site name and get the updated link).

Family-Friendly Places

- **The Franklin Institute Science Museum** http://sln.fi.edu/ offers online exhibits on an array of science and technology topics.

- Find good books to read, including Newbery and Caldecott Award Winners, at the **American Library Association** site http://www.ala.org/parents/index.html. This site includes information about authors, KidsConnect (for help locating all the information online), and educational games.

- Watch Live from Mars, audio and video transmissions of the Pathfinder's explorations, at **NASA's Quest Project** site http://quest.arc.nasa.gov. Find more adventures in space, including views from the Hubble Space Telescope, at a different NASA site http://spacelink.nasa.gov.

- Climb Mt. Everest, explore inside the Pyramids, and go on other electronic field trips with the **Public Broadcasting System** at http://www.pbs.org/. Preschool children can enjoy children's programming here, elementary school children can practice story telling, and teenagers and adults can take telecourses.

- Join an interactive exploration of the oceans, on earth and beyond, with the **Jason Project** http://www.jasonproject.org.

- Puzzle over optical illusions, take memory tests, and conduct experiments, online and off, at the **Exploratorium** http://www.exploratorium.edu.

- Enjoy materials from the **Library of Congress** http://www.loc.gov, including exhibits on topics ranging from ballet to Jelly Roll Morton, Native American flutes to Thomas Jefferson's pasta machine.

- Read stories with your children, let them add to the stories told around the Global Campfire, and find links to other good family sites at **Parents and Children Together Online** http://www.indiana.edu/~eric_rec/fl/pcto/menu.html.

- Get educational resources through distance learning from **Healthlinks** http://www.mcet.edu/healthlinks/index.html.

- Find information on blocking software from **Netparents** at http://www.netparents.org.

- Try the **Air Force's** new family-friendly site for kids at http://www.af.mil/aflinkjr.

Megasites (extensive links)

- **50+ Great Sites for Kids & Parents**, from the American Library Association (ALA) enables preschool through elementary school children to explore rainbows, black history, castles for kids, award-winning news reported by children for children, the Kids Web Page Hall of Fame, to say nothing of watching dolphins, learning lullabies, and much more http://www.ssdesign.com/parentspage/greatsites/50.html.

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- **Jean Armour Polly's Fifty Extraordinary Experiences for Internet Kids** invites viewers to make their own home page, visit the Kremlin, look inside the human heart, take Socks' special VIP tour of the White House, and make a boat trip around the world http://www.well.com/user/polly/ikyp.exp.html.

- **Berit's Best Sites for Children** helps you learn about earthquakes, visit the imagination factory and make junk mail jewelry, descend into a volcano, tour a human cell, go on a world "surfari," solve a crime, and fly a kite http://db.cochran.com/db_HTML:theopage.db.

- **Steve Savitzky's Interesting Places for Kids** is an award-winning site in its own right with many unusual links http://www.crc.ricoh.com/people/steve/kids.html.

Online Reference Material

- **The American Academy of Pediatrics'** http://www.aap.org has a wide variety of information for parents concerning their children's health and well-being; covering topics such as immunizations, sleep problems, newborn care, and television.

- The **National Urban League** http://www.nul.org is a useful resource for tracking programs and events related to African-American issues. It is a rich reference area for students, parents, teachers and history buffs.

- **AskERIC**, a free question-answering service provided by the Educational Resources Information Center (ERIC), invites people to submit their questions about education, parenting, and child development to askeric@askeric.org for an e-mail response within 2 working days.

- **B.J. Pinchbeck's Homework Helper** is a wonderful guide to encyclopedias, dictionaries, reference works, and other resources on a great variety of subjects http://tristate.pgh.net/~pinch13/. The enthusiasm of its 10-year-old creator adds appeal to everything from the Ultimate White Pages to Bugs in the News.

- **My Virtual Reference Desk** http://www.refdesk.com offers dozens of links— to dictionaries, encyclopedias, reference/research materials, thesauruses, atlases, sports, entertainment, and much more—as well as a search engine for locating more information.

- **The Internet Public Library: Reference Center** http://www.ipl.org/ref provides an "ask a question" feature and a teen collection, as well as sections on reference, arts and humanities, science and technology, and education.

