

EMBARGOED FOR RELEASE AT 6:00 P.M. (EASTERN), JUNE 20, 2001

Teenage life online

The rise of the instant-message generation and the Internet's impact on friendships and family relationships

Principal authors: Amanda Lenhart, Research Specialist Lee Rainie, Director Oliver Lewis, Research Assistant

> Susannah Fox, Director of Research John Horrigan, Senior Researcher Tom Spooner, Research Specialist Cornelia Carter, Manager

Pew Internet & American Life Project 1100 Connecticut Avenue, NW – Suite 710 Washington, D.C. 20036 202-296-0019

http://www.pewinternet.org/

Acknowledgement

This report is built around the phone survey work of the Pew Internet & American Life Project done by our polling partner Princeton Survey Research Associates that focused on teenagers and their parents. The main survey for this report involved phone interviews with 754 youth between the ages of 12 and 17 and 754 of their parents. PSRA has done all the project's surveys since its inception in January 2000, and its executives and staff have been our creative collaborators in every step of the project's work. This report also contains information and insights from a threaded bulletin board discussion with 21 teenagers called a MindStorm® that was put together by Greenfield Online, Inc. and email interviews of teenagers in the Maryland suburbs of Washington, D.C. We are especially grateful to these teenagers for responding enthusiastically and candidly to our questions and we are delighted with the results of our partnership with Greenfield.

About the Pew Internet & American Life Project

The Pew Internet & American Life Project creates and funds original, academic-quality research that explores the impact of the Internet on children, families, communities, the work place, schools, health care, and civic/political life. The Project is an independent, nonpartisan organization that aims to be an authoritative source for timely information on the Internet's growth and societal impact. The Project is a non-profit initiative affiliated with the Pew Research Center for People and the Press. The project is fully funded by The Pew Charitable Trusts.

About Princeton Survey Research Associates

Princeton Survey Research Associates is an independent research company specializing in social and policy work. The firm designs, conducts, and analyzes surveys worldwide. Its expertise also includes qualitative research and content analysis. With offices in Princeton, New Jersey, and Washington, D.C., PSRA serves the needs of clients around the nation and the world. The firm can be reached at 911 Commons Way, Princeton, NJ 08540, by telephone at 609.924.9204, by fax 609.924.7499 or by email at Research.NJ@PSRA.com

About Greenfield Online, Inc.

Greenfield Online, Inc. is a leading provider of Internet-powered marketing research and real-time business information. The company provides a range of information services to help clients make smarter marketing decisions at today's speed of business by leveraging its 100% Internet-enabled proprietary technology, experienced research professionals and unlimited access to online consumers. Incorporated in 1995, Greenfield Online is headquartered in Wilton, Conn., with an office in San Francisco and regional representatives in five other U.S. cities and Mexico City. For additional information about Greenfield Online and its services, please call Gail Janensch at 203.846.5720 or visit these company Web sites – http://www.greenfield.com/ and http://www.greenfield.com/ and

Summary of findings

The Internet has a pivotal role in the lives of American teenagers

About 17 million youth ages 12 through 17 use the Internet. That represents 73% of those in this age bracket. Teenagers' use of the Internet plays a major role in their relationships with their friends, their families, and their schools. Teens and their parents generally think use of the Internet enhances the social life and academic work of children. However, there are aspects of the Internet that cause strain and make children and their parents worry that these technologies are not an unqualified good in teens' lives.

- 76% of online teens say they would miss the Internet if they could no longer go online.
- 48% say their use of the Internet improves their relationship with friends; 32% say Internet tools help them make new friends.
- 55% of parents with online teens think that the Internet is a good thing for their own children; just 6% say it has been a bad thing.
- 55% of parents believe that it is essential for today's children to learn how to use the Internet in order to be successful and another 40% believe it is important.
- 64% of online teens say they think use of the Internet takes away from the time young people spend with their families.

The instant-message generation

Close to 13 million teenagers use instant messaging and this techno-communication has a key place in many of their lives. Talking to buddies online has become the information-age way for teens to hang out and beat back boredom. For most online teens, instant messaging has not replaced the telephone as the principle communications tool they use with their friends. But a fifth of online teens do say that IM (instant messaging) is the main way they deal with friends. A typical IM session for a teenager lasts more than a half hour, involves three or more buddies, and often includes friends from outside her community. And significant numbers of youth have used instant messages for serious kinds of communications such as telling their friends unpleasant things or starting and ending relationships.

- 74% of online teens use instant messaging. In comparison, 44% of online adults have used IM.
- 69% of teen instant messagers use IM at least several times a week.
- 19% of online teens say they use IM most often to contact their friends when they are not with them; and 8% use email. 71% still use the phone most often.
- 37% have used IM to write something that they would not have said in person.
- 17% of instant messagers have used IMs to ask someone out; 13% have used instant messaging to break up with someone.
- 57% have blocked messages from someone they did not want to hear from and 64% have refused to respond to instant messages from someone they were mad at.
- 22% of online teens who use instant messaging and email have shared their password with a friend.

Many teens manage and play with their online identities

Most online teens use different screen names and email accounts to manage their communications and the information that comes to them. Significant numbers also say they pretend to be different people and that they have been given false information by others. A quarter of online teens have built their own Web pages.

- 56% of online teens have more than one email address or screen name. Within this group of those who use multiple accounts, 24% say that one of those addresses or screen names is a secret one they use when they do not want their buddies to know they are online.
- 24% of teens who have used IMs and email or been to chat rooms have pretended to be a different person when they were communicating online.
- 33% of these teens report having someone give them fake information about themselves in an email or instant message.
- 15% of online teens and 25% of older boys online have lied about their age to access a Web site an act that often is used to gain access to pornography sites.
- 24% of online teens have created their own Web pages.

At times, parents and teens don't see eye to eye about the Internet and their family Parents and their children often do not agree about the place of the Internet in their home. Many parents say they enforce time limits on their children's use of the Internet, but most teens do not say they have limits. Many parents say they occasionally check up on the Web sites their children have visited, but most teens do not think that happens. And many parents say they have sat with their children while they were online at least at some point, but teens do not report that. There is also disagreement about how dangerously tempting the online world is.

- 61% of parents say they have rules about Internet use, while only 37% of teens themselves reported being subject to any Internet time-use strictures.
- 61% of parents report checking to see what Web sites their teen has visited after the child went online, while only 27% of online teens believe they have been checked on.
- 68% of parents say they have sat with their children when they were online, but just 48% of their children recall such episodes.
- 45% of parents are concerned that the Internet leads young people to do dangerous or harmful things, while 34% of their children say that.

At times, the role of the Internet at home generates struggles.

• 40% of parents have had an argument about the Internet with their children.

But there are times when parents and teens do see eye to eye

Both generations agree that teens know more than their parents about the Internet. They also agree that there are reasons for concern about the impact of the Internet on all teens.

- 64% of online teens say they know more about the Internet than their parents, and 66% of parents agree.
- 67% of parents are worried about the distracting qualities of the Net and say it keeps young people in general (not just their own children) from doing more important things; 62% of teens also say they fear that use of the Internet keeps young people from doing more important things.

Meeting strangers online

Some 57% of parents worry that strangers will contact their children online. These worries are well grounded. Close to 60% of teens have received an instant message or an email from a stranger and 50% report emailing or instant messaging with someone they have not met before. Despite this, teens themselves are not particularly worried about strangers online; 52% of online teens say they do not worry at all about being contacted online and only 23% express any notable level of concern.

How parents respond

In addition to checking up on their children and sitting down with them on occasion while they are online, parents have tried to take other precautions.

- 70% of online families have the Internet-connected computer located in an open family area of the house such as a den.
- 41% of families have installed filters or activated ISP-based controls on their computer to restrict their child's access to some kinds of content on the Web.

The Internet helps at school

A tenth of American teens (11%) get their primary or only access to the Internet through their school. There is strong agreement among parents and teens that use of the Internet helps youth at school.

- 87% of parents believe the Internet helps their children in school; 78% of teens agree.
- 94% of online teens report using the Internet to research for school.
- 71% say they relied mostly on Internet sources for the last big project they did for school.

Online material is a teaching tool outside school, too

In addition to being a key resource for school, material on the Web teaches children in other ways. It helps establish their tastes and fills in their gaps of knowledge on sensitive subjects.

- 54% of online teens think the Net helps them find out what is cool in fashion or music.
- 26% say the Internet helps them get information about things that are hard to talk to other people about.

Activities on the Web

What teens have done online The percentage of youth with Internet access aged 12 through 17 who have done the following activities online:		
Send or read email	92%	
Surf the Web for fun	84%	
Visit an entertainment site	83%	
Send an instant message	74%	
Look for info on hobbies	69%	
Get news	68%	
Play or download a game	66%	
Research a product or service before buying it	66%	
Listen to music online	59%	
Visit a chat room 559		
Download music files	53%	
Check sports scores	47%	
Visit a site for a club or team that they are a member of	39%	
Go to a Web site where they can express opinions about something	38%	
Buy something online	31%	
Visit sites for trading or selling things	31%	
Look for health-related information	26%	
Create a Web page	24%	
Look for info on a topic that is hard to talk about	18%	

Source: Pew Internet & American Life Project Teens and Parents Survey, Nov.-Dec. 2000. Margin of error is ±4%.

Not all teens use the Internet in the same way

There are significant differences between how boys and girls use the Internet and how young teens and older teens use the Internet. And, just as in the case of adults, experience with the Internet matters. Those who have more experience use the Internet differently from those who are newcomers to the online world. Several tables showing these online differences appear on pages 37-41.

Table of Contents

Acknowledgement	
Summary of findings	3
Table of Contents	7
Index of Tables	9
Main Report	10
Introduction	
A general portrait of wired teens	12
Teens would miss the Internet	
Parents worry, teens shake it off	
Part 1: Teens and Their Friends	16
Strengthens friendships	
Time with friends: A modest impact	
Good for meeting people, not always good for making new friends	
A teen's "true self"	
Multiple identities: Experimentation and self-protection	18
Meeting strangers	19
Sharing passwords	
Vouth and instant messaging	20
Youth and instant messaging	
U	
Instant messaging compared to the phone	
The special character of instant messages	
Dating	
Making plans	
Pranks and deception	23
Chat room tricks	23
Part 2: Teens and Their Families	
Teens know the Net better than their parents	
How parents and youth learn about the Net	
Conflict over access to the Net	
The Internet's impact on family relationships	
The Internet's impact on family activities	
Planning by email	29
Concerns and Fears	29
Worrying about strangers	29
Inappropriate content	
A bad influence?	30
The Internet as a distraction	30
Exploited by advertising	31
The Internet is worse than TV	31

How Parents Protect Their Children Online	31
Rules	31
Checking up	32
Surfing together	
The computer out in the open	
Filters	
Boys and adult content	33
Part 3: Teens and Their Schools	35
Access at school	
The Internet as teaching tool	35
Research for papers and projects: From Dewey Decimal to dot-com	35
Learning which information to trust	36
Part 4: Teens and Their Web	37
Online activities	37
Send and read email	38
Browse for fun	38
Go to Web sites about movies, TV shows,	
music groups or sports stars	39
Hobbies	39
News	
Online purchases and comparison-shopping	
Get insights into what's cool	
Click on ads	
Play or download online games	
Music – everybody listens and boys do the downloading	
Chat rooms	
Go to Web page for clubs, groups, or sports teams	
Trade or sell things	42
Look online for fitness, dieting, or health information	
Express yourself – create your own Web page	43
Go online to get information about something	
that's hard to talk about with other people	
Single-parent households are different from two-parent households	44
Methodology	
Phone survey	
Group discussions	46

Index of Tables

What teens have done online	6
Demographics of our sample of teens	. 10
Demographics of the parents	
Where teens log on	
Teens online every day compared to teens online less often	. 13
Risky business?	
How much do teens think time online takes away from time with friends	. 16
Splitting the self	
Fretting about strangers	
The basic IM crowd	
The less experience online a parent has, the more likely it is that	
he worries	. 23
How long parents and their teens have been online	. 25
Teens are more Net savvy	. 26
Who taught the teens	. 27
Does the Internet improve teens' relationships with their families?	. 28
Experience makes a difference in family life	. 29
A ĥarmful influence?	. 30
The steps parents take to protect their children online	. 31
Filtering	. 33
School-related use of the Internet	. 35
Teens' Internet use compared to adults	. 37
Girls and boys online: Differences and similarities	
Teen newcomers vs. teen veterans	
Younger teens compared to older teens	. 41
Single parents and the Internet	. 44

Main Report

"I multi-task every single second I am online. At this very moment,
I am watching TV, checking my email every two
minutes, reading a newsgroup about who shot JFK,
burning some music to a CD and writing this message."
-- 17-year-old boy

Introduction

The Internet is the telephone, television, game console, and radio wrapped up in one for most teenagers and that means it has become a major "player" in many American families. Teens go online to chat with their friends, kill boredom, see the wider world, and follow the latest trends. Many enjoy doing all those things at the same time during their online sessions. Multitasking is their way of life. And the emotional hallmark of that life is enthusiasm for the new ways the Internet lets them connect with friends, expand their social networks, explore

their identities, and learn new things.

