



# FAMILIES in the fast lane:

Making the most of the Internet

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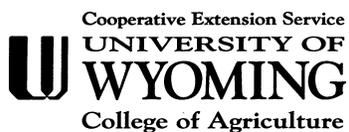
*Dedicated to my son, Jeremiah, for all he taught me about the Internet.*

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The information superhighway can lead children and families on the high road to pleasures and adventures. Yet like any interstate or country road, the system of electronic networks that links computers worldwide also holds perils for the unwary traveler. Families that understand the opportunities and risks are best prepared to enjoy their trips on this expanding highway of information and adventure.

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### **CYBERTalk: What to do on the Internet**

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The terms “information superhighway” and “cyberspace” describe a network of interconnected computers that allows users one-stop entry to many kinds of services. The U.S. Department of Education *Parent’s Guide to the Internet* suggests a few uses:

#### **Post Office**

Messages can be sent electronically via e-mail (text and print or graphic attachments) to anyone connected to an Internet mail system.

#### **Phone**

Users can engage in discussion groups (sites for topic comment), chat groups (interactive discussion groups), or list-serves (groups of e-mail receivers and/or senders with common interests). A searchable index of mailing lists is found at Tile.Net.

#### **Library**

Families can access books, articles, videos, and recordings found at sites ranging from private files to TV stations, colleges, and commercial interests to the Library of Congress. Individual Web sites are interlinked through the World Wide Web network tools.

*Newspapers.* Many print-based newspapers and magazines offer Web access. In addition, newsgroups such as those on the USENET

network on special topics send updates on specialized topics to those signed up on their list-serve.

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### **Internet technology: Zero to zillions in twenty-five years**

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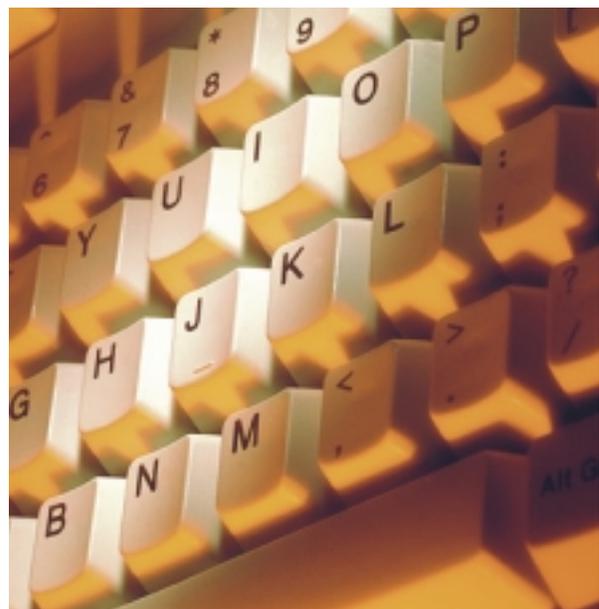
Beginning as a communications network among the Department of Defense, National Science Foundation, and university researchers in the 1970s, the Internet has grown as hardware, software, and user interest has expanded. The fiber-optic pace of that growth is reflected in the fact that the Internet has grown from 500 hosts in 1983 to 19,540,000 hosts in 1997. Soon the advent of Internet II will separate research and popular providers, thus reducing overcrowding and enhancing specialized use.

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### **Internet at home: Asset or intruder?**

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Children’s use of the Internet grew from 4 million users in 1996 to 10 million in 1997. As the estimated 10 percent of homes and classrooms currently online increases, 20 million are expected to access resources electronically by 2002. A recent survey found that 89





percent of parents viewed computers as crucial to children's educational success. Employment experts estimate that over 50 percent of jobs in the next decade, especially those in higher-wage categories, will require some computer literacy.

