

Teens and Social Media

The use of social media gains a greater foothold in teen life as they embrace the conversational nature of interactive online media.

December 19, 2007

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Summary of Findings

The use of social media – from blogging to online social networking to creation of all kinds of digital material – is central to many teenagers’ lives.

Some 93% of teens use the internet, and more of them than ever are treating it as a venue for social interaction – a place where they can share creations, tell stories, and interact with others.

The Pew Internet & American Life Project has found that 64% of online teens ages 12-17 have participated in one or more among a wide range of content-creating activities on the internet, up from 57% of online teens in a similar survey at the end of 2004.

- 39% of online teens share their own artistic creations online, such as artwork, photos, stories, or videos, up from 33% in 2004.
- 33% create or work on webpages or blogs for others, including those for groups they belong to, friends, or school assignments, basically unchanged from 2004 (32%).
- 28% have created their own online journal or blog, up from 19% in 2004.
- 27% maintain their own personal webpage, up from 22% in 2004.
- 26% remix content they find online into their own creations, up from 19% in 2004.

The percentage of those ages 12-17 who said “yes” to at least one of those five content-creation activities is 64% of online teens, or 59% of *all* teens.

In addition to those core elements of content creation, 55% of online teens ages 12-17 have created a profile on a social networking site such as Facebook or MySpace; 47% of online teens have uploaded photos where others can see them, though many restrict access to the photos in some way; and 14% of online teens have posted videos online. The current survey marks the first time questions about video posting and sharing were asked.

This Pew Internet & American Life Project report is based on the findings of a callback telephone survey of a randomly generated sample of youth 12-17 and a parent or guardian. The data was gathered through telephone interviews conducted by Princeton Survey Research Associates between October 23 and November 19, 2006, among a sample of 935 parent-child pairs. For results based on the total parent or teen sample, one can say with 95% confidence that the error attributable to sampling and other random effects is +/- 3%. For results based on online teens or online parents, margin of sampling error is +/- 4%.
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Girls continue to lead the charge as the teen blogosphere grows; 28% of online teens have created a blog, up from 19% in 2004.

The number of teen bloggers nearly doubled from 2004 to 2006. About 19% of online teens blogged at the end of 2004, and 28% of online teens were bloggers at the end of 2006. Overall, girls dominate the teen blogosphere; 35% of all online teen girls blog, compared with 20% of online teen boys. This gender gap for blogging has grown larger over time. Virtually all of the growth in teen blogging between 2004 and 2006 is due to the increased activity of girls. Older teen girls are still far more likely to blog when compared with older boys (38% vs. 18%), but *younger* girl bloggers have grown at such a fast clip that they are now outpacing even the *older* boys (32% of girls ages 12-14 blog vs. 18% of boys ages 15-17).

The growth in blogs tracks with the growth in teens' use of social networking sites, but they do not completely overlap.

Some 55% of online teens have profiles on a social network site (SNS) such as Facebook or MySpace and those who have such profiles are much more likely to be bloggers than those who do not have social network profiles. Two in five (42%) teens who use social networking sites also say they blog. And, in keeping with the conversational nature of social media, social networking teens are also interacting with others' blogs. Seven in ten (70%) social networking teens report reading the blogs of others, and three in four social networking teens (76%) have posted comments to a friend's blog on a social networking site.

Online boys are avid users of video-sharing websites such as YouTube, and boys are more likely than girls to upload.

Fully 57% of online teens say that they watch videos on video sharing sites such as YouTube. Older online teens, especially older online boys (15-17), are more likely to report watching videos on video sharing sites when compared with younger teens.

Online teen boys are also twice as likely as online teen girls to post video files (19% vs. 10%). Not even older girls – a highly-wired and active segment of the teen population – can compete with boys in this instance; 21% of older boys post videos, while just 10% of older girls do so.

Digital images – stills and videos – have a big role in teen life. Posting them often starts a virtual conversation. Most teens receive some feedback on the content they post online.

Once teens have posted photos or videos, conversation and feedback begin. Nearly nine in ten teens who post photos online (89%) say that people comment at least sometimes on

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the photos they post. Breaking it down, about half (52%) of teens who post photos online say that people comment or respond to their photos “sometimes.” Another third of those who post photos (37%) say that their audience comments on their posted photos “most of the time.” Only 10% of teens who post photos online say that people “never” comment on what they have posted.

Teen video posters report a similar incidence of receiving comments when they post videos online; nearly three-quarters (72%) of video posters report that they get comments at least sometimes. A little under half (48%) of posters say that people “sometimes” comment on their video postings. Another quarter (24%) say that people comment on their online videos “most of the time.” A similar number (27%) say that they “never” get comments on posted videos.

Comments and online conversation around content aren’t limited to images or videos posted online. As mentioned above, three-quarters (76%) of teens who use social networks say they comment on blog posts written by others.

Most teens restrict access to their posted photos and videos – at least some of the time. Adults restrict access to the same content less often.

Few teens who upload photos online consistently share them without any restrictions. While 39% say they restrict access to their photos “most of the time,” another 38% report restricting access “only sometimes.” Just 21% of teens who post photos say they “never” restrict access to the images they upload. Online adults are more lax in restricting access to their online photos; 34% restrict access most of the time, 24% some of the time, and 39% say they never restrict access to online photos.

For the most part, teens who post video files want them to be seen. Just 19% of video posters say they restrict access to their videos “most of the time.” More than one-third of teens who post videos (35%) say they restrict access to their videos “only sometimes,” and 46% say they “never” limit who can watch their videos. Adult internet video posters have a similar profile of restrictiveness; 23% limit access to videos they post “most of the time,” 30% do so “some of the time,” and 42% never restrict who can watch videos they have posted.

In the midst of the digital media mix, the landline is still a lifeline for teen social life. Multi-channel teens layer each new communications opportunity on top of pre-existing channels.

Communications patterns among teens are shifting as their array of options grows. For the entire population of those ages 12-17, phone conversations and face-to-face meetings are the most frequently chosen ways to communicate with friends outside of school. But multi-channel teens – those teens who use the internet, instant messaging, text messaging a cell phone, *and* social networking sites – are more likely to turn to cell phones and

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digital media when communicating with friends. These multi-channel teens are super communicators who will use any tool at their disposal, but cell phones, instant messaging applications, and social networking channels rank higher in the panoply of their communications choices when compared with landline and face-to-face communication outside of school.