"The Net is an AWESOME thing," wrote a 15-year-old boy in the Greenfield Online discussion group (the same group to which the introductory remark for this section was also made). "Who would have thought that within the 20th century, a 'supertool' could be created, a tool that allows us to talk to people in other states without the long distance charges, a tool that allows us to purchase products without having to go to the store, a tool that gets information about almost any topic without having to go to the library. The Internet is an amazing invention, one that opens the door to mind-boggling possibilities. As a friend of mine would probably say, 'The Internet RULES!!!!!!!"

Among the many striking things about teens' use of the Internet is the way they have adapted instant messaging technologies to their own purposes. The majority of teenagers have embraced instant messaging in a way that adults have not, and many use it as the main way to conduct most mundane as well as the most emotionally fraught and important conversations of their daily lives. They have invented a new hieroglyphics of emoticons to add context and meaning to their messages and a growing list of abbreviations to help them speed their way through multiple, simultaneous online conversations.

•			
Demographics of our sample of teens			
The percentage of responden	its will are:		
Sex			
Boys	50%		
Girls 50%			
Age (mean = 15)			
12-14	45%		
15-17	55%		
Grade (median = 9th)			
7 th or under 18%			
8 th 17%			
9 th	16%		
10 th	19%		
11 th	18%		
12 th 11%			
Internet experience			
One year or less	27%		
Two to three years 52%			
More than three years 21%			
Locale			
Urban	20%		
Suburban	54%		
Rural	26%		

Source: Pew Internet & American Life Project Teens and Parents Survey, Nov.-Dec. 2000. Margin of error is ±4%.

Many teenagers use instant messaging to communicate with teachers and classmates about schoolwork or projects. Significant numbers use it along with email to conduct romantic relationships. A notable proportion of online teens have used instant messages to ask someone out and to break up with someone. Some teens use IM to play jokes on friends and tricks on enemies. Instant messaging has permeated teen culture to such an extent that for some "message me later" has replaced "call me." A portion of teens say they have given out their user name instead of phone number to new friends or potential dates. Many believe that instant messaging allows them to stay in touch with people they would not otherwise contact – for instance, those who are only casual acquaintances, or those who live outside their communities.

American adults observe children's use of the Internet with equal parts wonder and worry. The vast majority of teenagers (64%) and their parents (66%) agree that teens know more

Demographics of the parents The percentage of respondents who are:			
Race			
White	87%		
Black	7%		
Other	4%		
Hispanic origin			
Hispanic	4%		
Not Hispanic	95%		
Educational attainment			
High school diploma 29% or less			
Some college 27%			
College degree or more 44%			
Family income*			
Less than \$30,000	10%		
\$30,000 to \$50,000	23%		
More than \$50,000	54%		
Internet experience—parents			
Not online	13%		
One year or less 25%			
Two to three years 34%			
More than three years 28%			
Number of phone lines in family home			
One	47%		
Two	41%		
Three or more	12%		

Source: Pew Internet & American Life Project Teens and Parents Survey, Nov.-Dec. 2000. Margin of error is ±4%. than their parents about using the Internet. At the same time, there is concern among adults that children's access to vast stores of information, some of it useful, some of it informative but some of it lurid, some of it hateful, some of it violent, and some of it disgusting, could warp or harm children. In addition, some adults fear that the same technology that allows their children to communicate instantaneously with explorers in the Artic, access paintings in the Louvre, hear traditional music from Brazil, and examine texts in Cantonese, can allow strangers to seek out, exploit, or even harm their children.

These ambivalent attitudes carry over into policy matters. Computer use among children is encouraged through public funds and donations to schools and community centers across the country. Simultaneously, federal policy makers have tried several ways to protect children from accessing Internet content that is deemed inappropriate or harmful. The first attempt at lawmaking, the Communications Decency Act (CDA) in 1996, was ruled unconstitutional in federal court. The next two attempts, the 1998 Child Online Protection Act (COPA) and the 2000 Children's Internet Protection Act (CIPA), have run into significant legal challenges.

Legislation in Washington has covered more than pornography. In 1998, lawmakers approved the Children's Online Privacy Protection Act (COPPA), which requires Web sites to get verifiable parental consent before collecting personal information from children under 13. COPPA also requires

^{*} Does not include 13% of respondents who answered "don't know" or who refused to answer the question.

affected sites to post clear and prominent privacy guidelines, though some privacy advocates say the law still does not go far enough.

In the midst of all this concern and legislative activity, there have been few national studies of what children actually do online. In late 2000, the Pew Internet & American Life Project surveyed 754 youth ages 12 through 17 who go online, and an equal number of their parents (of whom 87% go online) to discover how youth and their parents have incorporated Internet tools into their lives. The project also conducted an online threaded group discussion in February with 21 teenagers who were brought together from a panel of Internet users developed by Greenfield Online. To prepare for that research, we conducted email interviews with 16 children from the Washington, D.C. suburbs in October 2000.

A general portrait of wired teens

Our survey work in late 2000¹ shows that 45% of all American children under the age of 18 go online. Almost three-quarters (73%) of those between 12 and 17 go online. In contrast, 29% of children 11 or younger go online. Our sample of 754 teens contained a roughly equal number of boys and girls. The average age that they first started using the Internet was 13, and the average length of time they have been online is 2.5 years. In 13% of these families, the children go online, but the parents do not, in part because some children have their primary access outside the home, for instance, in school or at the home of a friend.

The families in our sample, selected because their children go online, are relatively upscale: 54% have a yearly income of more than \$50,000 (compared to 35% of all American parents); 44% are college graduates (compared to 27% of parents in the overall population). Our sample is slightly older than the population of all online parents, mainly because parents of children who are 12 to 17 are generally older than parents of younger children, who would all be included in a general sample of online parents.

Where teens log on The places where teens have ever gone online and where they go online most often:				
Ever ¹ Most often				
Home	90%	83%		
School	64%	11%		
A friend's house	64%	3%		
Library	36%	1%		
Someplace else, like work or a cyber cafe	8%	1%		

Source: Pew Internet & American Life Project Teens and Parents Survey, Nov.-Dec. 2000. Margin of error is ±4%.

Most online teens (87%) say they go online from multiple locations. The vast majority (83%) report that their primary access is from home. Another 11% say they go online most often at school and another 3% say they go online most from a friend's house. Two percent say that their primary connection is from someplace else, like the library, work, or an Internet café. Almost two-thirds have gone online at school at one time or another and another two-thirds have ever gone online at a friend's house. More than a third have gone online from a library.

 $^{^{1}}$ n = 754

 $^{^{2}}$ n = 659; teens who go online from multiple locations.

¹ These figures on the size of the online teen population comes from data gathered by the Pew Internet Project in November and December of 2000 and were mentioned in our *More Online, Doing More* report issued in February 2001. It can be accessed at http://www.pewinternet.org/reports/toc.asp?Report=30

Many teenagers are heavy, enthusiastic users of the Internet, though with busy schedules full of activities, clubs, sports, jobs and homework, teens are actually less likely to go online on a typical day than adult users. We found that 42% of all online teens go online every day, compared to 59% of wired adults who are online on a typical day.² Another third of teens (33%) say they go online a couple of times a week. Teens with several years' online experience are more likely than newcomers to be heavy users of the Internet, and older teens are more likely than younger teens to be the most fervent users. Indeed, the older a teenager gets, the more likely it is that he will be a frequent Internet user. There is a notable change in Internet use between middle school students and high school students: About half of high school students say they use the Internet every day, compared to about a third of middle school students.

There is also a close association between the enthusiasm for the Internet that parents have and the zeal of their children. The longer a parent's experience online and the heavier her use of the Internet is, the more likely it is that her child will be a heavy user of the Internet.

When teens are logged on, they are often multi-tasking, simultaneously emailing, instant

Teens online every day compared to teens online less often

Teens who go online every day are much more enthusiastic users of the Internet than their counterparts who go online less often. Below is a list of activities where the percentages who have done each are notably different for the two groups:

	Daily users	Less often
Send or receive email	99%	87%
Send instant messages	89%	64%
Research products online	74%	60%
Download music	73%	40%
Listen to music online	70%	52%
Visit a chat room	62%	50%
Buy products online	39%	26%
Create a Web page	34%	16%

Source: Pew Internet & American Life Project Teens and Parents Survey, Nov.-Dec. 2000. Margin of error is ±4%.

messaging, surfing the Web, and if they are fortunate enough to have two phone lines, a cell phone, or a broadband connection, talking on the phone, too. "I do so many things at once," acknowledged one 15-year-old girl in the Greenfield Online group discussion. "I'm always talking to people through instant messenger and then I'll be checking email or doing homework or playing games AND talking on the phone at the same time." Another girl, 17, from the same group explained, "I get bored if it's not all going at once, because everything has gaps – waiting for someone to respond to an IM, waiting for a website to come up, commercials on TV. etc."

For these teenagers, use of the Internet is often a social event. Fully 83% say they have gone online with a group of others clustered around the computer and it is not uncommon for one group of teens to be instant messaging another group of teens convened at another computer. More than half of online teens (52%) say they have logged on with their siblings at one time or another.

If the Net were not part of their lives, teens say they would watch more TV, read more, talk on the phone more, spend more time with their friends, join more clubs, and study more. "I

 $^{\rm 2}$ This figure comes from data gathered Feb 1- March 1, 2001 by the Pew Internet Project. N (Internet users)=1,198

don't even remember what I used to do when I did not go online," reported a 17-year-old girl in the Greenfield Online group discussion. "Sometimes I'm just so bored when I can't use the computer." Another 16-year-old girl added: "If I weren't online I'd probably be reading or bored out of my mind. I used to watch a lot of TV, but I think that even human interaction in front of a computer screen is better than mind numbing TV."

As we pointed out in our report titled *Who's Not Online*, ³ parents are more likely to go online than other adults, in part, we suspect, because their children cajole, pull, push or otherwise introduce them to the Internet. However, this role reversal in which children teach their parents might be changing as more parents learn about the Net before their children. Younger teens' parents are more likely to introduce their children to the Net, rather than the current pattern of older teens taking their parents and families online.

Teens would miss the Internet

The respondents to our survey believe the Web is an information resource, an entertainment utility, and a tool for social connection. Three-quarters of online teens say that they would miss the Web some or a lot if they no longer had access. This matches the enthusiasm of their parents – an equal proportion of their mothers and fathers say they would miss the Internet if it were cut off from them. "If I could not go online any more then I would miss all the opportunities the web has," noted one 15-year-old boy in the Greenfield Online group discussion. "It has everything at your fingertips including: unlimited information, instant messenger, email and games."

For some, life without the Internet would be generally "harder and more complicated," as one 17-year-old girl said in the Greenfield Online session. Heavy users among teens are the most likely to say they would miss going online "a lot" if Internet access were denied them. Ninety percent of teens who log onto the Internet every day say they would miss going online a lot or some. By comparison, 65% of teens who go online less frequently say they would miss it.