Children do not have to wait for the job market, but can benefit from Internet today in any of following ways:

- Problem solving, fact-gathering, analysis, and writing skills development through use of educational resources (news, documents, photos, statistics), learning games, or direct communication with experts and peers
- Homework help (encyclopedias, reference sources, e-mail inquiries)
- Ideas for further learning, including suggestions on good books to read, places to go, and activities to do at home

- Technology and research skills gained from using a variety of Internet tools
- Visiting places or participating in events otherwise inaccessible due to distance or disability

Children and teens can also be at risk on the Internet. While a relatively small proportion of sites and users exploit others, parents and children need to be wary of the following:

- Exposure to inappropriate material (sex, violence, hacking software)
- Verbal abuse and harassment
- Bigotry and hate speech
- Enticement into personal meetings for the purpose of exploitation or harm
- Commercial advertising that may be fraudulent or illegal for minors

While these risks are unwelcomed, families should remember that the Internet is the electronic forum of the First Amendment. Courts and executive agencies acknowledge free speech as its guiding principle, although laws against copyright, libel, solicitation, and misinformation apply to electronic communication. An Internet Engineering Task Force defines technical standards, but no official agency censors Internet content.

### **Casting the 'net instead of being caught in the 'net**

Families play two critical roles in helping children manage public media (Internet, radio, TV, newspapers, books, etc.). Adults must *protect* against risks. This includes setting limits and monitoring safe use, screening and restricting access, and balancing computer use with other activities. Parents can also *guide* positive experiences by modeling competent and creative use of available resources, sharing

positive learning and recreational experiences, and linking online experiences with home and community activities.

## Protecting against risks

### Setting limits and monitoring safe use

Sample a variety of sites and services, and consider how they measure up to your family values and to each child's capacities. Compare notes with other parents, and seek expert advice



(see "quality information" and "age appropriateness" below). As a reference point, check the *Platform for Internet Content Selection* (PICS) at [www.w3.org/PICS](http://www.w3.org/PICS). Explain to each child that there are ground rules for Internet use. The following

might be included in family rules for safe Internet use:

- There are sites that are okay and some that are not okay.
- There are rules about time online and conditions for use (i.e., completing chores or homework, active and shared use).
- Never release personal information (i.e., name, address, phone, school name, password, picture) to strangers.
- Ask permission for face-to-face meetings with Internet contacts. Parents should accompany children on their first meetings with Internet friends.
- Ask permission for commercial purchases, especially credit card purchases. Parents

should check vendor credentials and security of transfer before using these services.

Parents may reinforce family rules with the following steps:

- Post rules at the computer location and enforce them consistently.
- Establish logical consequences for rule violation such as losing user privileges or paying for damaged hardware or software.

Teach children signs of trouble such as "soft porn" on children's site or free offers that require release of name and phone number. Check online contacts to find out, for instance, if "12 year-old girl" isn't really a 40 year-old sex offender. Limit access by locating the computer in the family room and allowing use only during hours when an adult is home. Monitor regularly to be sure rules are followed. Quiz children on how to apply rules and make responsible decisions. When violations occur, enforce rules calmly but firmly and consistently. Monitor access in other sites (school, library, friend's house) and topics of discussion with other users (teachers, peers, Internet contacts).



## **Awareness is the key to effectiveness**

A parent's involvement as guide and partner is the best guarantee of a child's learning, enjoyment, and safety on the Internet. Since the Web is constantly expanding and changing, adults need to regularly update their awareness of available sites and procedures for locating, reviewing, and retaining data. All Internet users must master some basic tools:

### **Searching**

A browser, or program, that allows for viewing Web sites while connected to a search engine, helps explore topics or keywords, and then organizes and guides searches. Popular browsers include Netscape, Mosaic, and Explorer. Examples of search engines include Yahoo, Lycos, Alta Vista, Infoseek, Google, HotBot, and Excite.

### **Scanning**

Briefly review the source, purpose, and contents of a site, and evaluate its relevance and potential benefit to avoid wasting time or dismissing a good source too quickly.

### **Linking**

Use hypertext (highlighted) labels on a site to jump to related topics on other sites. This function allows users to gain additional or more specialized information. Use browser "Back" or "Return" key to retrace pathway.

### **Printing or downloading**

Use browser utilities ("File" or "Print" commands on the work bar at the top of a screen) to create a hard copy on a printer or save the file to a floppy disk. Note the site Uniform Resource Locator (URL) in the upper right hand corner of the printed copy. Before printing or downloading to disk, check the copyright status of the material and be aware of the computer virus protection software on your own computer.

### **Time and money management**

Reduce per-hour costs for phone and connection time by keeping a logbook and staying within monthly time restrictions.