Multi-Channel Teens Are Super Communicators		
<i>The percent of teens who communicate with their friends every day via these methods...</i>		
	<i>All teens (n=935)</i>	<i>Multi-channel teens+ (n=265)</i>
Talk to friends on landline telephone	39%	46%
Talk on cell phone	35	70*
Spend time with friends in person	31	35
Instant message	28	54*
Send texts	27	60*
Send messages over social network sites	21	47*
Send email	14	22

*Source: Pew Internet & American Life Project Survey of Teens and Parents, October-November 2006. n=935. Margin of error for teens is $\pm 4\%$. +Multi channel teens are defined as teens who use the internet, have cell phones, use instant messaging, text messaging and use social network sites. * indicates statistically significant differences between the percentages in the row.*

Email continues to lose its luster among teens as texting, instant messaging, and social networking sites facilitate more frequent contact with friends.

Despite the power that email holds among adults as a major mode of personal and professional communication, it is not a particularly important part of the communication arsenal of today's teens. Only 14% of all teens report sending emails to their friends every day, making it the least popular form of daily social communication on the list we queried. Even among multi-channel teens, who are more likely to take advantage of any communication channel they have access to, just 22% say they send email to their friends daily.

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Teens and Social Media: Summary of Findings at a Glance
The use of social media – from blogging to online social networking to creation of all kinds of digital material – is central to many teenagers’ lives.
Girls continue to lead the charge as the teen blogosphere grows; 28% of online teens have created a blog, up from 19% in 2004.
The growth in blogs tracks with the growth in teens’ use of social networking sites, but they do not completely overlap.
Online boys are avid users of video-sharing websites such as YouTube, and boys are more likely than girls to upload.
Digital images – stills and videos – have a big role in teen life.
Posting images and video often starts a virtual conversation. Most teens receive some feedback on the content they post online.
Most teens restrict access to their posted photos and videos – at least some of the time. Adults restrict access to the same content less often.
In the midst of the digital media mix, the landline is still a lifeline for teen social life.
Multi-channel teens layer each new communications opportunity on top of pre-existing channels.
Email continues to lose its luster among teens as texting, instant messaging, and social networking sites facilitate more frequent contact with friends.
<small>Source: Lenhart, A. Madden, M. Rankin Macgill, A. Smith, A., <i>Teens and Social Media: The use of social media gains a greater foothold in teen life as email continues to lose its luster</i>. Washington, DC: Pew Internet & American Life Project, December 19, 2007.</small>

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Acknowledgments

On behalf of the Pew Internet & American Life Project, the authors would like to acknowledge the contributions to this study by the following people:

Thanks to danah boyd, Fred Stutzman, and Eszter Hargittai for their assistance with the survey design and research process.

About the Pew Internet & American Life Project: The Pew Internet Project produces reports that explore the impact of the internet on children, families, communities, the work place, schools, health care, and civic/political life. Support for the non-profit Pew Internet Project is provided by The Pew Charitable Trusts. The Project is an initiative of the Pew Research Center. The Project's website: www.pewinternet.org

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Part 1.

Teens creating content

In our 2005 report, “Teen Content Creators and Consumers,” we noted an important and emerging trend: teenagers were helping to lead the then-ascendant movement into the Web 2.0 era of participatory media. Online teens were utilizing the interactive capabilities of the internet—creating and sharing their own media creations—at levels far higher than adults. At the time, online teens were more likely than adults to have tried virtually every form of content creation. The portion of online teens who were blogging, maintaining their own websites, remixing content, and sharing other artistic creations online far outweighed the portion of online adults who had engaged in the same types of activities.

Catherine Cook is co-founder of the social networking site MyYearbook.com, which she started when she was in high school. Together with her brothers, she wanted to create a site that would give students access to an interactive digital yearbook that would help them stay in touch with friends after graduation. First launched in 2005, the site now has over 1.7 million members and has attracted over \$4 million dollars in venture capital.¹

Ben Cathers was just 12 years old when he started his first business providing online advertising in the late 1990s. By 17 he was producing his own syndicated radio show, and by 19 he had founded a search engine technology company.²

In 2004, then 14-year-old Ashley Qualls took her interest in graphic design to the Web and created Whateverlife.com, a source for MySpace graphics and Web design tutorials. She describes the site as “a place to express yourself.” In addition to layouts and other free graphics, Whateverlife.com now features a magazine with teen-authored articles and reviews. According to Google Analytics figures cited in a recent *Fast Company* article, “Whateverlife attracts more than 7 million individuals and 60 million page views a month.”³

While these teens have been exceptionally successful in their pursuits, their stories highlight a near-universal truth about the life of American teens today. Online teens have access to tools that can gain them widespread attention and notoriety—for better or for worse—in ways that simply were not possible under the traditional mass media model. It is still the case that recognition is often tethered to the amplification afforded by

¹ Stefanie Olsen, “Newsmaker: The secrets of a teen’s internet success,” (CNET News.com: August 16, 2007). Available at: http://www.news.com/the-secrets-of-a/2008-1038_3-6202845.html

² See Ben Cathers’ personal website: <http://www.bencathers.com/>

³ Chuck Salter, “Girl Power,” (*Fast Company*: September 2007). Available at: <http://www.fastcompany.com/magazine/118/girl-power.html>

mainstream media, but the tools needed to produce and distribute digital media are readily available and utilized in some way by most teen internet users. And while some teens may dream of becoming famous on YouTube, most teen content creators are posting material with much smaller audiences in mind (such as one's network of friends on a social networking site).

93% of teenagers are online, and their use of the internet is intensifying.

More than nine in ten Americans between the ages of 12 and 17 are internet users, as of November 2006. In 2004, 87% were internet users, and in 2000, 73% of teens went online.

Not only are more teens online, but they are also using the internet more intensely now than in the past. The percentage of online teens who report using the internet daily has increased from 42% in 2000 and 51% in 2004 to 61% in 2006. Among teens who go online daily, 34% use the internet multiple times a day and 27% use the internet once a day.

Nearly two-thirds of online teens are content creators.

In recent years, the Pew Internet Project has focused on five activities that we consider hallmarks of online content creation. Our questions ask respondents if they create or work on a blog; create or work on a personal webpage; create or work on a webpage for school, a friend, or an organization; share original content such as artwork, photos, stories, or videos online; or remix content found online into a new creation.

Content Creators are online teens who have created or worked on a blog or webpage, shared original creative content, or remixed content they found online into a new creation.

In this survey, 64% of online teens said “yes” to at least one of the basic content questions described above. That is an increase from 57% who were content creators in our 2004 survey. Translated to the entire teen population these new findings show that 59% of *all teens* report some type of content creating activity, compared with 50% in our previous study.

By our measures, all of these forms of participatory culture are blossoming in their own right. Even in the cases where we see little or no growth in the incidence of certain activities over the past two years, the total size of the online teen population and their rates of daily connectivity have increased, such that the sheer number of teens who report a given behavior are representative of a larger and more active contingent of users.