Parents worry, teens shake it off

This level of attachment to the technology worries many older Americans. Close to half of parents (45%) say they believe "a lot" or "some" that the Internet can lead young people to do harmful or dangerous things. After the shootings at Columbine High school in Colorado in 1999, many expressed concern that the unique capabilities of the Internet had a role in inciting and abetting violence in teens – a concern most memorably summed up by candidate George W. Bush in a presidential election debate on October 11, 2000. He worried during the debate that "a child can walk in and have their hearts turn dark as a result of being on the Internet."

Risky business?		
The percentage of teens who have		
Received email or instant messages from a stranger	60%	
Exchanged email or instant messages with strangers	50%	
Shared passwords	22%	
Lied about their age to access a Web site	15%	
Sent a prank email	6%	

Source: Pew Internet & American Life Project Teens and Parents Survey, Nov.-Dec. 2000. Margin of error is ±4%. N=754, except for "Received email," "Sent a prank" and "Shared password," where n=712.

³ http://www.pewinternet.org/reports/toc.asp?Report=21

⁴ Schorow, Stephanie. "Questions to help the presidential candidates face up to virtual reality," *The Boston Herald*, October 17, 2000.

But the teenagers asked about this by the Pew Internet Project were relatively unconcerned. When asked if they thought that the Internet led teens to do dangerous or harmful things, the greatest number of teens themselves (37%) answered "only a little" and another 28% said "not at all." Even though they think that the Internet can in some instances lead to harmful behavior, online teens generally are less worried than their parents. And they do not want limits placed on the information that can be accessed. "Information is power and can be used either way, for good or bad," argued a 16-year-old boy in the Greenfield Online group discussion. "It is impractical to have limitations set up on something as large as the Internet. People have that power [to impose limitations], so they choose how they use it. If a child sees something he's not supposed to, then he's not ready for the environment you've placed him in."

Teens who are the heaviest Internet users are the least worried about its impact. Does the Internet lead young people to do dangerous or harmful things? Some 34% of daily Internet users in our sample answered "not at all" and that compares to 23% of those who go online less often who had the same response.

PART 1: TEENS AND THEIR FRIENDS

Many American youth say that Internet communication, especially instant messaging, has become an essential feature of their social lives. For them, face-to-face interaction and some telephone conversations have been partially replaced with email and instant message communication. Relationships that once might have withered are now nourished by the ease and speed of instant message exchanges and email messages. Romantic relationships are begun and ended online. Difficult conversations with friends are now mediated by the emotional distance the Internet provides. Intimate conversations sometimes seem easier than those that take place face-to-face. Teens say this can be very helpful, especially in otherwise awkward situations or at times when they are too shy to speak. Conversely, relationships with friends and romantic partners are sometimes hurt or destroyed because of misunderstandings sparked by the very voiceless aspects of Internet communication that make it attractive to youth.

Strengthens friendships

About half of online teens (48%) believe that the Internet has improved their relationships with their friends. Frequent users of the Internet are more enthusiastic about the friendshipenhancing quality of the Internet – more than six in ten say that it helps "some" or "a lot." But some teens, while they appreciate the ease of communication over the Internet and its ability to help them keep in touch with a larger group of people, also recognize that it may not be the best medium for starting or maintaining deeper relationships. "Unless you know the person really well, they're just some anonymous typist hiding behind a funny screen name," said one 17-year-old boy from Maryland in an email exchange with the Pew Internet Project. "I don't see people at school and think that's somebody I know from AOL. I would not even recognize them and times that I do…it's 'Hey, there's HAPPYKID113.' The Internet has helped me socialize with more people, but at a very unpersonal level."

Time with friends: A modest impact

America's youth do not believe the Internet takes much time away from friendships. Some 61% of online youth say teens' use of the Internet does little or nothing to detract from the time teens spend together, while only 10% say it takes away a lot of time they think young people would otherwise be enjoying in the company of their friends. Some who say that use of the Internet takes time away from friends argue that this is balanced by the increased level of communication young people have with friends who live too far away for regular face-to-face meetings. "If the Internet did not exist at all, I would probably be out doing things with my friends or getting

How much do teens think the time kids spend online takes away from				
time s _l	pent with fri	ends?		
	A lot A little or some or not at a			
All teens	39%	61%		
Boys	38%	62%		
Girls	41%	60%		
Ages 12-14	36%	64%		
Ages 15-17	42%	58%		

Source: Pew Internet & American Life Project Teens and Parents Survey, Nov.-Dec. 2000. Margin of error is +4%

homework done," maintained one girl, 17, in the Greenfield Online group discussion. "I think that would be better in some ways, but I think I'd miss out on a lot, especially on keeping in touch with far away friends."

Good for meeting people, not that great for making new friends

Most teens do not believe that the Internet is particularly helpful in making new friends. Sixty-seven percent of all online teens think it only helps "a little" or "not at all" when trying to make new friends. Younger children are more likely than older children to be enthusiastic about the Internet's capacity to help them make new friends. Some 37% of younger teens say the Internet helps them meet new friends, compared to 29% of older teens who say that. Girls aged 12 through 14 are the most enthusiastic about the Internet's capacity to help them make friends online.

Many teens recognize the difference between casually meeting new people online via chat rooms, or other interactive discussions, and establishing a meaningful friendship. They believe it is easier to make contact with new people online than it is to make friends. "One person I met [online] was about to move to our town, so he IM-ed me [sent an instant message]," said one 16-year-old boy in the Greenfield Online group discussion. "When he moved here I kinda showed him around. It was ok, but I really did not like him. He was a little too shy, a year younger than I and incessantly irritating. I would prefer not to have a repeat."

A teen's "true self"

Some teens feel that Internet frees them to be more fully their true selves. That makes it easier to make friends online than doing so face to face, they believe, because these relationships begin with assessments that focus on personality and intellect, rather than the attractiveness and "style" of the new acquaintance. "At one time, I had a friend online who I considered a better friend than anyone else in my life," reported a 16-year-old boy in the Greenfield Online group discussion. "Why? Well, online, we have [the] mask of the computer screen. We don't have to worry about what we look like or what other people think of us. Imagine, for instance, meeting a teenager online named Pat. All Pat knows is what you tell Pat. Pat knows what you are feeling and who you REALLY are, based on what you talk to Pat about. Pat doesn't worry about what you look like or what people say about you. Pat cares about you. Of course this could also be a bad thing, because it's easy to manipulate someone online. But I choose to believe in the better of the two situations."

To others, appearance still matters a great deal. "I continued to chat with these two girls for a long time," says one boy, 15, in the Greenfield Online group. "Then when I met them...they did not look like what I expected. I thought they would be cute, but they weren't. After meeting our online and offline friendships died off."

Research by Elisheva Gross of UCLA and others suggests that teens with strong social connections tend to look to email and instant messaging as a way to reinforce pre-existing bonds, while teens with smaller or less developed social networks look to the Internet to find new companions and social ties to fill-in for the ties they lack offline. "I've always been very shy in real life," noted one boy, 16, in the Greenfield Online group. "I'm home-schooled, and have avoided most contact with children my own age. The Internet has, in many ways, replaced real-life socialization for me. This is abnormal, but I don't think its 'bad' by any means. I've become comfortable with socializing both on-line and off and I've made a large number of friends by participating in small on-line communities."

⁵ Elisheva Gross, Jaana Juvonen, Shelly L. Gable. "Internet use and well-being in adolescence." UCLA, 2001

Multiple identities: Experimentation and self-protection

Fully 56% of online teens have more than one email address or screen name and most use different screen names or email addresses to compartmentalize different parts of their lives online, or so that they can experiment with different personas. Boys more often than girls report having multiple email addresses or screen names. Sixty-one percent of boys have more than one address – almost a quarter have four or more. Half of online girls (50%) have more than one screen name or email account and nearly one in five girls have more than four online identities. The oldest boys (15 to 17) are the most likely to have more than one address, with two-thirds reporting multiple addresses. The most active Internet users are the most likely of all to have multiple addresses.

Of those teens with multiple addresses, nearly one-quarter say that at least one of those addresses is a secret address that teens use when they do not want their friends to know that they are online. More boys than girls have secret addresses and older teens are more likely to report a secret address than younger teens.

Ann Hird writes in her book *Learning from Cybersavvy Students* about a particular student with multiple screen names. "Through his choice of screen names, Colin controls the size of the online space in which he functions at any given time. The name 'Cal Zenkow' exposes him to online interaction with a large number of other individuals. The second screen name 'Doctor Topper,'

Splitting the self				
How many email addresses or screen names do online teens use?				
	One	Two	Three	Four +
All teens	44%	25%	10%	21%
Boys	39%	26%	11%	24%
Girls	50%	23%	9%	19%

Source: Pew Internet & American Life Project Teens and Parents Survey, Nov.-Dec. 2000. Margin of error is ±4%.

allows him to maintain a private space accessible only to his five closest friends. Neither screen name has any connection to his offline identity." Says Colin himself, "'Doctor Topper is a screen name I go to sometimes when I want to be left alone.'" Hird also maintains "The Internet provides adolescents with safe spaces for continual modification of the identities they wish to convey to others."

For some teens, the possibility of exploring who they are, who they might become, and how they present themselves to the world in fairly safe online environments is a valuable opportunity and a primary use of the Internet. For others, identity play is something in which they dabble while they play jokes on others, but it is not a serious aspect of their Internet use.

Almost a quarter of online teens who use email, instant messaging or chat spaces confess to pretending to be someone else when they emailed or instant messaged someone. Older youth, especially boys, are the most likely to report that. "I have [pretended to be someone else] a couple of times, but only to freak my friends out, or to play a trick on them," said one 13-year-old girl in an email exchange with the Pew Internet Project. "Sometimes I say I'm

⁶ Hird, Ann, *Learning from Cyber-Savvy Students: How Internet Age Youth Impact Classroom Teaching*, Stylus publishing, Virginia, 2000, pg. 53

⁷ Hird, p. 53

⁸ Hird, p. 100

someone they know or like. One time...I pretended that I was someone who was in love with my friend. It was actually quite funny, but my friend did not think so."

Meeting strangers

Many teens with Internet access have been contacted by strangers and the majority of them respond at least some of the time. Fully 60% of all online teens have gotten an email or instant message from a perfect stranger and 63% of those who have gotten such emails or IMs say they have responded to strangers online.

Overall, 50% of those who use instant messaging, email or chat rooms have corresponded via IM or email with people that they have never met face-to-face. However, in many cases,

Fretting about strangers			
How much parents worry that their teens will be contacted online by a stranger:			
A lot 25%			
Some 32%			
A little 24%			
Not at all 19%			

Source: Pew Internet & American Life Project Teens and Parents Survey, Nov.-Dec. 2000. Margin of error is +4% these online conversations involve people who have been introduced by their friends or family members. Still, many are not shy about meeting true strangers online, including those they meet in other places online or the complete strangers who have sent them email or instant messages out of the blue. A 14-year-old girl in the Greenfield Online group discussion reported: "Around half of my buddy list⁹ are friends I made online. One girl I met in a chat room, we had a lot in common and talked together for almost 3 months and then decided to meet. We did and it was the best. We talked forever and now we see each other a lot."

Boys and older youth are more likely to have emailed or instant messaged a stranger than girls and younger teens. Fifty-four percent of boys have ever done this compared to 46% of girls. Fifty-seven percent of older teens say they have done this compared to 41% of teens ages 12-14. Predictably, youth who are online every day report doing this more often, with 57% saying they have ever emailed or instant messaged someone they have never met face to face.¹⁰

When asked, most teens say they do not tell their parents when a stranger contacts them online. One 15-year-old girl from the Greenfield Online group explained how strangers find her: "A lot of people can find you on Yahoo or AOL if you have a profile [public place for listing hobbies and other personal information]. They can enter in different criteria and if you match it, they'll get your User ID." She added "I wouldn't talk about it with my parents, they'd flip out and probably restrict my access to the Internet."

Sharing passwords

For some wired teens, a sign of true friendship is for one Internet user to share his screen name and password with a buddy. More than a fifth of our respondents (22%) who use instant messaging, email or chat report sharing their passwords with friends or others that they know. Boys and girls report in equal measure that they do this.