Sites for Parents and Parent Groups

- **The Children's Partnership** http://www.childrenspartnership.org offers, for free, the full text of its useful guide, **The Parents' Guide to the Information Superhighway: Rules and Tools for Families Online**, prepared with the National PTA and the National Urban League. A printed version of the guide, which provides common-sense guidance and encouragement for parents and tips and computer activities for children, is available for $8 from The Children's Partnership, 1351 Third Street Promenade, Suite 206, Santa Monica, CA 90401–1321; 310–260–1220.

- **The National Parent Information Network** http://npin.org cosponsored by the ERIC Clearinghouses on Elementary and Early Childhood Education and Urban Education, includes extensive articles on parenting, listservs, and links to more than 100 sites on education, health and safety, family issues and interests, and parenting and development of children from infancy to adolescence.

- At the **National PTA** site http://www.pta.org/ learn about PTA education programs and participate in a discussion group, chat room, or bulletin board. The site also includes links to sites of many organizations concerned with children.

- **The Family Education Network** http://www.familyeducation.com offers hundreds of brief articles on parenting, links to local sites, and discussion boards that connect parents with online experts.

- **The Partnership for Family Involvement in Education** http://www.ed.gov/PFIE sponsored by the U.S. Department of Education, highlights school-community-business partnerships and includes a calendar of events. At the home page for the Department of Education http://www.ed.gov, parents will find information about the President's education initiatives, college financial aid, and parenting publications, along with links to other useful education sites.

- **The National Coalition for Parental Involvement in Education** http://www.ncpie.org/ provides a catalog of resources available from all its member organizations.

- **The National Coalition of Title I/Chapter 1 Parents** 202-547-9286 helps economically disadvantaged parents develop skills to enhance the quality of their children's education.

- **Parent Soup** http://www.parentsoup.com includes an archive of answers to questions asked of pediatricians and child development experts and advice about helping your children succeed in school.

- **The Parents at Home** site http://advicom.net/~jsm/moms, especially for at-home parents, offers e-mail pen pals, a booklist, and links to children's sites.

- **Magellan** http://www.mckinley.com/ magellan uses a rating scale to evaluate parenting sites. To look at the ratings or follow the links, select Reviews, Life & Style, Family, and Parenting.

- **The ASPIRA Association, Inc.** http://www.incacorp.com/aspira highlights its two national parent involvement programs—ASPIRA Parents for Educational Excellence Program (APEX) and Teachers, Organizations, and Parents for Students Program (TOPS). Each program provides a Spanish/English curriculum that strives to empower Latino parents and families.

- **The White House** web site http://www.whitehouse.gov/WH/New/Ratings describes a strategy to involve government, industry, parent, and teachers in putting together a rating system so parents can define material they consider offensive and protect their children effectively.

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Glossary

ADDRESS: The unique location of an information site on the Internet, a specific file (for example, a Web page), or an e-mail user.

BOOKMARK: A saved link to a Web site that has been added to a list of saved links so that you can simply click on it rather than having to retype the address when visiting the site again.

CD-ROM (Compact Disk Read Only Memory): A computer disk that can store large amounts of information and is generally used on computers with CD-ROM drives.

CHAT ROOM: A location on an online service that allows users to communicate with each other about an agreed-upon topic in "real time" (or "live"), as opposed to delayed time as with e-mail.

DOWNLOAD: To copy a file from one computer system to another. From the Internet user's point of view, to download a file is to request it from another computer (or from a Web page on another computer) and to receive it.

E-MAIL (Electronic Mail): A way of sending messages electronically from one computer to another, generally through a modem and telephone line connected to a computer.

FREENET: A community network that provides free online access, usually to local residents, and often includes its own forums and news.

HARDWARE: A term for the nuts, bolts, and wires of computer equipment and the actual computer and related machines.

HOME PAGE: The site that is the starting point on the World Wide Web for a particular group or organization.

HYPERTEXT LINK: An easy method for retrieving information by choosing highlighted words or icons on the screen. The link will take you to related documents or sites.

HYPERTEXT TRANSFER PROTOCOL: A standard used by World Wide Web servers to provide rules for moving text, images, sound, video, and other multimedia files across the Internet.