What has not changed since 2004 is that the most popular content-creating activities are still sharing self-authored artistic content and working on webpages for others. However,

teen blogging has grown significantly over the past few years, accounting for much of the growth in the teen content creation category overall.

- 39% of online teens share their own artistic creations online, such as artwork, photos, stories, or videos, up from 33% in 2004.
- 33% create or work on webpages or blogs for others, including those for groups they belong to, friends, or school assignments – essentially the same number as reported this in 2004 (32%).
- 28% have created their own online journal or blog, up from 19% in 2004.
- 27% maintain their own personal webpage, up from 22% in 2004.
- 26% remix content they find online into their own creations, up from 19% in 2004.

In addition, many internet users post comments on news sites, bulletin boards, and group webpages. Many create avatars – digital representations of themselves – to interact with others in the gaming environment and in virtual worlds such as Second Life.

Moreover, social networking applications and websites such as Facebook and MySpace integrate many of these content-creating behaviors and the opportunity to display content created elsewhere into one centralized location. MySpace, one of the most popular social networking sites for teens, hosts blogs, photos, stories, video, and other creative content like custom wallpaper and icons.

Indeed, the very act of creating a profile on a social network site constitutes content creation – and 55% of online teens have such profiles. Thus, the growth we observed across the five activities we have measured over time should be seen as an indication of broad trends toward engagement with what some have termed “participatory media.”

MIT professor Henry Jenkins notes that, along with the rise in popularity of participatory media applications, there has also been a concurrent development of “participatory cultures” that serve to encourage all of this user-contributed content. Jenkins defines a participatory culture as “a culture with relatively low barriers to artistic expression and civic engagement, strong support for creating and sharing one’s creations, and some type of informal mentorship whereby what is known by the most experienced is passed along to novices.”⁴

According to Jenkins, participatory cultures take the form of “affiliations” (i.e., informal and formal memberships built around various forms of media, which include social networking sites, message boards and gaming communities), “expressions” (producing transformative forms of creative expression such as mash-ups and fan fiction), “collaborative problem-solving” (working in teams to complete tasks and contribute to a knowledge base using a wiki or other collaborative environment), and “circulations” (changing the distribution and flow of media through tools like blogging and podcasting).

⁴ Jenkins, Henry. "Confronting the Challenges of Participatory Culture: Media Education for the 21st Century (part one)." October 20, 2006. http://www.henryjenkins.org/2006/10/confronting_the_challenges_of.html

Most online teens engage in more than one kind of content-creating activity.

Teen content creators say they have done an average of two content-creating activities out of the five we included in the survey. Some 68% of content creators have done multiple activities, and 32% have done one activity.

Teen Content Creators Branch Out		
<i>Teen content creators do more content-creating activities than in prior years.</i>		
<i>Number of Content-Creating Activities</i>	<i>2004 (n= 548)</i>	<i>2006 (n= 572)</i>
1	45%	32%*
2	27	28
3	16	19
4	10	14
5	2	7*

*Source: Pew Internet & American Life Project Survey of Parents and Teens, October-November 2004. Margin of error for teens is $\pm 4\%$. Pew Internet & American Life Project Survey of Parents and Teens, October-November 2006. Margin of error for teens is $\pm 4\%$. * indicates a statistically significant difference between the percentages in the row.*

Since our last survey, teens have gained more experience with a wider range of content-creation activities. Compared with teen content creators in 2004, more teen content creators are currently doing multiple content-creating activities. In other words, the number of teen content creators who have done one activity has decreased significantly while the number of content creators who have done two or more activities has increased.

Who are the teen content creators?

Content creators are more likely to be girls and more likely to be older teens. Fifty-five percent of creators are girls and 45% of creators are boys. Furthermore, 45% of creators are aged 12 to 14 and 55% of creators are aged 15 to 17.

Demographics of Teen Content Creators	
<i>The percentage of content creators* in each demographic category:</i>	
Sex	
Boys	45%
Girls	55
Age	
12-14	45
15-17	55
Family Income	
Less than \$30,000 annually	13
\$30,000 - \$49,999	21
\$50,000 - \$74,999	19
\$75,000 +	38
Locale	
Urban	23
Suburban	52
Rural	25

*Source: Pew Internet & American Life Project Survey of Parents and Teens, October-November 2006. Content Creators n=572. Margin of error for teens is $\pm 4\%$. *Content creators are defined as teens who have done at least one of the following: created or worked on a blog, created or worked on webpages, shared original creative content, or remixed content they found online.*

Social networking sites are hubs of teen content-creating activity.

Online social networks sprang onto the internet scene in recent years, providing popular online spaces for hanging out, sharing, and communicating with a network of friends through an individual profile. As of the end of 2006, 55% of online teens had a profile on a social network. A much smaller percentage of adult internet users (20%) report an online profile.⁵

Older online girls ages 15-17 are more likely to have used social networking sites and have an online profile; 70% of older girls have used an online social network compared with 54% of older boys, and 70% of older girls have created an online profile, while only 57% boys have done so. For nearly half of social networking teens, visiting these sites is at least a daily occurrence.

⁵ Madden, Mary et al (2007) *Digital Footprints: Online identity management and search in the age of transparency*, http://www.pewinternet.org/PPF/r/229/report_display.asp.

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The “social” in social network is the operative term for many teens – nearly all teens who use the networks say that they use the sites to keep in touch with friends and make social plans. Nine in ten (91%) of all social networking teens say they use the sites to stay in touch with friends they see frequently, while 82% use the sites to stay in touch with friends they rarely see in person.

And the online networks are not just for staying in touch with old friends; 72% of all social networking teens use the sites to make plans with friends; half (49%) use the sites to make new friends, and one in six (17%) teens use social networks to flirt.

All of this friendship and flirting is facilitated by the communications options embedded within social networks. Users can send public messages such as wall posts, group messages to friends, or private messages, all within the social network system.

How Teens Communicate with Friends Using Social Networking	
<i>The percentage of teen SNS users who...</i>	
Post messages to a friend's page or wall	84%
Send private messages to a friend within the social networking system	82
Post comments to a friend's blog	76
Send a bulletin or group message to all of your friends	61
Wink, poke, give "e-props" or kudos to your friends	33

Source: Pew Internet & American Life Project Survey of Parents and Teens, October-November 2006. Margin of error is ±5% for teens who use social networking sites. Teen social networking site users n=493. Table first printed in Social Networking and Teens data memo, available at http://www.pewinternet.org/pdfs/PIP_SNS_Data_Memo_Jan_2007.pdf

But there are other elements to social networking besides flirting, party-planning, and messages to friends. For many teens, social networks, home to a concentrated posse of easily contactable friends, are the perfect place to share yourself through your profile, including things you have created. And the data suggest that social networking teens are avid content creators, with 77% of social network users creating some type of content. Indeed, 53% of social network users have shared some kind of artistic work online, compared to 22% of those who do not use a social network.