⁹ A buddy list is an instant messaging address book, collected by an IM user. When she logs on, she can find out how many of her buddies are online at the same time she is.

 $^{^{10}}$ Analysis in the preceding two paragraphs is based on a sub-sample of our panel of teens who use instant messages, email or chat rooms. N=712. N for teens in the whole survey is 754.

While such behavior might seems strange in light of concerns about online privacy, the teens who share their passwords see it as emblematic of their trust in their friends. "Sharing your password can have its ups and downs," admitted one girl, 17, in the Greenfield Online group discussion. "You know you can trust someone if you can give them your password, but if you ever have a problem with that person, then they have all that info at their fingertips. I am glad that I did [share my password]. It makes me feel closer to people by letting them know I trust them with something as personal as my password." But others would not ever share their passwords or have regretted doing it. "I have shared my password with my two best friends," noted a 15-year-old girl in the Greenfield group. "No, I'm not glad that I did because when we got in this big fight they went into my email and wrote my boyfriend telling him that I don't like him and I don't want to go out with him. Mature, huh?"

Youth and instant messaging

Almost three-quarters of online teens (74%), roughly 13 million youth, have used an instant messaging program that allows those online to hold conversations back and forth with other

users instantaneously. In comparison, 44% of online adults have tried instant messaging at one time or another.

Many online teens use IM frequently. More than 1 in 3 of those who use IM services (35%) say they instant message every day, with another third using instant messaging a couple of times a week (34%). No matter how frequently they log on, 45% of online teens who have used instant messaging say they use this online communications form each time they go online. Close to half (46%) of these young instant messagers say they spend between half and full hour on instant messaging each time they do IM, and another 21% say they spend more than an hour on a typical session.

Many report that a major advantage of instant messaging is that they can stay in touch with people who do not live nearby. Fully 90% of instant messagers say they use this Internet tool to stay in touch with friends and relatives who live outside their communities. Camp friends are particularly popular instant messaging buddies. "My buddy list includes friends from school, past teachers, family members or family friends, and friends that I have met that don't go to my school but [who] I like to keep in touch with, especially friends from camp [from] the previous summers," summarized a 16-year-old girl in an email message to the Pew Internet Project.

The basic IM crowd

Fully 74% of online teens use instant messaging, compared to 44% of online adults. Below are the percentages of online teens in each group who use Instant messaging:

Sex	
Boys	71%
Girls	78%
Age	
12-14	66%
15-17	81%
Sex and age	
Younger (12-14): Boys	60%
Girls	72%
Older (15-17): Boys	80%
Girls	83%
Family income	
Less than \$30,000	65%
\$30,000 to \$50,000	69%
More than \$50,000	79%
Internet experience	
One year or less	61%
Two to three years	75%
More than three years	89%

Source: Pew Internet & American Life Project Teens and Parents Survey, Nov.-Dec. 2000. Margin of error is ±4%; n=754.

Who sends instant messages

A greater proportion of online girls than online boys have ever tried instant messaging – the figures are 78% for girls and 71% for boys. And the percentage of online teens who have used IM increases with age.

In addition, girls latch on to instant messaging at an earlier age, with 72% of girls 12 to 14 using the service, compared to 60% of boys the same age who use IM. However, boys seem to catch up to girls as they get older, instant messaging at about the same rate as girls by the time they are in high school.

More youth from wealthier families use instant messaging than those from lower income families. Experience online also is closely associated with use of instant messaging. The longer a teen has been online, the more likely she is to use instant messaging.

Instant messaging compared to the phone

Ninety-four percent of online teens in our sample report using online communications tools like email, instant messaging, and chat rooms. Still, a strong majority of online youth (71%) who use these online tools say the phone is still the way they most often get in touch with their friends. At the same time, however, a fifth of these online teens (19%) say that instant messaging is their primary way of communicating with their friends and another 8% report that they use email the most often to contact pals.

When asked why they used one method of communication over another, the teens who cited the telephone say they preferred it because nuances of communication are easier to detect. They like the fact that they can hear emotions on the phone and that means they think they make fewer social mistakes on the phone than they do on the Internet. "Online, it is difficult to convey attitudes or tone of voice, whereas on the phone, there is much more of a human aspect, less austere and sterile than cyberspace," wrote a 16-year-old girl in an email to the Pew Internet Project.

Others preferred instant messaging for the way it enables multiple simultaneous conversations, and even multiple activities. "I send/receive instant messages almost every time I am online. I talk to up to 8 people at once," said a girl, 16, in an email to the Pew Internet Project. "I carry on separate conversations with each person. That way, you can talk about more stuff at once."

The special character of instant messages¹¹

Teens report instant messages do not contain the visual and aural cues that people get in face-to-face or phone contacts. They say this can lead to misunderstandings. "Although it never really starts anything big, I do frequently misunderstand people online, and they misunderstand me," said one boy, 16, in the Greenfield group. "It is hard to convey tone of voice and the manner in which one is saying something online. Sarcasm can be easily misunderstood online." At the same time, though, online teens appreciate instant messaging because they say it gives them a greater freedom to craft arguments carefully or to word an unpleasant message delicately.

 11 Analysis from here to the end of this section, unless otherwise noted, is of teens who use Instant messaging. n=560.

Fully 37% of instant message-using teens say they have used IM to say something that they would not have said to somebody's face. They report feeling a measure of protection using IM because writers cannot see the first reaction of the recipient. "It is easier to talk to someone about certain topics online, than to talk about them face-to-face," reported a 17-year-old girl in the Greenfield Online group discussion. "Online you can think things over, and erase them before you look stupid, rather than to their face, where you can't always take things back."

This "distancing" trait in Internet communication also can be an aid in repairing ruptured relationships, according to group discussion respondents. It is easier at times to explain some experiences and feelings online and not have to encounter awkward or confused reactions that sometimes occur during spoken or face-to-face conversation. "I had talked about this person behind their back a bit, and that person became upset by that," noted a boy, 16, in the Greenfield Online group. "Neither one of us knew how to bring it up in person, although we wanted to. Finally, we talked about it [online], I apologized, and we found out how much we mean to each other. Since that discussion, we have become very good friends again."

When online arguments are not resolved quickly, or when strangers or others send irritating or incessant instant messages, IM users often use the tools at their disposal to protect themselves. Fifty-seven percent of instant message users say they have blocked an instant message from someone they did not want to hear from. And 64% have ever ignored an instant message from someone they were mad at or did not like.

Dating

Significant numbers of teens have used instant messages to conduct relationships: 17% of IM users have asked someone to go out with them with an instant message. Teenage boys, especially those between ages 12 and 14, are the most likely to have used instant messages this way. One quarter of instant message-using boys have asked someone out over an instant message, as have 10% of IM-using girls. "She and I started to talk online and played a game where we could ask each other anything," wrote one 16-year-old boy in the Greenfield Online group discussion. "I eventually asked her out...online, of course. It's not the most romantic thing to do, but I was very nervous and it helped to make it a little bit easier."

Some 13% of IM users have broken up with someone via an instant message. There are not gender-based differences in this use of instant messaging. An equal number of girls and boys have used IMs to break up with someone. Younger teens (ages 12-14) are more likely than older teens to use this form of communication to end a relationship. Almost a fifth (18%) of teens in this age bracket have done so.

At times, even the emotional core of a relationship is conducted through instant messages and email. "Sometimes it is easier to say what is in your heart online," noted a girl, 17, in the Greenfield Online group discussion. "You can type the words and hit send instead of freezing up in person. In the mornings I sometimes get love letters and it makes me feel so good. I love hearing what my sweetie is thinking."

Making Plans

Eighty-two percent of online teens use instant messages to make plans with their friends. "We can check movie times online and get directions for where we want to go and have everyone talking and checking with each other at once," said one 17-year-old girl in the Greenfield Online group discussion. "That's really great because it makes things so much easier."

Pranks and deception

Instant messages and emails have become a prime vehicle for playing tricks on friends or others. A little more than a quarter (26%) of instant messaging teens have used the medium to pretend to be someone different. "Unfortunately, a friend and I tricked someone once," reported a 16-year-old boy in the Greenfield Online group discussion. "This person was a friend of mine (I'll call him 'Jim'). We created a new screen name and told 'Jim' that we knew his address and phone number and stuff. It only lasted about 15 minutes, but it really did mess up our friendship. I did it all in fun, but 'Jim' took much offense to it, and I can understand why. I decided not to mess with online trickery any more. Another time, another friend of mine created a new screen name and IM-ed his girlfriend to see if she was being faithful."

Online deception concerns some teens enough that they only use email and instant messaging with people they already know. But many just assume it is part of the online environment and cope in other ways. "I don't think people are always completely honest but it's not a big problem," wrote a 17-year-old boy in an email to the Pew Internet Project. "They're mostly small, white lies that are of little consequence." Added a girl, 13, in another email: "Yeah, I think people give a lot of fake info online all the time. Yeah, I guess I worry about it because of my friends' safety. They talk to people they have no idea who they are and sometime I find myself telling them that it might not be the person who they think it is. Of course, they think I'm a stiff @\$\$, but its ok as long as they're still living. Some of my friends think they're talking to Justin from N'sync, but I don't think so. There is so much information about him that anyone can impersonate him. I think it's quite scary."

Chat room tricks

Online teens also recognize that chat rooms are places where deception is commonplace. There is a sense among many teens, particularly younger ones, that chat rooms are dangerous places. According to online teens, one of the most common questions a new arrival in a chat will be "ASL?" That is a request from another chat participant asking someone her Age, Sex, Location.

One 15-year-old girl said in an email to the Pew Internet Project that she thought that people online lied about who they were, but that it did not worry her because "people ought to know if they go into a chat room what risks go along

The less experience online a parent has, the more likely it is that he worries

The percentage of parents who are worried "a lot" or "some" that the Internet leads young people to do dangerous or harmful things online, by the parents' level of Internet experience:

All parents	45%
Never online	60%
A year or less online	45%
More than three years online	39%

Source: Pew Internet & American Life Project Teens and Parents Survey, Nov.-Dec. 2000. Margin of error is +4%

with it, and you have to know that you can't trust anything anybody tells you." And another 16-year-old girl added: "I rarely go into chat rooms, if ever, and while there, I'm not looking for a faithful friendship so it's not like I am expecting to trust them completely." A common refrain is highlighted by one 14-year-old girl, who wrote in an email to the project: "I used to go into chat rooms, but I don't anymore."

Six percent of online teens who use email, instant messages or chat rooms confess to sending a prank email or email "bomb." Nine percent of boys 15 to 17 report doing this as do 9% of those online every day. For some teens computer viruses and hacking pranks are a big worry. Others are not too concerned. They figure they will not be victims of such attacks. "I know, however, that there are 'bugs' and spy utilities and viruses and all those bad things out there," stated a boy, 16, in the Greenfield Online group discussion. "[But] for the most part, I feel safe."

PART 2: TEENS AND THEIR FAMILIES

In addition to altering how teens interact with their friends, the Internet is introducing new dynamics into family life. In their overall judgment, parents think that the Internet's role in their children's lives beneficial. More than half of parents of online youth (55%) believe the Net is generally a good thing for their children and only 6% believe it is bad for their children. Some 38% do not think it has had an effect on their child one way or the other.

In many families, a child has mastered a technology before the parents. Teens often are the instigators of the family's first foray onto the Internet and end up teaching other family members how to use it. These new developments reverse the tradition of parents as teachers and children as learners and can play a beneficial role in family life as the teens gain in self-

respect and show their competence to their parents. It is easy to see how this could enhance parent-child relationships. However, this new arrangement is taking place during the tumultuous teen years, when children more aggressively test limits and move beyond the parameters of their family. So, this role reversal can exacerbate family

How long parents and their teens have been online Parents and teens often say they first got Internet access around the same time. The percentage of teens who have been online					
longerabout theless time than parent: same: than parent.					
All teens 25% 44% 31%					
Younger teens (12-14) 19% 44% 37%					
Older teens (15-17) 29% 44% 27%					

Source: Pew Internet & American Life Project Teens and Parents Survey, Nov.-Dec. 2000. Margin of error is $\pm 4\%$.

conflicts and add new topics over which to argue.