ICON: A small picture on a Web page that represents the topic or information category of another Web page. Frequently, the icon is a hypertext link to that page.
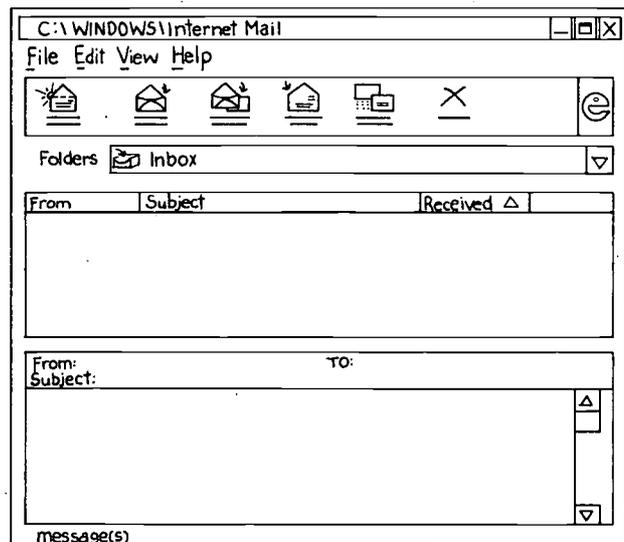
INTERNET: A worldwide collection of computer networks that allows people to find and use information and communicate with others.

ISP (Internet Service Provider): A generic term for any company that can connect you directly to the Internet.

MODEM: A device that allows computers to communicate with each other over telephone lines or other delivery systems by changing digital signals to telephone signals for transmission and then back to digital signals. Modems come in different speeds: the higher the speed, the faster the data is transmitted.

MOUSE: A small device attached to the computer by a cord, which lets you give commands to the computer. The mouse controls an arrow on the computer screen and allows you to point and click to make selections.

NETIQUETTE: Rules or manners for interacting courteously with others online (such as not typing a message in all capital letters, which is equivalent to shouting).

ONLINE SERVICE: A company such as America Online or Prodigy that provides its members access to the Internet through its own special user interface as well as additional services such as chat rooms, children's areas, travel planning, and financial management.

SEARCH ENGINE: A program that performs keyword searches for information on the Internet.

SOFTWARE: A computer program or set of instructions. System software operates on the machine itself and is invisible to you. Application software allows you to carry out certain activities, such as word processing, games, and spreadsheets.

URL (Uniform Resource Locator): The World Wide Web address of a site on the Internet. For example, the URL for the White House is http://www.whitehouse.gov.

USENET NEWSGROUPS: A system of thousands of special interest groups to which readers can send or "post" messages; these messages are then distributed to other computers on the network. Usenet registers newsgroups, which are available through Internet Service Providers.

VIRUS: A piece of programming code inserted into other programming to cause some unexpected and usually undesirable event, such as lost or damaged files. Viruses can be transmitted by downloading programming from other sites or be present on a diskette. The source of the file you're downloading or of a diskette you've received is often unaware of the virus. The virus lies dormant until circumstances cause its code to be executed by the computer.

WEB BROWSER: A software program that lets you find, see, and hear material on the World Wide Web, including text, graphics, sound, and video. Popular browsers are Netscape, and AltaVista. Most online services have their own browsers.

WORLD WIDE WEB (Web or WWW): A hypertext-based system that allows you to browse through a variety of linked Internet resources organized by colorful, graphics-oriented home pages.

Acknowledgments

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Reviewers

American Academy of Pediatrics
http://www.AAP.org

American Library Association
http://www.ALA.org

ASPIRA
http://www.incacorp.com/aspira

The Children's Partnership
http://www.childrenspartnership.org

The National PTA
http://www.PTA.org

The National Coalition of Title I/Chapter 1 Parents
National Parent Center
202-547-9286

The National Parent Information Network
http://www.npin.org

The National Urban League
http://www.nul.org

The Partnership for Family Involvement in Education
http://www.ed.gov.PFIE

Project OPEN
http://www.isa.net/project-open

New from the U.S. Department of Education

Parents Guide to the Internet

The *Parents Guide to the Internet* is designed to help parents make the best use of the online world as an educational tool. The *Guide* cuts through an overwhelming amount of consumer information to give parents an introduction to the Internet and how to navigate it. This book suggests how parents can allow their children to tap into the wonders of the Internet while safeguarding them from its potential hazards. Other information includes

- identifying community locations that offer free Internet access;
- making sense of computer and Internet terminology;
- searching for information online;
- protecting children from offensive material;
- teaching children about online safety;
- using technology to benefit children with special needs;
- finding family-friendly Internet sites;
- selecting a home computer; and
- choosing an Internet Service Provider or Online Service.

To request your free copy of the *Parents Guide to the Internet*, call the U.S. Department of Education on 1-800-USA-LEARN.

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