Blogging is not always synonymous with social networking, but social network users are more likely to keep a blog or read them.

There are more teen bloggers among the social networking crowd when viewed alongside those without any social network experience. Two in five (42%) teens who use social networking sites also say that they blog. However, while a majority of social network-using teens do not author their own blogs, in keeping with the conversational and social nature of social media, they are still interacting with others' blogs. Seven in ten (70%) social network users report reading the blogs of others (compared with just one in

four teens who do not use social networking sites in some capacity), and three in four social networking teens (76%) have posted comments to a friend's blog on a social networking site.

Users of Social Network Sites Are More Likely to Create All Kinds of Content		
<i>Content - Creating Activities</i>	<i>Online teens who use SNS</i>	<i>Online teens who don't use SNS</i>
Post pictures for others to see	73%	16%
Share own artistic work	53	22
Create / work on own blog	42	11
Maintain own webpage	42	8
Create / work on webpage for others	41	23
Remix content	32	18
Post videos for others to see	22	6

Source: Pew Internet & American Life Project Survey of Parents and Teens, October-November 2006. Teen social network users n=493. Margin of error for teens is ±4%.

Given the prominence of images and photos in many online social networking profiles, it is not surprising that social network users greatly outpace non-social-networking teens in their posting of pictures and photos, with 73% of social networking teens posting pictures, compared to just 16% of those not on social networks. Video is also a feature on certain prominent social networking sites, and some 22% of social networking teens report video posting, compared to 6% of non-social-network users.

Social networking teens are also more avid remixers when compared to those without any social networking site experience. One in three social network-using teens (32%) remix content into their own creations compared with just 18% of non-social-networking teens.

More older girls than boys create and contribute to websites.

One in four online teens (27%) say they create or work on their own webpages, roughly the same proportion who reported this in our 2000 and 2004 surveys of teens (when 24% and 22% of online teens reported this respectively). A much smaller percentage of online adults build their own webpages, with just 14% of adults 18 and older doing so.⁶

Since 2004, teen girls have outpaced teen boys in website contributions; 32% of online teen girls create or work on their own webpage, compared with just 22% of boys. Older

⁶ Madden, Mary et al (2007) *Digital Footprints: Online identity management and search in the age of transparency*, http://www.pewinternet.org/PPF/r/229/report_display.asp, pg 19.

online girls ages 15-17 and those who are online on a daily basis are among the most likely to maintain their own websites; 34% of each of these groups create or work on their own webpages.

Teens share their website building skills with others.

Those ages 12-17 are more likely to create or contribute to webpages for others than they are to maintain their own site. Currently, 33% of online teens say they create or work on pages for others, including for friends, for groups they belong to, or for school assignments. This incidence has also changed little since our 2004 survey, when 32% contributed to others' websites. Online adults create webpages for others at much lower rates than teens, with 13% of adult internet users reporting building a website for others. And unlike teens, online adults are just as likely to build a website for themselves as for someone else.⁷

Girls have also become more likely to work on others' websites over time; while there was no difference between boys and girls in 2004, 36% of online teen girls now say they create or work on websites for others, while just 29% of online teen boys report this.

Dramatic increases in teen blogging activity account for much of the growth in the content creation category.

Blogging has enjoyed rapid adoption since our last survey. In 2004, 19% of online teens said they had created a blog, while 28% now report blogging.⁸ Some of the websites that teens create for themselves or work on for others might take the form of a blog, as more than half of online teens who maintain their own webpage also say they blog. Teens also far surpass adults internet users in blogging – just 8% of adult internet users have ever created a blog.⁹

Since 2004, blogs have become easier to search, update and distribute to the world via RSS.¹⁰ Blogging has been embraced and encouraged by the educational and library community, and some schools are now incorporating blogging tools into their curriculum. In school, students may be asked to post their papers to a blog before class to allow other students to read their writing and post feedback online that can be incorporated into the class discussion.

⁷ Madden, Mary et al (2007) *Digital Footprints: Online identity management and search in the age of transparency*, http://www.pewinternet.org/PPF/r/229/report_display.asp, pg 19.

⁸ It is important to note that the question wording was changed slightly in our new survey in order to match the wording used with adults. The 2004 survey question asked, "Have you ever created an online journal, a web log, or blog that others can read on the Web?" The 2006 question asked, "Do you ever create or work on your own online journal or blog?"

⁹ Madden, Mary et al (2007) *Digital Footprints: Online identity management and search in the age of transparency*, http://www.pewinternet.org/PPF/r/229/report_display.asp, pg 19.

¹⁰ RSS stands for Really Simple Syndication, and refers to a type of code that may be used on a webpage that allows people with RSS readers to grab the URL and have the reader visit it at predetermined intervals to capture and pull into the reader any new content posted at that URL.

Girls have fueled the growth of the teen blogosphere.

Overall, girls continue to dominate the teen blogosphere; 35% of all online teen girls blog, compared with just 20% of online teen boys. As was the case in 2004, there is relatively little variation by age in blogging activity when looking at all teens. The gender gap for blogging, however, has actually *grown larger* over time. Virtually all of the growth in teen blogging between 2004 and 2006 is due to the increased activity of girls. Older teen girls are still far more likely to blog when compared with older boys (38% vs. 18%), but *younger* girl bloggers have grown at such a fast clip that they are now outpacing even the *older* boys (32% of younger girls blog vs. 18% of older boys).

Teens from lower-income and single-parent households are more likely to blog.

Beyond gender and age, two new developments emerged in this survey in the demographics of teens who blog. While there was little or no variation in blogging activity among teens according to household income or family structure in 2004, both variables have become important indicators in the 2006 data. Teens living in households earning *less than* \$50,000 per year are considerably more likely to blog than those living in higher-income households; fully 35% of online teens whose parents fall in the lower income brackets have created an online journal or blog, while just 24% of those in the higher income brackets have done so.

An even more pronounced contrast is evident when looking at teens who live with single parents vs. those who live with married parents. Online teens living in single-parent homes are far more likely to have shared their writing through a blog; 42% of these teens keep a blog compared with 25% of teens living with married parents.

Teens who are most active online, including bloggers, are also highly active offline.

Teens who are daily internet users blog in greater numbers than those who report less frequent internet use. As is the case with many online activities, teens who go online more tend to engage in a wider array of online pursuits, and blogging is no exception. One in three teens (32%) who go online daily keep a blog, compared with just 23% of teens who go online several times per week.

However, we have yet to see compelling evidence that these highly wired teens are abandoning offline engagement with extracurricular activities in favor of having more screen time. In fact, in many cases, those who are the most active *online* with social media applications like blogging and social networking also tend to be the most involved with *offline* activities like sports, music, or part-time employment.