Parents also have concerns about the amount of time that their children spend online and about the people and material they will encounter in cyberspace. These worries prompt many parents to impose rules on Internet use, to monitor their children's online activities, and to install software to prevent their children from accessing objectionable material.

Many families first connect to the Internet in the same time period. The most noticeable variation in sequencing of who first got Internet access occurs between younger and older teens.

Teens know the Net better than their parents

Most youth and parents agree that the children know more about the Internet than their parents. Nearly two-thirds of online teens (64%) believe that and a slightly greater percentage of parents (66%) agree. More online boys say that than girls and more older teens say that than younger teens. This view is especially prevalent among online teens from families with modest incomes and those who live in single-parent homes.

The more recently a parent has gone online, the more likely it is that the teenager believes he knows more about the Internet than his parents. Fully 70% of online teens whose parents went online in the last year say they know more, compared to 53% of online teens whose parents have been online for more than three years.

When it comes to parents, more online fathers than mothers say they know more about the Internet than their children; more college-educated parents say this than those without

college degrees; and parents with a substantial amount of Internet experience are more likely to say they know more about the Internet than online parents who have just gotten access to the Internet.

How parents and youth learn about the Net

Forty percent of online teens report teaching themselves how to use email and the Internet. And they are not just teaching themselves – often, they are the ones who learn how to use the Internet and then teach their families. "At the time this was all beginning, no one else in our household beside myself knew how to do anything on any computer," reported a 17-year-old boy in the Greenfield Online group. "I had to write out instructions and tape them to sides of the monitor so that they'd know how to turn the computer on." Another 30% of teens report learning it from their parents. Only 5% learned from a class. "I learned the basics of the Internet (browsing, searching, E-Mail) at a summer course at school, but I taught myself the rest (downloading programs, instant messaging, etc.)," said a girl, 15, in the Greenfield Online group.

Teens are more Net savvy The percent of online teens in each group who say			
teenspare know more know i			
All teens	64%	32%	
Boys	67%	29%	
Girls	62%	35%	
Age			
12-14	58%	39%	
15-17	70%	27%	
Internet experience of teen	S		
One year or less	57%	39%	
Two to three years	65%	31%	
More than three years	71%	27%	
Frequency of Internet use b	y teens		
Every day	77%	20%	
Less often	56%	41%	
Frequency of Internet use b	y parents		
Every day	54%	42%	
Less often	73%	25%	
Parents' marital status			
Married ¹	62%	34%	
Single ²	75%	21%	

Source: Pew Internet & American Life Project Teens and Parents Survey, Nov.-Dec. 2000. Margin of error is ±4%. Note: Rows do not add to 100% because of non-response or teens' selecting "both equally" as their response.

Teens with the most knowledgeable parents (those who have been online longer than 3 years) were the most likely to be taught by their parents (43%). Those teens whose parents don't go online mainly learned how to use the Internet from friends (33%) or by teaching themselves (39%). Girls are more likely to have learned from their parents than boys, and boys are more likely to report being self-taught. A shift back to more traditional parent-child roles might be occurring, though, because a plurality of younger teens, regardless of gender, reported learning to use the Internet from their parents. Among 12- to 14-year-olds, 41% were taught by parents, compared to 22% of older teens. More than half (51%) of teens 15 to 17 report learning to use the Internet on their own.

¹ Married is defined as parents who are married or living as married.

² Single is defined as parents who have been divorced, separated, widowed, or never married.

Some of the differences between how teens of different ages learned to use the Internet can be explained by the pattern of Internet adoption in the U.S. About three years ago, Americans, both adults and teens started going online in droves. Often older teens with more interest and leisure time mastered the new technology and taught it to friends and family. Youth who are aged 12 through 14 are more likely to have parents who went online

Who taught the teens The percentage of teens who first learned how to use the Internet from each of the following sources:			
On their own 40%			
From a parent 30%			
From friends 23%			
From a sibling 10%			
In a class 5%			

Source: Pew Internet & American Life Project Teens and Parents Survey, Nov.-Dec. 2000. Margin of error is ±4%.

Numbers do not add up to 100% because multiple responses were accepted.

before them, and more likely than other teens to report that their parents taught them how use the Internet. Many of these parents had Internet access at work or school, and thus were already familiar enough with the technology, even if they did not have it at home, to teach their children how to use it.

Teens say they go online for the first time for a variety of reasons. "My dad got the Internet at home because he wanted us all to 'get with the times' so to speak," said one 16-year-old boy in the Greenfield Online group. Other parents decide to go online because they felt it was vital to the education of the children in the family. "I got it because I needed it for school and because it keeps me out of trouble," wrote a 17-year-

old girl. And some families got the Internet because the children *really* wanted it. "My dad decided to get the net because I begged and begged him for it," said a 14-year-old girl also in the Greenfield Online group discussion.

Conflict over access to the Net

The vast majority of the youth who have access to the Internet gain their access through their homes. Fully 90% of the online teens in our sample say they go online from home. And 94% of those with home access say they must share a computer with siblings or other family members. This sometimes causes family conflict. Indeed, 40% of the parents of online teens have had an argument with their children about using the Internet.

The amount of time teens spend online is a big factor. "The only thing we seem to disagree about is how much time I want online and how much I get," noted one boy, 17, in the Greenfield discussion group.

A 17-year-old girl in the Greenfield group described the struggle over access to the Internet this way: "I usually demand to get on the computer, and my brother yells at me that he's gonna take even longer. Then I tell my mom that I really need to go on and she makes me ask my brother nicely. He usually takes a long time though just to spite me." Others in the teen groups told of how families construct elaborate schedules of time for Internet use.

Other times, there is conflict over the nature of the online world. One 17-year-old girl described the evolution her relationship with her parents about the Internet this way in the Greenfield group: "At first, there were disagreements on where I could go, or couldn't go. But as time went on, they [her parents] realized that the Internet was not a bad thing, but a good thing that was a great learning tool. I dealt with these problems by talking to them, and showing them where I went. They would frequently watch from behind and monitor where I

was going. When they realized I wasn't trying to defy them, they eased up and gave me freedom."

The Internet's impact on family relationships

The conflicts surrounding time use as well as content accessed on Internet-connected computers may be part of the reason why teens do not think the Internet is helping their relationships with their families. In fact, most teens (61%) do not think that the Internet helps their relationships with their families at all. Almost two-thirds of online teens (64%) express a generalized concern that young people's use of the Internet takes away time they would spend with their families. Some 69% of girls say that and 59% of boys agree.

When asked whether the Internet has improved how they spend time with their children, 79% of parents say it has not helped at all or has only helped a "little bit." The frequency with which both parent and child go online is closely associated with the level of improvement they report. Parents who go online every day and parents of children who go online daily both report a greater sense of improvement in how they spend time with their children.

Does the Internet improve teens' relationships with their families?					
The percent of teens whoa lotonly a little answered or some or not at all					
All teens 20% 79%					
Younger (12-14): Boys 27% 72%					
Girls	22%	77%			
Older (15-17): Boys 21% 79%					
Girls	13%	87%			

Source: Pew Internet & American Life Project Teens and Parents Survey, Nov.-Dec. 2000. Margin of error is ±4%.

Parents and their children are evenly split on the question of whether the Net improves their children's relationships with their friends. Almost half of each generation (48%) believe Internet use is tied to improved friendships. "When I did not have any classes with my best friend the other year, we emailed each other every day and told each other the details of our day," said a 17-year-old girl in the Greenfield Online group discussion. "That brought us much closer together. That was when our friendship became stronger." The teens who are the most active Internet users are the most likely to express these positive feelings. In addition, fathers are more likely to report positive feelings than mothers, and the parents who use the Internet the most are the most enthusiastic about the beneficial impact of the Internet on their children's relationship with friends.

The Internet's impact on family activities

In most online homes, parents do not think the Internet has affected interfamily relations much. Still, some believe that the Internet has contributed at least somewhat to enjoyable family activities. More than a third (34%) of parents say the Internet has helped them plan weekend outings; 27% say it has helped them shop for birthday and holiday gifts for family members; 26% say it has improved the way they spend time with their children; and 19% say it has improved the way they care for their children's health.

There are sharp differences in the views held by online veterans compared to newbies on all these issues. The longer a parent has been online, the more likely it is for that parent to have

Experience makes a difference in family life The more online experience parents have, the more likely they are to think the Internet improves these aspects of family life "a lot" or "some": Parents who went online within2-3 the past years ago than 3 years ago			
The way they plan weekend outings and family trips	26%	32%	44%
The way they shop for birthday and holiday gifts	17%	28%	37%
The way they spend time with their children	24%	25%	29%
The way they care for their children's health	17%	14%	26%

Source: Pew Internet & American Life Project Teens and Parents Survey, Nov.-Dec. 2000. Margin of error is $\pm 4\%$.

quite positive things to say about the impact of the Internet on family life.

Planning by email

A significant bloc of parents is using email to do some of the logistics planning in their children's lives that used to be conducted by phone. More than a quarter of parents with Internet access (28%) use email to communicate with their children's teachers; and a fifth of online parents (20%) use email to stay in contact

with the parents of their children's friends. Parents in high-income households and parents with high levels of education are more likely to have used email to communicate with teachers than are other parents. Parents of younger children are a bit more likely to be in touch by email with the parents of their child's friends. And almost a third (32%) of parents who are veteran users of the Net stay in contact with other parents by email – compared to 17% of parents who've been online for a year or less.

Concerns and Fears

Parents agree that for the most part the Internet is a good thing or at least has a neutral impact on their own children. Still, parents have many concerns about the Internet and struggle to protect their children from the worst elements online – dreadful people and ugly information – without keeping children from its benefits.

Parents of girls are more concerned than parents of boys that their children will be victimized online – that they will be stalked, harassed, and that they will susceptible to advertising. This clearly carries over to the Internet the concerns that girls' parents have about all kinds experiences and threats.

Wired parents are generally much less worried about the impact of the Internet on their children than parents who do not have Internet access. Online parents tend to be more vigilant in monitoring what their children do on the Internet, but also seem more confident that their children can avoid trouble. Parents with considerable online experience express even less concern than those who have recently come online.

For their part, online teens as a group are generally much less concerned than parents about online content and do not feel as strongly that they need to be protected.

Worrying about strangers

Fifty-seven percent of parents of online teens worry that their children will be contacted by strangers via the Net – 25% of parents worry "a lot." Parents of girls and of younger children worry more than other parents. We noted above that 50% of online teens who use instant messaging, chats or email report sending email or writing instant messages with someone they have not met before. "I rarely talk to anyone I don't know on the Internet," said one girl, 17, from the Greenfield Online group discussion. "Sometimes when I have, though, it will get creepy when they start asking for information about you, or for pictures." But for the most part, these exchanges do not give these teens pause. Fully 52% teens of all online teens say they do not worry at all about being contacted by strangers online. Only 23% worry some or a lot.

Still, more than a quarter of all online girls (27%) worry that someone they do not know might find out who they are or try to contact them because they see them online. In comparison, only 18% of all online boys feel the same way. More younger children worry about this than older children and younger girls are the most concerned. One 15-year-old girl in the Greenfield online group spoke of her brush with the darker side of online strangers: "I've been…harassed. Cyber racists run rampant nowadays. One had a screen name that said "I Persecute Jews", and IM-ed me saying "How are you Jewin today?" So I block the guy, and then I get another IM from the same stalker with another name "Black Lotus." It's amazing, I guess people do express themselves better online. It's just that those deep feelings are often dark and offensive."

Inappropriate content

Parents are also concerned about what their children might see or read online. Sixty-two percent of parents express a lot or some concern about what their children might seek out or stumble across on the Internet. More parents of younger children are worried about this problem than parents of older children—68% of parents of 12-to 14-year-olds expressed a lot or some concern; whereas 58% of parents of teens 15-17 said the same.

A bad influence?

About half (45%) of parents are worried that the Internet leads some young people to do dangerous or harmful things. Yet only 11% report a lot of worry, and 34% reporting some. Parents who do not use the Internet themselves tend to be more concerned than parents with more online experience.