### **Screening and restricting access**

Arrange with children to periodically monitor “questionable” sites and discuss their merits (remember that good judgment is more valuable than innocence). Establish a family log of sites visited. A log done under coercion will generally not show “forbidden site” visits and may create resentments. A record may help recall enjoyable sites or help parents track interests and risks. Become aware of monitoring standards. Several books or Internet sites discuss these issues. These are three sites that offer help:

- *NetParenting*  
[www.netparenting.com](http://www.netparenting.com)
- *Safe Surf Home Page*  
[www.safesurf.com/index.html](http://www.safesurf.com/index.html)
- *NBCi: Internet Child Safety Issues*  
[www.nbc.com](http://www.nbc.com), then search keyword

Parents can also use blocking services. Software that filters offensive or inappropriate material is not a substitute for parental guidance, but it may limit exposure or exploration. Sites that use key words may eliminate some useful, inoffensive material (i.e., scientific information on breast cancer or on sexually transmitted diseases). Programs that pre-screen sites cannot keep up with the proliferation of web sites. Following are some useful products currently reviewed online:

- *Cyber Patrol*—[www.cyberpatrol.com](http://www.cyberpatrol.com)
- *Cybersitter*—[www.solidoak.com](http://www.solidoak.com)
- *Net Nanny*—[www.netnanny.com/home/home.asp](http://www.netnanny.com/home/home.asp)

In addition, several providers, such as America Online, CompuServe, and Prodigy, offer screening services; and browsers, such as Explorer, and Web sites, such as Disney.com, offer sets of pretested “kid safe” sites to users.

### **Supporting involvement appropriate for the child’s age**

While there is little research to indicate what is too much or exactly the right kind of Internet use for children at various stages, what we know about development and learning in other settings provides some guidance:

**Ages 2 to 3:** Watching family members or playing with preschool CD-ROM or software programs (rather than working online) introduces toddlers to computer fun, learning, and how-to skills. A parent can help by holding a child in the lap as he or she plays on the computer, introducing the child to mouse or keyboard skills, or sharing a children’s book or video program.

**Ages 4 to 7:** Older preschoolers show greater interest and learn more quickly, although they still require assistance. A wealth and diversity of child-centered recreational and educational software and CD-ROMs is available, although time on computers is still a relatively low priority at this age. Parents can teach simple procedures and introduce a preschooler to e-mail, interactive software, sites (games, drawing programs), and many kinds of learning experiences (science and geography, as well as cartoon sites). Contact with schools, libraries, and other sites where children use computers will help a parent keep up on issues and options generally, as well as on the progress and interests of a particular child.

**Ages 8 to 11:** School-age children are ready and able to use the Internet to access a variety of recreational and educational resources such as online encyclopedias, specialized information and interactive sites, and e-mail to relatives or worldwide pen pals. Careful attention to protection and guidance at this age can encourage productive use, balanced lifestyle, and positive habits into the teen years.

## **How to tell if you've found a gold mine or just fool's gold on the Internet**

The information highway can be a road to paradise or perdition. Knowing how to evaluate the quality of a Web site can help parents or children save time, get good information, and avoid unpleasant experiences. The University of Minnesota Children, Youth, and Family Consortium urges Internet users to assess:

### **Content**

- What is the site's stated purpose, and what is my purpose in using site information?
- What is the age appropriateness of the information and format?
- What is the breadth and depth of information presented and the quality and credibility of links?
- Is the information research-based and up-to-date?

### **Authorship**

- Are the creators, contributors, or publishers of the site knowledgeable and accurate?
- What is the source or bias of the information (i.e., viewpoint, commercial interest)?

### **Readability**

- What is the level and quality of the writing (i.e., grade level, spelling and grammar, clarity)?
- How difficult is this site to scan through (i.e., computer time, hassle), print, or download?

**Ages 12 to 14:** Experienced pre-teens can move to more sophisticated research resources, scan and evaluate sites more capably, and work on projects with peers or experts in remote locations. More online services and chat groups are geared to this age group, which means guidance and monitoring is more important than ever.

**Ages 15 to 18:** Mid- to late-teens can build on early experience by accessing multimedia

and specialized sites for school reports and personal interests. Information about job opportunities, internships, colleges, and scholarships can assist them in transition to adulthood. Surfing the 'net together may be one of the most enjoyable ways for parents to interact with this busy age group. More experienced teens may also be interested in sharing their knowledge with schools or community organizations.