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This is certainly the case with blogging, where those who are most active offline also appear to have the most to share online; 35% of teens who engage in three or more extra curricular activities keep a blog compared with 26% of those who participate in one or two activities outside of school. Just 20% of teens without any engagement in sports, clubs, youth groups, or any other extracurricular activity have created a blog.

There is also a strong correlation between blogging and other content creation among teens, with bloggers much more likely to engage in other content-creating activities than non-blogging teens. Given that blogs often serve as a place to display self-created content, the correlation between blogging and other content creation is unsurprising. Bloggers were major content creators in 2004 as well, but the relationships between blogging and other kinds of content creation have shifted in our current survey such that differences between bloggers and non-bloggers are somewhat less stark than they were in the past.

Bloggers Communicate through Multiple Channels				
<i>Teen bloggers continue to create, remix and share all kinds of media.</i>				
<i>Do you ever...?</i>	2004		2006	
	<i>Bloggers (n=179)</i>	<i>Do not blog (n=792)</i>	<i>Bloggers (n=243)</i>	<i>Do not blog (n=643)</i>
Shared content of your own creation, like drawings, stories, photos, or videos?	69%	24%	66%	29%
Remixed content that you found online like images, songs, or video into your own artistic creation?	35	16	40	20
Created a personal webpage?	58	14	53	17
Created or worked on a webpage for a friend, a group you are part of, or for a school project?	61	25	54	25

Source: Pew Internet & American Life Project survey of Parents and Teens, October-November 2004 and Pew Internet & American Life Project survey of Parents and Teens, October-November 2006. Margin of error for teens in both surveys is $\pm 4\%$. All of the differences between the percentages in the rows for 2004 and the differences between the percentages in the rows for 2006 are statistically significant.

While broadband connectivity is still predictive of whether some youth engage in bandwidth-intensive activities like video viewing and downloading, it does not have an impact on most other online activities, including whether or not teens keep a blog. Teens with dial-up internet access are equally as likely to keep a blog when compared with

those who have high-speed connections at home, with 24% of dial up users and 28% of broadband users keeping blogs.

Half of online teens read blogs.

While there are now more teens creating blogs than there were when we last surveyed, the teen blog-reading audience has also grown. Half of all online teens (49%) now read the online journals or blogs of others, up from 38% in 2004. Fully 59% of teens who go online on a daily basis read blogs, compared with just 39% of teens who go online several times per week.

Demographics of Teen Blog Readers	
<i>Percent of blog reading teens who are ...</i>	
Sex	
Boys	43%
Girls	57
Age	
12-14	39
15-17	61
Family Income	
Less than \$30,000 annually	14
\$30,000 - \$49,999	23
\$50,000 - \$74,999	22
\$75,000 +	41
Locale	
Urban	27
Suburban	52
Rural	21

Source: Pew Internet & American Life Project Survey of Parents and Teens, October.-November 2006. Teen blog readers n=444. Margin of error for teens is ±4%.

The older the teen, the more likely he or she is to follow the blogosphere; while 40% of online teens ages 12-14 read blogs, 58% of online teens ages 15-17 are blog readers.

Just as girls are primarily the ones who are authoring teen blogs, they are also primarily the ones reading them. More than half of online teen girls read blogs compared with two in five online teen boys (55% vs. 43%). Again, older girls lead the pack, with 64% reading blogs, while just 52% of older boys are blog readers.

Going online at school is not equivalent to internet access at home, whether because of time limits, rules about personal use of school equipment, or filters. Given the limitations of school internet use, it is not surprising that teens who go online most often from school

are less likely to report blog reading. While 40% of teens who primarily have internet access at school read blogs, 52% of teens with primary access at home follow blogs.

Teens are now more likely to share their own artwork, photos, stories, or videos online.

Online teens are now more likely to report that they share their personal creations online; 39% say they share content such as artwork, photos, stories, or videos, up from 33% in 2004. Online adults are less likely than online teens to share online; 22% of adult internet users have shared something online that they personally created.¹¹ In 2004, younger and older online teens were equally likely to share content; 32% of teens ages 12-14 had shared something online that they had created themselves, while 34% of teens ages 15-17 had done so. However, in 2006, 35% of younger teens reported sharing content, compared with 42% of older teens.

One in four online teens remix content they find online.

With all of the tools teens have at their disposal to post and share content, many have also become adept at editing and remixing digital content. Applications that allow users to edit images, music, and video are becoming increasingly sophisticated. Additionally, searchable libraries of content without traditional copyright restrictions such as those found in the Creative Commons section of the Flickr photo-sharing site are providing a seamless way for users to find content that they can sample and remix.

Remixing has grown in popularity since our last survey such that 26% of online teens now say they take material they find online – like songs, text, or images – and remix it into their own artistic creation, up from 19% in 2004. Adults lag behind teens in this creative arena; in 2007, 17% of online adults reported remixing content.¹²

Teen girls and boys are equally likely to remix content they find online, and there are no clear patterns of increased remixing activity among older or younger teens.

Looking at the subgroup of teen content creators – those who have engaged in at least one user-generated content activity – 41% have remixed online content into their own creation.

¹¹ Madden, Mary et al (2007) *Digital Footprints: Online identity management and search in the age of transparency*, http://www.pewinternet.org/PPF/r/229/report_display.asp, pg 19.

¹² From the Pew Internet & American Life Project's February -March 2007 survey data, available at http://www.pewinternet.org/PPF/r/58/dataset_display.asp

Half of online teens post photos online.

Often one of the anchoring elements of online profiles and blogs, digital photos are widely posted online by teens. With the proliferation of digital cameras and cell phone cameras in particular, many teens have the means to document the most mundane and profound moments of their lives through images and share those photos with family, friends, or the world at large by posting them online. About half of wired teens (47%) say they upload photos online where others can see them. Among adult internet users, a smaller portion (36%) of them say they upload photos.¹³

Girls eclipse boys in photo posting.

Online girls are far more likely to have posted photos online when compared with boys (54% vs. 40%). Older teens are also more active posters, with 58% of online teens ages 15-17 posting photos, vs. 36% of younger teens ages 12-14. Older girls are the mega posters, with 67% of them uploading photos, compared with 48% of older boys. Younger girls and boys are equally as likely to upload photos; 39% of younger girls ages 12-14 upload photos while 33% of younger boys do so.

Teens who live in homes with high-speed internet access are better positioned to upload content, and it shows. While 51% of broadband teens upload photos online, just 39% of dial-up teens post photos. Likewise, teens who are online frequently are more engaged with photo posting; while 59% of those who go online daily post photos, just 29% of teens who go online several times per week or less often have uploaded photos.