Teens themselves register even less concern than their parents. The largest group of teens (37%) answered that they believed that the Internet causes other young people to do dangerous or harmful things "only a little" and another 28% said "not at all."

How much parents and teens think that use of the Internet leads young people to do dangerous or harmful things: Parents Teens A lot 11% 10% Some 34% 24%

A harmful influence?

Source: Pew Internet & American Life Project Teens and Parents Survey, Nov.-Dec. 2000. Margin of error is ±4%.

29%

22%

Only a little

Not at all

The Internet as a distraction

Parents are quite concerned that Internet keeps teens generally from doing more important things. Sixty-seven percent of all parents expressed some or a lot of worry about the

37%

28%

distracting qualities of the Net. Parents of youth who go online on a daily basis are the most concerned parents, with 72% saying that they worried the Internet was keeping their children from doing more important things.

Online youth do not express many concerns about the impact of their own use of the Internet, but they fear use of the Internet keeps *others* from doing more worthwhile things. Almost two thirds of online teens (62%) think that the Internet does keep young people from doing more important things. Older girls are the most likely to view the Internet as a distraction, with 68% saying it keeps teens from doing more important things.

Still, many teens acknowledge that the Internet does keep them from doing other things that they ought to be doing. "I've been doing my homework later than usual because I just seem to get carried away online and forget I have homework," admitted one 17-year-old girl in the Greenfield discussion group.

Exploited by advertising

A bit more than half of all parents are concerned that companies will push advertising to their children. Fifty-eight percent of parents say that this concerns them some or a lot. Parents of girls 12 to 14 are the most concerned that advertisers will target their daughters online. Parents who are newer the Net express more concern than their veteran counterparts – 64% of parents who went online in the last year are worried about their children being exploited advertising, compared to 56% of those with more than a year of experience. For some online teens, concern about privacy is a serious issue. "I'm not concerned about malicious individuals obtaining my information, but about unethical companies," said one 16-year-old boy in the Greenfield Online group discussion. "I don't mind targeted banner ads, but I have grave objections to my personal information being sold, since it always results in more junk mail and e-mail."

The Internet is worse than TV

Asked to compare their worries about Internet content compared to TV content, more parents said they worry about Internet content. Thirty-eight percent of all parents are most concerned about the Internet, 16% are most concerned about what their children view on television, and 29% of parents are equally concerned about TV and the Net. Seventeen percent of parents are not concerned about either medium.

How Parents Protect Their Children Online

Rules

Fully 61% of parents of online teens say they impose time limits on how long their children can stay online. But only 37% of the online teens in our sample say such limits are imposed on

The steps parents take The percent of parents who say they	
Have family computer located in a public space in the home such as a den or living room	70%
Sit down with teens at computer and surf together	68%
Check on their teen's activities after child has been online	61%
Installed filters or use ISP controls on home computer	41%

Source: Pew Internet & American Life Project Teens and Parents Survey, Nov.-Dec. 2000. Margin of error is $\pm 4\%$.

them. Young teens are more likely than older teens to say they have rules.

Here is how parents use of time limits on Internet use compares to other key household technologies: Close to half (47%) of teens with Internet access say they have limits on the amount of time they can talk on the phone; 40% have limits on how much television they can watch; and 35% have time limits on playing computer games.

Checking up

A substantial majority of parents (61%) say they monitor the sites their children view by checking up on the children after they have gone online. But less than a third (27%) of online teens believed that their parents follow up on their online behavior. Boys were much more likely than girls (34%, compared to 20%) to say that they thought their parents were following up. But parents report monitoring at roughly the same rate for their sons and daughters (62% for sons, 59% for daughters).

Surfing together

Another tool that parents use to control what their children see and do online is to actually sit down and surf along side their son or daughter. Close to seven in 10 parents (68%) report sitting down at the computer with their child. More mothers than fathers sit down at their computers with their children. Interestingly, 34% of parents who say that they "do not go online" say they do sit down and go online with their children.

Parents are more likely to sit down and go online with younger teens than older teens -78% of parents of online 12- and 13-year-olds have ever gone online with them compared to 63% of parents of 14-to-17 year olds. Teens on the other hand say that a little less than half (48%) of them have ever sat down at the computer with their mother or father.

The computer out in the open

Most families seem to be listening to the advice of child advocates who urge them to put the computer in a public space in their homes such as a den or living room. Of youth who have access at home, 70% have their computer located in a public household space like a living room, study, den or family room. Twenty-seven percent have the computer located somewhere private, like a private bedroom. Sometimes the space is a little less definitely private or public. "My computer is located in the 'office.' This is where my dad does his work and my sister and I do our homework," noted one 17-year-old girl in the Greenfield Online group discussion. "It is pretty private in the sense that there is a closeable door, and no one really goes in there unless they need to use the computer for something."

Younger teens are more likely to use a computer in a public space than their older counterparts. Youth who go online every day are more likely to use a computer in a private space than youth who go online less often. Youth whose parents do not go online are also more likely to have their computer located somewhere private.

Filters

Technological filters have enjoyed a wave of news coverage recently with the passage of the Children's Internet Protection Act on December 21, 2000. The bill mandates that all schools and libraries receiving federal funding must employ filters to prevent young people from accessing pornographic or indecent material, and is supposed to be implemented by July, 2002. The American Civil Liberties Union and the American Library Association have mounted an attack against the implementation of the bill. And in February, *Consumer Reports*

concluded that filters generally fail to block out 20% of objectionable sites, and also block out educational sites with objectionable words or subjects.

To combat their concerns, many parents, especially parents of younger teens, turn to filtering software or controls through their Internet Service Provider to restrict what their children

can access online. Despite the flaws of filters, more than 2 in 5 parents (41%) of Net-using youth have some kind of monitoring software or use AOL's parental controls on their home computers. Parents of younger girls are the most likely to have the software on the computer.

Many youth who do not have filtering software on their home computers cite parental trust as the reason for not filtering: "I don't have any restrictions, because my mother trusts me to use the Internet without getting myself into trouble," argued a girl, 15, in an email to the Pew Internet Project. In the Greenfield group, a 16-year-old boy said, "My mom is pretty cool and doesn't care what I do. I suppose she wouldn't like it if I hacked into the government, but that is the only extreme I can think of."

Most of the teens who were contacted by the Pew Internet Project believed that parental monitoring of teenagers' online behavior was preferable to filtering. Some felt that teaching people how to avoid bad

Filtering Who has filtering software installed on their home computers:			
All parents	41%		
Parents of boys 12-14	42%		
of boys 15-17	35%		
Parents of girls 12-14 48%			
of girls 15-17 41%			
Offline parents	23%		
Online parents 44%			
Single parents ¹ 33%			
Married parents ² 43%			

Source: Pew Internet & American Life Project Teens and Parents Survey, Nov.-Dec. 2000. Margin of error is ±4%.

content voluntarily would be preferable to outright control over content by the government. "I think the topic of regulation is a very difficult one," said a 16-year-old girl in the Greenfield Online group discussion. "But I think that if we start to limit [what material is online], we will end up in a society that we really don't want."

Boys and adult content

Overall, 15% of online teens say they have lied about their age to gain access to a Web site – an action that is often required in gaining access to pornographic sites. A fifth of all boys (19%) ages 12-17 have done this, compared to 11% of teen girls. And fully one quarter of boys ages 15-17 have said they were older than they are in order to gain access to a Web site. Teens with several years of Internet experience are more likely than newcomers to have lied about their age to gain access to a Web site.

This is comparable to the reported use of pornographic sites by adults. Some 15% of adults say they have visited adult Web sites. Some 23% of men say they have done so and 7% of women say they have done so. Getting access to adult sites is most popular among men ages 18-29 and it is a relatively popular activity with Internet newcomers.

A significant number of the teens we engaged in the Greenfield Online group discussion and in other email exchanges reported that they had gotten unwanted email and instant messages from pornographers. "Just yesterday I was mail bombed with a porno advertisement," wrote

¹ Single is defined as parents who have been divorced, separated, widowed, or never married

² Married is defined as parents who are married or living as married.

one boy, 16, in the Greenfield Online group discussion. "You know, I really enjoy having to receive 4260 porno advertisements. *sigh* oh well, it's blocked now. I really hate spam mail."

Beyond porn sites and spam, sex has another place on the Net. Some of the teens in the Greenfield Online group, when asked about things that make them uncomfortable online, mentioned cybering. It is the online equivalent of phone sex or being solicited for online sexually suggestive talk by strangers. Most were either blasé about it, or found it "creepy." Said one girl, 15, "I feel uncomfortable a lot when people I don't know IM me and want to know private things about me or want to cyber or whatever. I usually just block people when this happens." Another boy, 16 stated: "Cybering is the most pointless thing in the world. It is simply typing letters and knowing that the other party is either: A.) Getting off to your message B.) Someone you know playing a joke on you or C.) (and most disturbing) All of the above."

PART 3: TEENS AND THEIR SCHOOLS

In 1996, the Telecommunications Act was signed into law, creating the E-Rate program that provided discounts of 20% to 90% to schools (depending upon the number of poor children

in a district) to allow them to purchase Internet access for the school or library. More than 98% of American public schools have some kind of Internet access for students. Some 77% of instructional classrooms have Internet connections, and the number drops to 60% for schools with the highest concentrations of poverty. 12 Our surveys show that 11% of online

School-related use of the Internet The percent of online teens who have ever		
Used the Internet for school research	94%	
Used the Internet as the major source for their most recent school project 71%		
Downloaded a study aid	34%	

Source: Pew Internet & American Life Project Teens and Parents Survey, Nov.-Dec. 2000. Margin of error is ±4%.

teens say their primary Internet access location is their school. Even if teens primarily access the Internet from home, many say the Internet's ability to help them with their schoolwork and to learn about new things is one of the best things that the Internet has brought to their lives and is often one of the major reasons why families first go online.

Access at school

More than six in ten (64%) youth who say they have Internet access say they have gone online at school at one time or another. Our survey suggests that school is often the place where those who are less privileged have their primary access to the Internet. A greater percentage of youth of single parents, from low-income families and whose parents do not go online (some respondents are part of each of those groups), have their primary access at school or at friends' houses. Youth with parents who have been online for a long time are less likely to have their primary access at school.

The Internet as teaching tool

Parents agree with their online children that Internet helps with learning. Almost all the parents interviewed (93%) believe that the Internet helps their children learn new things. Eighty-seven percent of parents also believe that the Internet helps with school.

Research for papers and projects—From Dewey Decimal to dot-com

For the teens in this survey, the Internet has replaced the library as the primary tool for doing research for significant projects. Almost all online teens use the Internet to do research for school—94% report using the Internet for this purpose. "I find the Internet most useful when I need help for school," maintained a 15-year-old boy in the Greenfield Online group discussion. "With out the Internet you need to go to the library and walk around looking for books. In today's world you can just go home and get into the Internet and type in your search term. The results are endless. There is so much information that you have to ignore a lot of it."

When asked to think about the last big report they wrote for school, 71% of all online teens report relying mostly on Internet sources for their research. Another quarter (24%) reported

¹² Cattagni, Anne, Farris, Elizabeth, and Westat. *Statistics in Brief,* "Internet Access in U.S. Public Schools and Classrooms: 1994-2000," National Center for Education Statistics, May 2001

using mostly library sources, and 4% said they used both equally. Older teens were slightly more likely than younger ones to report relying on Internet sources (74% compared to 68%) And three-quarters of youth who go online every day used the Internet as their main source for their last school report compared to 68% of youth who go online less often. Students cite the ease and speed of online research as their main reasons for leaving the library behind, and also say that the Internet frees them and their parents from the hassle of getting to the library to find the information they need.