## **Maintaining a balance: Life is more than computer literacy**

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Excessive computer or Internet use may cause children to miss exercise, socializing, household chores, and other activities critical to a balanced lifestyle. Healthy computer use can enhance lifestyle by increasing efficiency (i.e., accessing libraries online versus driving across town) and flexibility (i.e., checking in with a friend online versus missing the conversation to catch the bus after school). To keep computer use in perspective, the following ideas may be appropriate:

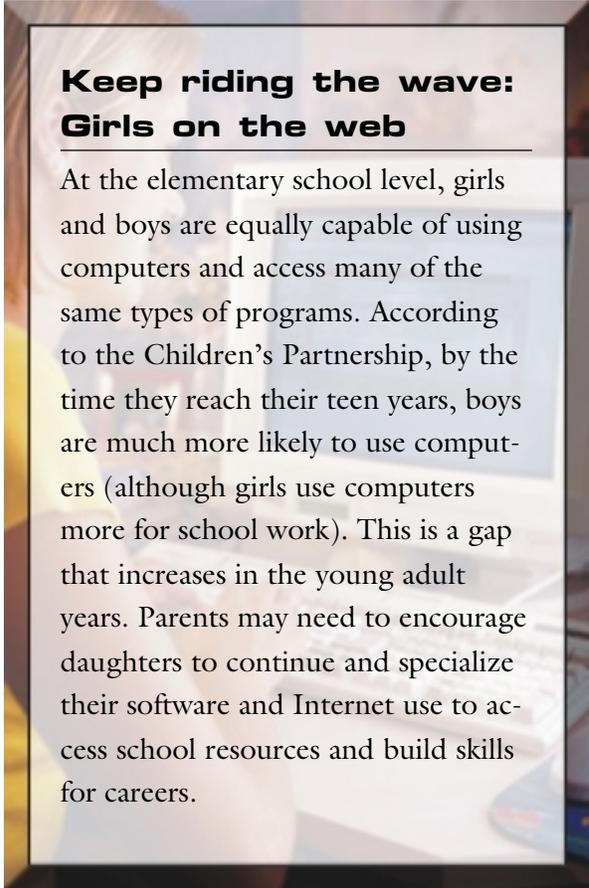
- Balance recreational and educational uses (hopefully blending them at times)
- Schedule time on the Internet, avoiding peak hours
- Take exercise breaks and enjoy physical activities as well as computing
- Use sports stories or lessons and/or records on fitness to track physical conditioning
- Print out stories or reference material to augment reading and writing school assignments and to reduce eyestrain
- Use stories online or chat groups as catalysts to creative writing
- Structure socializing by joining e-mail and chat groups focused on learning
- Encourage shared use of a computer among siblings or friends to reduce shyness or to widen social circles
- Enhance spiritual development by accessing meditations and faith issue discussion groups (available for a variety of faiths online) or descriptions of community service to facilitate (not replace) reflection, learning traditions, or helping others

## **Guiding positive experiences**

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Adult influence is always most powerful when inviting or sharing learning experiences. Those who take the time to learn a child's interests and abilities, as well as what is available online, can take the lead in using the Internet as a learning tool. Among the roles that build credibility and leadership with a child are the following:

- *Modeling competent and creative use of available resources.* An adult should continually explore a variety of applications and sites and discuss new discoveries with a child. Openness to the child's discoveries can expand the parent's awareness and establish a learning partnership.
- *Sharing positive learning and recreational experiences.* Parents who notice a child's preferences and seek high-quality sites to meet interests and delivery methods will



### **Keep riding the wave: Girls on the web**

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At the elementary school level, girls and boys are equally capable of using computers and access many of the same types of programs. According to the Children's Partnership, by the time they reach their teen years, boys are much more likely to use computers (although girls use computers more for school work). This is a gap that increases in the young adult years. Parents may need to encourage daughters to continue and specialize their software and Internet use to access school resources and build skills for careers.

find the Internet increases quality time together.

- *Share your own interests.* Especially when the subject is appropriate to the child's level of understanding or interactivity, a parent's interests expand learning and enjoyment of time together.
- *Cultivate skills in using Internet sites.* Dozens of books, courses, online chat or news groups are available to share experiences with what is available as well as with new software for using the technology base of the Internet.