Teens who go online most often from home are considerably more likely to post photos when compared with those who are primarily at-school users. About half (51%) of online teens who access the internet mostly from home have uploaded photos, compared with 36% of those with primary access at school.

Most teens restrict access to their posted photos – at least some of the time. Girls are more restrictive photo posters.

In recent years, much attention has been paid to how teens share information online. Parents and policymakers shared concerns that teens were revealing too much information online, putting them at risk for predation or reputational harm, now and in the future. Previously released Pew Internet & American Life Project research¹⁴ suggests that teens are cognizant of the risks of placing personal information online. Two-thirds (66%) of teens with an online profile say they restrict access to it in some way, while just 50% of online adults with profiles restrict access. And 56% of teens with online profiles

¹³ Madden, Mary et al (2007) *Digital Footprints: Online identity management and search in the age of transparency*, http://www.pewinternet.org/PPF/r/229/report_display.asp, pg 19.

¹⁴ Lenhart, Amanda, & Madden., Mary. (2007) *Teens, Privacy and Online Social Networks*, available at http://www.pewinternet.org/PPF/r/211/report_display.asp

say they post false information of some kind on their profile. Teens also limit the type of real information they share about themselves online – only 11% of teens with profiles share both a first name and a last name online, and even fewer profile-owners (5%) share their full name, photos and city or state.¹⁵

But beyond just sharing personal information, teens are savvy about how they share images and video as well. Few teens who upload photos online consistently share them without any restrictions. While 39% say they restrict access to their photos “most of the time,” another 38% report restricting access “only sometimes.” Just 21% of teens who post photos say they “never” restrict access to the images they upload. Online adults are more lax in restricting access to their online photos; 34% restrict access most of the time, 24% some of the time, and 39% say they never restrict access to online photos.

Girls are more likely to restrict access to their photos (“most of the time”) when compared with boys; 44% of girls who post photos regularly restrict access, while 33% of photo-posting boys do so. Older girls are even more protective of their images, with 49% of photo-posting girls ages 15-17 restricting access most of the time vs. 29% of photo-posting older boys.

One in seven online teens has posted video files on the internet. Boys lead the video-posting pack.

Some 14% of all online teens say they have uploaded a video file online where others can watch it. In contrast, just 8% of online adults have uploaded a video.¹⁶ In a striking departure from the trends observed with photo posting, online teen boys are nearly twice as likely as online teen girls to post video files (19% vs. 10%). Not even older girls – a highly-wired and active segment of the online teen population – can compete with boys in this instance; 21% of older boys post video, while just 10% of older girls do so.

Videos are not restricted as often as photos.

For the most part, teens who post video files want them to be seen. Just 19% of video posters say they restrict access to their videos “most of the time.” As previously mentioned, that compares to 39% of photo posting teens who usually set limits on who can view the photos they post.

More than one-third of teens who post videos (35%) say they restrict access to their videos “only sometimes,” and 46% say they “never” limit who can watch their videos. Adult internet video posters have a similar profile of restrictiveness; 23% limit access to

¹⁵ Different social networking websites have different requirements regarding information that can be or must be shared as well as tools each site offers to protect privacy, so as teens migrate to new sites, the kinds of information they share may change.

¹⁶ Madden, Mary et al (2007) *Digital Footprints: Online identity management and search in the age of transparency*, http://www.pewinternet.org/PPF/r/229/report_display.asp, pg 19.

videos they post “most of the time,” 30% do so “some of the time,” and 42% never restrict who can watch videos they have posted.

The group of teens who post videos (n=124) is too small to note any significant variations in privacy restrictions according to gender, age, or other demographic characteristics.

Posting photos and videos starts a conversation. Most teens receive some feedback on the content they post online.

The posting of content does not happen in a vacuum. Content is posted so that it might be seen by an audience, regardless of how that audience is limited by restrictions set on the content by the content poster. And often that audience responds to the content posted online, making the content as much about interaction with others as it is about sharing with them. About half (52%) of teens who post photos online say that people comment or respond to their photos “sometimes.” Another third (37%) say that their audience comments on their posted photos “most of the time.” Only 10% of teens who post photos online say that people “never” comment on what they’ve posted.

Video posters report a similar incidence of commenting on the videos they post online – a little under half (48%) say that people “sometimes” comment on their video postings. Another quarter (24%) say that people comment on their online videos “most of the time.” A similar number (27%) say that they “never” get comments on posted videos.

Comments and online conversation around content are not limited to images or videos posted online. As mentioned above, three-quarters (76%) of teens who use social networks report commenting on blog posts written by others.

Content creators are not devoting their lives exclusively to virtual participation. They are just as likely as other teens to engage in most offline activities and more likely to have jobs.

One of the persistent concerns that arises in policy circles, among parent advocates, and among health professionals is that teens might be too wrapped up in virtual life and that might turn them away from engagement in real-world social and academic activities. Our survey shows that content creators are just as likely as non-creators to participate in a most offline extracurricular activities and more likely to participate in certain specific offline activities.

Online Content Creators Are More Active Offline than Non-Creators		
<i>Do you currently participate in any of the following...?</i>	<i>% of content creators who participate</i>	<i>% of non-content creators who participate</i>
A club not affiliated with school like recreation league or church or youth group	60%	54%
School sports program	52	51
Other extracurricular like band	42	42
School club like drama or language	42*	26

Pew Internet & American Life Project Survey of Parents and Teens, October-November 2006. Content creators n=572, Non-content creators n=312. Margin of error for teens is ±4%

Compared with non-content-creating teens, those who create content are more likely to report participating in school clubs, with 42% of content creators participating compared with 26% of non-creators. Content creators are also more likely to have a part-time job than non-content-creators. Twenty-four percent of creators have a part-time job, compared with 18% of non-creators.

Content creators are just as likely as non-creators to participate in a club or sports program that is not affiliated with their school, like a church youth group, recreation league, or community volunteer organization (60% of creators compared to 54% of non-creators), a school sports program (52% compared to 51% of non-creators), or some other extracurricular activity like band (42% of both creators and non-creators).

The “broadband effect” is waning among teens.

Broadband access does not seem to be as significant a factor with regard to online teen content creation. In 2004, the difference in broadband access was much more pronounced between online teens that created content and those who did not. At that time, over half of content creators (54%) had broadband access, compared with 46% of other online teens. However, in our most recent survey, 76% of teen content creators report having a broadband internet connection at home, while 71% of teens who are not content creators say they connect to the internet using a high-speed connection. The evening out of broadband access between content creator teens and other online teens is likely due to the wholesale increase of broadband penetration in households with teenagers. Three-fourths (75%) of online teens reported having broadband internet connections at home in 2006, compared with 51% of online teens in 2004.

Part 2.