Learning which information to trust

How do teens know what Web information is accurate? Some teens use a "gut-sense" or an "I know it when I see it" rule to determine what is good information and what is not. Said one 17-year-old girl in the Greenfield group: "I think you have to use your best judgment – and best guess." Some double check with books or other Web sites on similar topics, and some go by whether a Web site has a good reputation or a trustworthy offline counterpart. Many teens are fairly skeptical of the information they see on Web sites because they are aware of how easy it is to publish online. Anne Hird supports this sentiment in her book *Learning from Cybersavvy Students*. She writes that "as a result of their own experience designing Web pages, these students approach online information with caution. They are quick to recognize that there is nothing to prevent anyone – themselves included – from providing either biased or erroneous information on the Internet." ¹³

¹³ Hird, Anne. Learning from Cybersavvy Students: How Internet-Age Kids Impact Classroom Teaching Stylus Publishing, 2000 p. 82

PART 4: TEENS AND THEIR WEB

Online teens, particularly older ones, are omnivorous Web users. They sample a large variety of activities online. They particularly resemble the adult newcomers to the Internet that we named "Instant Acolytes" in the fall of 2000. 14 Instant Acolytes and teens of all experience levels alike are enthusiastic Internet users, embracing the entertainment and communication aspects of the Internet, and expressing less concern about potential dangers online. Neither group is very likely to have transacted anything online. Among teens, it is likely that the lack of spending is tied to their limited access to credit cards.

Online activities

Compared to the average adult Internet user, the average online teen has tried a greater number of online activities, though that average user might not continue to do those activities over the long term. Teens and adults (particularly parents) use the Internet for different reasons. Both groups appreciate the communication tools of the Internet. Youth are more interested in entertainment activities or information and parents lean more toward online tasks like transactions and information searches that will help their families like seeking health and medical material and financial information.

Of the activities that we asked of both youth and parents, youth are more likely to have tried listening and downloading music, game playing, checking sports scores, instant messaging, chatting, looking for news, looking for entertainment information, and going online just to pass the time. Parents are more likely to say they have researched and bought products or services

Teens' Internet use compared to adults In many ways, teens are more adventurous than adults online. The percentages of each group that have done the following online:		
	Teens	Adults
Go online for fun	84%	63%
Look for info about movies or other leisure activities	83%	65% a
Use instant messaging	74%	44% b
Play or download games	66%	34% a
Listen to music online	59%	40%
Visit a chat room	55%	26% b
Download music	53%	29%
Check sports scores online	47%	38% ^c
Some activities show a negligible difference between teens and adults:		
Send or receive email	92%	93%
Get news	68%	66%
And there are some activities favored by adults:		
Research a purchase or new product	66%	73% b
Buy a product	31%	53%
Look for health information	26%	57%

Source: Pew Internet & American Life Project Teens and Parents Survey, Nov.-Dec. 2000, and Pew Internet & American Life Project Survey, February 2001.

online, and that they have searched for information about their hobbies.

Beyond the differences in parents and children's uses of the Internet lie differences among the teenagers themselves. Girls and boys sometimes do different things. Older teens (15-17) and younger teens (12-14) use the Internet different ways. Experienced users and Internet

37

^a Source: Pew Internet & American Life Project Survey July-August 2000

^b Source: Pew Internet & American Life Project Survey May-June 2000

^c Source: Pew Internet & American Life Project Survey December 2000 Margin of error is \pm 4% for children and \pm 3% for adults.

¹⁴ See http://www.pewinternet.org/reports/toc.asp?Report=22

newbies also show some marked differences online. Here's a snapshot of what youth do online:

Send and read email

Email is the most often-sampled feature of the Internet for youth, just as it is for adults. Fully 92% of online teens have used email. More girls (95%) report email use than boys (89%). The boys' number is lower due to lesser enthusiasm for email among younger boys.

Girls and boys online: differences and similarities The percentages of teens who do the following activities online, by gender:		
	Girls	Boys
What more girls do online:		
Send or receive email	95%	89%
Use instant messaging	78%	71%
Look for dieting, health, or fitness information	30%	22%
What more boys do online:		
Research items that they might like to buy	55%	77%
Look for hobby information	62%	76%
Play or download games	57%	75%
Look for sports scores	32%	62%
Download music	47%	60%
Go to a Web site where people trade or sell things	20%	42%
Create their own Web sites	19%	29%
What boys and girls do at about the same	level:	
Go online for fun	85%	83%
Visit Web sites about movies, TV shows, music groups or sports stars	85%	81%
Look for news	70%	66%
Listen to music online	59%	59%
Visit a chat room	56%	55%
Visit Web sites for clubs, activities, or sports teams of which they are members	38%	41%
Visit Web sites where they can express their opinions about things	38%	38%
Go online to find information that is hard to talk about with other people	17%	19%

Source: Pew Internet & American Life Project Teens and Parents Survey, Nov.-Dec. 2000. Margin of error is $\pm 4\%$.

Of online boys aged 12 through 14, 84% have used email at one time or another. New users are also a bit less enamored with email, as are youth from lower-income families (those in households earning less than \$30,000) and families headed by parents without college educations.

Browse for fun

The next most popular thing to do after email is to go online to pass the time for fun. Eighty-four percent of online youth say that they do this. Boys and girls are equally likely to report going online to pass the time. There is little variation among ages, either. Youth who live in households with only one parent are more likely than other teens to go online to pass the time, with 91% of these teens reporting doing this. A 17-year-old boy in the Greenfield Online group reports going online "and just looking for stuff that interests me at new sites."

Go to Web sites about movies, TV shows, music groups or sports stars

Like adult newbies, online youth enjoy searching for entertainment-related information. There is little difference overall between girls and boys on this front. However, older girls ages 15-17 are the most likely to have been to such sites, with 87% of them saying that they

have done this at one time or another, compared to 80% of boys the same age and 83% of all online teens. "Each session online," says a girl, 15, from the Greenfield Online group, "I

check my email, check for hits to my page, and visit sites of my artist or athletes."

Hobbies

Sixty-nine percent of online youth access Web sites related to favorite hobbies. This compares to the 78% of adults who search for hobby information. Boys are more likely to go to hobby Web sites than girls, with 76% of boys having ever done this, compared to 62% of girls.

Boys are also more likely than girls to feel that the Internet helps them with their hobbies. 59% of all boys believe that the Net helps them some or a lot with their hobbies, compared to 44% of girls who say that. One 17-yearold boy from the Greenfield group noted, "The Internet has been a great tool in finding information about paleoanthropology. I have read all the books I could find on this subject and taken college classes in high school in physical anthropology. I seem to always want to find more information on this and the Internet is the place

Teen newcomers vs. teen veterans

The more experience teens have online, the higher the percentage of them who do the following activities:

	Internet Newcomers ¹	Internet Veterans ²
Send or read email	85%	94%
Go online just for fun	78%	85%
Look for info on hobbies	64%	75%
Send an instant message	61%	89%
Get news	58%	74%
Research a product or service before buying it	54%	76%
Visit a chat room	53%	64%
Listen to music online	49%	65%
Check sports scores	41%	47%
Download music	36%	70%
Go to a Web site where they can express opinions about something	33%	49%
Visit a site for a club or team that they are a member of	28%	47%
Visit sites for trading or selling things	25%	42%
Buy something online	21%	41%
Create a Web page	20%	29%
Look for info on a topic that is hard to talk about	17%	24%

Source: Pew Internet & American Life Project Teens and Parents Survey, Nov.-Dec. 2000. Margin of error is ±4%.

to find it. There are numerous research institutions, universities and personal Web pages that people have graciously shared their information on." Another 15-year-old boy in the group added: "I have a rather large basketball card collection, so eBay.com has given me an idea of what my stuff is worth."

News

More than two-thirds (68%) of youth ages 12 through 17 have searched for news online. Older teens are more likely to look for news with 73% of them reporting having ever done that activity, compared to 63% of teens ages 12 through 14. Teens and adults are just as likely (68% to 66%) to have ever checked the news or current events online. Children from wealthier households are a bit more likely than others to look for news online – 71% of youth whose families earn more than \$50,000 a year report looking for news, compared to 63% of youth whose families earn less. A 16-year-old girl wrote in an email to the Project

¹ Newcomers have been online for one year or less.

² Veterans have been online for more than three years.

describing her typical session online "[First, I] see who's on from my buddy list, check my email and erase messages from names I don't know, instant message my friends, research something on yahoo for homework and go to the Washington Post Web site for news updates."

Online purchases and comparison-shopping

Some recent studies suggest that teens have hefty spending power – by some accounts teens receive \$55 billion a year from their parents. Add in money that teens earn on their own, and the sum grows even larger. Still, while teens may have substantial purchasing power, their limited access to credit cards limits how many can buy online. Some 31% have purchased goods online, compared to 51% of online adults who have done so. More older teens with Internet access (36%) have done this than younger teens (26%).

But many more teens use the Internet to research their purchases. Two-thirds (66%) of teens research items online that they might like to buy. This gap between looking and buying is mirrored by adults -75% of those 18 older and online have researched purchases, but 53% have actually made a purchase online. Boys are the most likely to research purchases online, with 77% of boys having searched online for product or service information, compared to 55% of girls. The oldest boys are the most likely to have sought such information.

To a lesser extent there is also an age gap – older teens are more likely to research online with 71% doing so, compared to 60% of younger teens. When asked to describe the best things about going online, a girl, 17, from the Greenfield group, said, "I can also go shopping online for many different thing[s], or I can just browse through different items I don't usually see, or find anywhere local. I can look at collectible items, or paintings, etc."

Boys are much more likely to find the Internet useful for comparison-shopping and finding good deals. Forty-five percent of online boys say they find the Internet helps them "some" or "a lot" to get the best prices on the things they buy. Only 28% of girls report such positive feelings. In fact a full 50% of all girls say the Internet is not helpful at all for finding good prices on things they want to buy. Older youth are also more likely to say the Internet is helpful for comparison-shopping. Forty-one percent of teens 15 through 17 say it is useful compared to 32% of younger teens.

Get insights into what's "cool"

More than half (54%) of teens say that the Internet helps them find out what's cool in fashion and music that they like. Younger girls, 12 to 14, are the most likely (64%) to say that the Internet helps them to find fashion and music. Fifty-nine percent of frequent users (those who go online every day) are also more likely to have used the Net to find out what's cool. Youth from families earning less than \$50,000 a year, single parent families and families with parents who went online a year ago or less are also more likely to say the Net helps them find what's cool.

40

¹⁵ April 2, 2000, The New York Times, citation of an Ohio State University study of teen allowances and discretionary income.

¹⁶ From the Pew Internet Project May-June 2000 survey

Click on ads

Even as ad revenues drop in the current online climate, there is evidence that teens are receptive to online advertising. Youth do not seem to mind, but their parents do. Boys are much more likely to click on ads than girls. Sixty percent of boys report having clicked through, compared to 47% of online girls. Older youth are more likely than younger to have clicked on an ad; youth who log on every day are also more likely than less-frequent users to have clicked through on ads; and youth from wealthier families are more likely than those from households with lesser incomes to have checked out online ads.

Play or download online games

Two-thirds (66%) of teens have downloaded or played an online game. Younger teens are

Younger teens compared to older teens

Older teens are by far heavier users of the Web than their younger counterparts, with one exception.

The percentage of teens in each age group who do the following activities online:

Ages 12-14 Ages 15-17

	1.9 1- 1	1.9 1		
What younger teens do online more than older teens:				
Play or download a game online	75%	58%		
What older teens do online more than younger teens:				
Send or receive email	89%	95%		
Send instant messaging	66%	81%		
Get news	63%	73%		
Research a purchase	60%	71%		
Download music	44%	61%		
Visit a chat room	49%	60%		
Visit team or club Web sites	33%	44%		
Buy something online	26%	36%		
Visit Web sites that allow trading or selling of items	27%	35%		
Look for dieting, health, or fitness information	18%	32%		
Create their own Web page	21%	26%		
Go online to find information that's hard to talk about with someone	14%	21%		

Source: Pew Internet & American Life Project Teens and Parents Survey, Nov. Dec. 2000. Margin of error is $\pm 4\%$.

much more likely to have done this than older teens - threequarters (75%) of teens 12 through 14 have played or downloaded games, compared to 58% of older teens. Boys also play more online games than girls – three-quarters of online boys have done this compared to 57% of all online girls. And younger boys (aged 12-14) are the most enthusiastic online games players. This contrasts with the adult online population, in which online game playing is generally more popular with women than with men.