The Internet offers a wide variety of applications for family interaction, as well as for child growth and development. Search engines and links from trusted sites can help parents and children access information quickly and efficiently. Printing or bookmarking on preferred sites provide ways to return as needed. Topics parents can explore extend from A to Z:

Arts and artistic expression • Business tips and tools • Consumer information • Discussion on favorite topics • E-mail to family and friends • Food safety and recipe information • Homework assistance • Genealogy research • Interests and hobbies • Justice and legal issues and procedures • Know-how for home and yard jobs • Learning games • Medical information • News and newsletters • Outings (vacations to day trips) • Projects for school or community clubs • Questions and answers • Real Estate options • Sports schedules and information • Topical information on money, sex, bullies, and careers • University sites (accounting to zoology) • Viewpoints • Weather reports, locally and worldwide • Xyloids to plant around your house • Yearbooks and almanacs • Zany tales, jokes, and riddles

## **Family-friendly places to explore the Internet's opportunities**

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### **Educational information:**

*Dreamcatcher*—[www.uwyo.edu/ag/ces/dream.htm](http://www.uwyo.edu/ag/ces/dream.htm)

The University of Wyoming Extension Family Life site describes available programs and resources, statistical trends and resource links, and provides learning resources for families and professionals, with extensive menus on children, youth, and families at risk and marriage/couples education.

*CYFERNET*—[www.cyfernet.org](http://www.cyfernet.org)

The national Cooperative Extension site for children, youth, and families resources features information and teaching resources from national networks on child care, collaboration, diversity, health, resiliency, and science and technology, as well as links to state Extension and government agency resources. Statistics, funding sources, curricula, and evaluation tools descriptions are available for professionals, while families can enjoy learning games and activities for positive times together.

*Children First*—[www.pta.org](http://www.pta.org)

The National Parent-Teacher Association offers resources for schools, communities, and families augmented by information about current events and programs, as well as a wealth of links to child development and education organizations.

### **Practical Assistance:**

*University of Iowa Virtual Hospital*—[vh.radiology.uiowa.edu/](http://vh.radiology.uiowa.edu/)

A wealth of information for practitioners, students, and patients and updates and links to other sources of specialized medical information.

### **Games:**

*Lemonade Stand*—[littlejason.com/lemonade/index.html](http://littlejason.com/lemonade/index.html)

An interactive simulation game in which a child, beginning with \$5, can plan a business, learn to cope with the predictable (finances, marketing, sales) and unpredictable (weather, trends), and make (or lose) his or her fortune.

**Entertainment:**

*CyberCamp*—[cybercamp.unl.edu/healthindex.html](http://cybercamp.unl.edu/healthindex.html)

Designed by Extension youth development specialists, this site features science and life skills adapted to the season. Campfire, conversations with counselors or fellow campers nationwide (by e-mail), and activities to try at home or outdoors are among the benefits.

**Commercial:**

*Yahoo! Travel*—[travel.yahoo.com](http://travel.yahoo.com)

Book a flight, rent a car, reserve a hotel room, check message boards on specials or alerts, or find out about places to go worldwide.

**Chat Groups:**

*Salt Lake 2002*—[www.saltlake2002.com/](http://www.saltlake2002.com/)  
Salt Lake City Organizing Committee information on the games.

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\*Note: Since the content of Web sites is changed frequently, the home page has been cited for several reference sources. To locate specific material, conduct a search on the home page using the title of the article as the keyword.

Be aware that due to the dynamic nature of the World Wide Web, Internet sources may be difficult to find. Addresses change, and pages can disappear over time. If you find problems with any of the listed Web sites in this publication, please contact Ben Silliman, Department of Family and Consumer Sciences, P.O. Box 3354, Laramie, WY 82071-3354, (307) 766-5689, [silliman@uwyo.edu](mailto:silliman@uwyo.edu).

As noted earlier in this bulletin, the Internet has risks for the unwary traveler. Parents and other users should be aware that even when the correct title or URL for a "child safe" site is entered, the browser may key on an otherwise benign word and begin to access unwanted, inappropriate, or offensive material. This is yet another reason for using caution and good judgement on the World Wide Web and for always supervising children's use.