Communications and social media

Teens inhabit a highly social world, one teeming with communications options; nevertheless, teens generally default to more traditional media – telephones (either landline or cell) and face-to-face communication. However, communication patterns are different among three groups of teens: content creators, social networkers, and “multi-channel teens” who use the internet, instant messaging, text messaging cell phones, *and* social networks.

Despite the influx of digital media into their lives, teens continue to rely on telephones to keep in touch with their friends.

While text-based digital communication technologies are increasingly prevalent, the telephone continues to reign as the instrument of choice when teenagers want to interact with their friends. However, those who have cell phones and those who are avid internet users have different communications profiles from the entire teen population.

Rank Order of Teen Daily Social Communications Choices					
<i>The most popular methods of communicating with friends every day</i>					
Rank	All Teens (n=935)	Cell-using teens (n=618)	Internet-using teens (n=886)	Teens who use the internet <u>and have cell</u> phones (n=601)	Teens who use social network sites (n=493)
1	Landline	Cell phone	Landline	Cell phone	Cell phone
2	Cell Phone	Landline	Cell phone	Landline	Landline
3	Face to face	Text	Face to face	Text	IM
4	IM	IM	IM	IM	SNS
5	Text	Face to face	Text	Face to face	Face to face
6	SNS	SNS	SNS	SNS	Text
7	Email	Email	Email	Email	Email

Source: Pew Internet & American Life Project Survey of Parents and Teens, October-November 2006. Margin of error for teens is ±4%.

Part 2. Communications and social media

Looking at how the average teen communicates with friends outside of school, phone, and face-to-face encounters are more common than online encounters. Nearly four in ten teens (39%) talk with their friends via landline every day, 35% talk by cell phone with friends, and 31% see their friends in person in settings outside of school.

It is important to note, too, that text-based, face-to-face, and telephonic communications with friends are not mutually exclusive. Fully 74% of teens engage in two or more of these communications activities on a regular basis (defined here as more than once a week).

Daily Social Communications Choices					
<i>The percent of teens who communicate with their friends every day via these methods</i>					
<i>Thinking about all the different ways you socialize and communicate with your friends...about how often do you...?</i>	<i>All Teens (n=935)</i>	<i>Cell- using teens (n=618)</i>	<i>Internet- using teens (n=886)</i>	<i>Teens who use the internet <u>and</u> <u>have</u> cell phones (n=601)</i>	<i>Teens who use social network sites (n=493)</i>
Talk to friends on landline telephone	39%	41%	40%	41%	44%
Talk on cell phone	35	55	36	55	48
Spend time with friends in person	31	34	32	34	38
Instant message	28	35	30	36	42
Send text messages	27	38	28	38	36
Send messages over social network sites	21	26	23	27	41
Send email	14	15	15	16	21

Source: Pew Internet & American Life Project Survey of Teens and Parents, October-November 2006. n=935. Margin of error is ±4%.

Once different subpopulations of teens are considered, communication preferences do shift. Youth who own cell phones are considerably more likely to use their mobile phones to talk to friends daily than they are to pick any other option, with 55% of this group saying they use their cell phones everyday to talk to friends.

“Multi-channel teens” who have many communications options are a breed apart.

The youth ages 12-17 who say they are active in all the communications realms we probed have a distinctly different profile from other teens. Multi-channel teens – those who have mobile phones and internet access, send text messages and instant-messages, and use social network sites – have many pathways to contact their friends. This group constitutes a bit more than a quarter (28%) of all the teens in our sample. They are older than the full sample and more likely to be girls. Socioeconomic status and race or ethnicity differences are not statistically significant for this group.

Multi-Channel Teens Are the Most Communicative		
<i>The percent of teens who communicate with their friends every day via these methods</i>		
	<i>All teens (n=935)</i>	<i>Multi-channel teens (n=265)</i>
Talk to friends on landline telephone	39%	46%
Talk on cell phone	35	70
Spend time with friends in person	31	35
Instant message	28	54
Send text messages	27	60
Send messages over social network sites	21	47
Send email	14	22

Source: Pew Internet & American Life Project Survey of Parents and Teens, October-November 2006. Margin of error for teens is ±4%. Note: Multi-channel teens are defined as teens who use the internet, instant messaging, text messaging, social networks and have a mobile phone.

These highly wired and connected teens are notable for the intensity with which they use connective technologies, layering new technologies over old, while sustaining an overall higher likelihood of daily use of all technologies. Multi-channel teens are most likely to use their cell phones to reach out to friends and then turn to internet tools – instant messaging and social networking site tools. They are even more likely to use email than the general population of teens, though for them, as for the rest of the online teen population, email is the least popular communications choice.

Face-to-face contact still matters.

All of these technology-based communication methods still do not replace face-to-face communication for many teenagers.¹⁷ In the general teen population, 31% of the teens in this survey reported that they spent time with friends in person doing social activities outside of school every day, 34% of teens reported that they did so several times a week, and 24% of teens reported that they spent time in-person with friends after school at least once a week. Older teens – the very people who are more often using other forms of communication like cell phones or instant messaging – are more likely to report spending time with friends in person doing social activities outside of school every day or several times a week than younger teens.

Across the spectrum, the communication activity that changes the least is the frequency of face-to-face encounters; 31% of all teens have this kind of interaction with friends every day outside of school; 34% of cell phone owners do so; 35% of multi-channel teens have such encounters; and 38% of social network site users have in-person meetings with friends every day.

Email continues to lose its luster among teens.

Despite the power that email holds among adults as a major mode of personal and professional communication, it is not a particularly important part of the communication arsenal of today's teens when they are dealing with their friends. According to focus group findings, email is falling into disfavor because teens have so many other options that allow immediate contact when they are away from computers, and because when they are on computers there are particular features of instant messaging and social network sites that make them more appealing ways to communicate. Said one high-school-aged girl, "Email is becoming obsolete. MySpace is so much quicker. It's like text messaging on your phone. You can send pictures."

Just 14% of all teens report sending emails to their friends every day, making it the least popular form of daily social communication. Younger online girls are the exception; 22% of girls ages 12-14 email friends daily, compared with 11% of younger boys and 13% of older teens. When compared with the number of teens who report talking to their friends every day by instant message (28%) and with a cell phone (35%), the amount of daily email use is small.

Girls and older teens are more frequent communicators.

Girls engage in a wider array of communication activities when compared with boys, and do so with greater frequency. Fully 95% of teenage girls participate several times a week in at least one communication activity, compared with 84% of boys. Similarly, older

¹⁷ Note: Our question asked about face-to-face communication taking place outside of school.

Part 2. Communications and social media

teens (ages 15-17) are more likely to engage in a large number of communications activities than are younger teens (ages 12-14).