<u>Music—everybody listens and boys do</u> <u>the downloading</u>

Napster and other peer-to-peer file sharing systems like Gnutella and FreeNet have radically altered how teens learn about and get music. Teens have always been large consumers of music, and with their generally limited spending

money have flocked to sites like Napster where they can learn about and download music for free. Consequently, listening to music and downloading music files from the Internet are very popular activities among teens, with 59% of online teens saying they listened to music online at one time or another and 53% saying they have downloaded music files. Boys and girls are equally as likely to listen to music online, but boys are much more likely to have downloaded music than girls, with 60% of boys reporting this, compared to 47% of all online girls. Older teens (61%) are also more likely to have downloaded music than younger

teens (44%). And older boys (ages 15-17) are the most fervent music downloaders: Nearly three-quarters of them (73%) have downloaded songs.

Chat rooms

Slightly more than half (55%) of all teens online said that they have visited a chat room. Boys and girls are equally likely to go to chat rooms. Older youth are far more likely to go to chat sites than 12 to 14 year olds (60% to 49%). Some youth say they prefer instant messaging to chatting because they feel it is easier to control conversational contacts and the flow of conversation itself. "When I'm with a group of people online, I will usually I.M them all separately," said a boy, 16, in the Greenfield Online group discussion. "The reason being 1. it's not a big jumble of people talking all at once (like talking in a crowd, where you hear everything that everyone has to say perfectly, hard to hear the person ur talking to.) [and] 2. setting up a chat room isn't as easy as setting up several I.M.'s." Many teens also told us about creating private chat rooms where they could control who was invited to participate. Says one girl, 14, in the Greenfield Online group discussion, "If there are a lot of people online, I set up a private chat room and invite my friends so we can all talk together."

Go to web page for clubs, groups or sports teams that you are a member of

A considerable number of these wired teens participate in extracurricular activities and organizations that have Web sites. These pages contain information about practice times, schedules, and games or events after they have taken place. Thirty-nine percent of all youth said they had visited these sites. Older youth of high school age are more likely to do this than younger – with 44% of 14 to 17 visiting team and club Web sites, compared to 30% of middle and junior high school-aged younger teens.

Much of the day to day organizing for these clubs or groups now occurs over email or instant messaging. "I am in the Drama Club at our school and in my last email I touched on the idea of next year's play," said one 16-year-old boy from the Greenfield Online group. "I want to try to get other people to pick out a production that's good. Last year we did Hello Dolly! which was kinda dumb..." Added another girl 14 in the same group: "Just yesterday I was talking on IM with my best friend Laura. We are in the same religious youth group...and she is President and I am Vice President, so we were talking about upcoming events that we were planning and talking about events that have already taken place."

Trade or sell things

Auction and trading sites like eBay are increasingly popular among online teens. Boys are twice as likely to have gone to these sites than girls. Twenty percent of girls have been to trading or auction sites, compared to 42% of boys. Age also makes a difference – younger teens with Internet access are somewhat less likely than older teens (27% to 35%) to have visited auction or trading sites. And older boys (ages 15-17) are the most likely to have been to such sites. Nearly half (46%) report doing so.

Look online for fitness, dieting or health information

Older girls are the most likely to look for this type of information – 40% of online girls 15 to 17 reported that they had done so. Older boys were the next most likely to search for that information with 26% saying they had visited those sites. Eighteen percent of all the younger (12-14) online teens said they had looked for health, fitness or dieting information. "I'm sure many teens (including myself) do this occasionally," noted a girl, 15, in the Greenfield

Online group discussion. "Health and body issues is the topic that sticks out in my mind when it comes to sensitive subjects that can be researched online."

Express yourself: Create your own Web page, give your opinion

One-quarter (24%) of all online teens have created their own Web pages. Older boys lead the pack with one third (34%) of them saying that they have designed their own page. Said one girl, 14, from the Greenfield Online group "My favorite thing to do online is check emails and update my Web page on [favorite TV show]."

Almost two-fifths (38%) of online teens have ever visited a Web site where they could express their opinions. There are no significant differences defined by age or gender in this activity. Teens who go online every day are enthusiastic about expressing themselves online, with 48% saying they visit sites where they can express their opinion about something, compared to 31% of teens who go online less often.

Go online to get information about something that's hard to talk about with other people

Eighteen percent of online youth said they have looked online for sensitive information and more than a quarter of all online teens (26%) think the Net is helpful in this regard. Older teens are more likely to have done this than younger (21% to 14%) and are slightly more likely than younger teens to say that the Internet is helpful for this purpose. Fully a quarter of older teenage boys (ages 15-17) say they have turned to the Internet to get information on sensitive subjects.

Children from families with modest incomes and whose parents do not have college educations are more likely to say that they think the Net helps to find information that is hard to talk about with others. "You may have noticed that I often note the website virtualkid.com," wrote one 16-year-old boy from the Greenfield Online group discussion. "It was a website for teens complete with forums and information and just help in general for teenagers.... Besides dating, the site had information on puberty and all the awkward teenage moments. It was a really nice, helpful site." Said another 17-year-old girl in the Greenfield group: "Yeah, I've done it before. It's less weird and cheaper than going to a doctor to ask."

"If I did need to find such information at a point in my life my first step would be looking online. It's easier, more private, and faster," added a 17-year-old boy in the same group. "Then if I could not find what I was looking for, I'd head to a library or see a professional. I figure that if you can solve a personal problem yourself, more power to you. Some issues that people might feel uncomfortable about could be health issues, sexuality issues, religious questions, or dating issues."

Single parent households are different from two-parent households

Twenty-eight percent of all American youth live in single parent households (or close to 20 million children).¹⁷ They are 17% of our sample and there are some differences between the

online behaviors of youth in single parent households and those with two parents at home. Youth living with one parent are more likely to go online just for fun (91%, compared to 83% of youth with two parents at home), visit chat rooms (61% to 54%), play or download games online (71% to 65%) and are more likely to research products they

Single parents and the Internet

Single parents sometimes exhibit different behaviors and express different opinions from their married counterparts.¹ The population of single parents tends to be more female, younger, with generally lower levels of income and educational attainment.

What parents do and think:	Married	Single
Went online in the last six months	7%	13%
Believe the Net improves time spent with teen	25%	30%
Use filters on home computer	41%	27%
Believe the Internet helps plan family outings	37%	24%
Believe the Internet is a good thing for their teen	56%	51%
Worry about online advertising	59%	54%

Source: Pew Internet & American Life Project Teens and Parents Survey, Nov.-Dec. 2000. Margin of error is ±4%.

would like to buy online (71% to 65%). Youth with two parents at home are more likely to search for news online (70% to 61%) and buy something online (32% to 27%). Some of the differences might indicate that the computer is more of a babysitter and companion for youth with one parent. The differences between buying and researching products could be tied to the income levels in single-parent homes and to the greater likelihood that these households have just recently gotten Internet access.

44

¹ Single is defined as parents who have been divorced, separated, widowed, or never married. Married is defined as parents who are married or living as married.

¹⁷ From the U.S. Census Bureau current population report from March 1998. Available on the Census Bureau web page at http://www.census.gov/population/www/socdemo/ms-la.html

METHODOLOGY

Phone survey:

Data on Children and Teens, Parents Thoughts and Fears

This report is based on the findings of a special survey of 754 children, ages 12 to 17, who use the Internet and one of their parents or guardians (total of 1,508 persons interviewed) and was conducted by Princeton Survey Research Associates between November 2, 2000 and December 15, 2000. Results in this report are based largely on data from this special survey of online youth and parents. For results based on this survey, the margin of error is plus or minus 4 percentage points. In addition to sampling error, question wording and practical difficulties in conducting telephone surveys may introduce some error or bias into the findings of opinion polls.

Interviews for this survey were conducted among Internet households with a child age 12 to 17 that completed a Tracking interview with the Pew Internet & American Life Project some time during 2000. The Tracking polling was done in the continental United States and yielded a representative sample of the adult population of the United States. The callback survey was of those who had told us they had children with Internet access. Households were called back to determine eligibility. Once a household was deemed eligible, both a parent and a randomly selected child completed an interview. Some families could not be reached for the callback portion of the survey; others did not wish to participate. Thus, this sample cannot be considered a representative sample of the online U.S. teenage population. The final data were not weighted.

Data on Parent's Activities

The information about online behaviors of parents is based on our daily tracking surveys on Americans' use of the Internet. The results are based on data from one month of telephone interviewing conducted by Princeton Survey Research Associates between February 1, 2001 and March 1, 2001, among a sample of 2,096 adults, 18 and older, of whom 735 are parents and some 496 are parents and Internet users. For results based on the total sample, one can say with 95% confidence that the error attributable to sampling and other random effects is plus or minus 3 percentage points. Some other pieces of data about adults or parents are from a call-back survey conducted between March 3 and April 8, 2001, calling back the same respondents from our March 2000 random digit sample tracking poll. The results based on the full sample of 1,501 interviews are plus or minus 3 percentage points and results based on Internet users are plus or minus 4 percentage points.

The sample for this parents' survey is a random digit sample of telephone numbers selected from telephone exchanges in the continental United States. The random digit aspect of the sample is used to avoid "listing" bias and provides representation of both listed and unlisted numbers (including not-yet-listed numbers). The design of the sample achieves this representation by random generation of the last two digits of telephone numbers selected on the basis of their area code, telephone exchange, and bank number.

A new sample was released daily and was kept in the field for at least five days. This insures that the complete call procedures are followed for the entire sample. Additionally, the sample was released in replicates to insure that the telephone numbers called are distributed

appropriately across regions of the country. At least 10 attempts were made to complete an interview at every household in the sample. The calls were staggered over times of day and days of the week to maximize the chances of making contact with a potential respondent. Interview refusals were re-contacted at least once in order to try again to complete an interview. All interviews completed on any given day were considered to be the final sample for that day.

Non-response in telephone interviews produces some known biases in survey-derived estimates because participation tends to vary for different subgroups of the population, and these subgroups are likely to vary also on questions of substantive interest. In order to compensate for these known biases, the sample data are weighted in analysis. The demographic weighting parameters are derived from a special analysis of the most recently available Census Bureau's Current Population Survey (March 1999). This analysis produced population parameters for the demographic characteristics of adults age 18 or older, living in households that contain a telephone. These parameters are then compared with the sample characteristics to construct sample weights. The weights are derived using an iterative technique that simultaneously balances the distribution of all weighting parameters.

Throughout this report, the survey results are used to estimate the approximate number of Americans, in millions, who engage in Internet activities. These figures are derived from the Census Bureau's estimates of the number of adults living in telephone households in the continental United States. As with all survey results, these figures are estimates. Any given figure could be somewhat larger or smaller, given the margin of sampling error associated with the survey results used in deriving these figures.

Group discussions

This report also contains quotes from teenage Internet users gleaned from two group discussions. The preliminary group discussion was held in the fall of 2000 and was made up of email responses from a group of children mainly solicited from families on a sports team list-serv at a public high school outside of Washington, DC. The second group discussion was facilitated by Greenfield Online and was drawn from their panel of Internet users. The group discussion was conducted from February 12 to 16 online, in a moderated, threaded discussion format in which participants were asked to respond to questions from the Pew Internet & American Life Project, queries from the moderator, as well as the responses of other members of the group. MindStorm® uses a threaded response procedure that allows respondents to react to and build upon each other's ideas at whatever time is convenient for them. It is open 24 hours per day during the course of the study. The "Mindstorm"® group discussion lasted for five days and had 21 respondents who completed all five days. The group was made up of 11 females and 10 males, and ages ranged from 13 to 17. Participants in the Greenfield Mindstorm were offered a cash incentive to participate. For both group discussions, parents and children were informed of the nature of the research. All identifying information has been removed from the comments from teens from both group discussions. Neither group discussion is meant to be a representative sample and comments may not be generalized to American teen population as a whole.

Special thanks to Susan Roth, Director, Qualitative Research, Yan Saquansataya: Manager, Qualitative Operations, Siobhan Duffy: Qualitative Project Manager and Gail Janensch: Vice President of Corporate Communications.