In particular, older teens are more likely than younger teens to communicate with their friends using a cell phone; 81% of teens ages 15-17 send text messages or talk to their friends on a cell phone, compared with 56% of teens ages 12-14. This discrepancy is largely due to higher levels of cell phone ownership among older teens; 77% of teens ages 15-17 own a cell phone, compared with 49% of teens ages 12-14.

Teens Participate in an Abundance of Communications Activities**				
<i>% within each group who participate in the following number of communications activities several times a week or more:</i>	<i>0 Communications Activities</i>	<i>1-2 Activities</i>	<i>3-4 Activities</i>	<i>5-7 Activities</i>
All teens	10%	31%	31%	28%
Sex				
Male	16	35	30	19
Female	5	26	33	36
Age				
12-14	16	37	28	19
15-17	5	24	34	37

Source: Pew Internet & American Life Project Survey of Parents and Teens, October-November 2006. n=935. Margin of error for teens is $\pm 4\%$. **The communications activities referred to above are: spending time in person with friends, talking to friends on a landline, talking to friends on a cell phone, sending text messages to friends, emailing friends, instant messaging and sending messages to friends using social networking sites.

Content creators are more active communicators than non-creators.

Overall, teens who create content are more likely than other teens to use text-based communication tools. Sending messages through social networking sites is their most popular method for communicating with friends; 94% of content creators who use social network sites have sent a message to friend through a social network site, compared with 86% of non-content-creators. Even though email is on the decline among teens in general, email is the surprise second most popular way of communicating with friends, with 79% of content creators saying that they've sent email to friends, compared with a little more than half (56%) of non-content-creators. Instant messaging is nearly as popular as email, with 77% of content creators saying that they have sent and received instant messages, compared with just 53% of non-creators. Text messaging is another frequently cited communication tool, with 61% of content creators text messaging friends, compared with just 40% of non-creators. Voice-based communication tools – landline telephones and calls made on a cell phone – are communication choices made equally by content creators and those who do not create content.

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Content creators are more likely than other teens to report communicating with their friends daily using all of the various means listed in this survey. Content creators are more likely to spend time with their friends every day, to talk to their friends either on a landline or cell phone every day, to send texts to their friends every day, to instant message with their friends on a daily basis, to send emails, and to send social networking site messages to their friends than non-content-creators.

Content creators stand out from non-content-creators in their intense daily use of instant messaging and social networking sites to communicate with friends. Fully 36% of content creators say they IM their friends every day compared with just 20% of non-content-creators, and 30% of content creators say they send messages to friends over social networking sites daily compared with only 10% of non-content-creators. There is significant overlap in the content creator and multi-channel teens populations – 36% of content creators are also multi-channel teens, compared with just 13% of non-creators.

Content Creators Have Plenty to Say		
<i>Thinking about all the different ways you socialize or communicate with friends...About how often do you...?</i>		
	<i>Content creators (n=572)</i>	<i>Non-content-creators (n=312)</i>
Talk on cell phone every day [†]	58%	48%
Talk to friends on landline every day	45	32
Spend time with friends in person every day	36	25
Instant Message	36	20
Send texts every day	33	19
Send messages over SNS sites every day	30	10
Send email every day	18	8

Source: Pew Internet & American Life Project Survey of Parents and Teens, October-November 2006. Margin of error is ±4. All differences between the percentages in each row are statistically significant. [†] of teens that have a cell phone (n=618).

Social network users are intense communicators, too.

Overall, social network users are also “super-communicators,” utilizing all types and methods of communication to stay in touch with their friends with a frequency unmatched by other teens. Nearly two-thirds (63%) of cell-phone-owning social network users make cell phone calls to their friends on a daily basis, while 41% of cell phone owners who do not use social networks report calling friends with a cell phone daily.

Part 2. Communications and social media

Social network users are also more likely than non-social-networking users to talk to friends on a landline telephone on a daily basis, with 44% of social networking teens reporting such behavior compared to 34% of those without social network profiles.

Two-thirds (67%) of social network users have sent or received text messages, compared to just 38% of those not on social networks. Social network users are more likely than non-social-network users to text friends every day (36% vs. 17%), as well as to own a cell phone (75% vs. 54%).

Similar to texting, social network users are more likely to send and receive instant messages and more likely to send and receive them more often. While 85% of social network users ever send instant messages, half (50%) of non-social-networking teens report using instant messaging. And social network users are nearly three times as likely to send instant messages every day, with 42% of social networking teens reporting daily instant messaging, compared to just 16% of non-social-network users.

Face-to-face interaction outside of school is another opportunity for social network users to stand out; 38% of social network users report talking to friends in person every day, while only 25% of non-social-networking teens report the same.

Even though email continues to fall into disfavor among young adults as a mode of communication, social network users still use email at a greater rate than non-social-networking teens. Indeed, nearly one in three (29%) of online teens say they never send or receive email from peers. Overall, 80% of social network users say they still use email to talk to friends, while 59% of non-social-network users report sending email to peers. Of those teens who use email to talk with friends, 21% of social networking teens use email every day, while only 7% of non-social-network users do the same.

Social Network Users Are Also Major Communicators		
<i>Thinking about all the different ways you socialize or communicate with friends...About how often do you...?</i>		
	<i>SNS users (n=493)</i>	<i>Non SNS users (n=393)</i>
Talk on cell phone every day	48%	22%
Talk to friends on landline every day	44	34
Instant Message	42	16
Send messages over SNS sites every day	41	n/a
Spend time with friends in person every day	38	25
Send texts every day	36	17
Send email everyday	21	7

Source: Pew Internet & American Life Project Survey of Parents and Teens, October-November 2006. Margin of error for teens is ±4%. All differences between the percentages in the rows are statistically significant.

Part 2. Communications and social media

As with content creators, there is a significant overlap between social networking teens and multi-channel teens. More than half (52%) of social networking teens are also multi-channel communicators. And for social networking teens, the channels are even more numerous; within the category of sending messages over social networks, social network users have an additional set of communication tools at their disposal. The use of these tools by social network users is detailed in the chart below.

How Teens Communicate with Friends Using Social Networking	
<i>The percentage of teen social network users who...</i>	
Post messages to a friend's page or wall	84%
Send private messages to a friend within the social networking system	82
Post comments to a friend's blog	76
Send a bulletin or group message to all of your friends	61
Wink, poke, give "e-props" or kudos to your friends	33

Source: Pew Internet & American Life Project Survey of Parents and Teens, October-November 2006. Teen social network site users n=493. Margin of error is ±5% for teens who use social networking sites. Table first printed in Social Networking and Teens data memo, available at http://www.pewinternet.org/pdfs/PIP_SNS_Data_Memo_Jan_2007.pdf

Part 3.

Teens' online activities and gadgets

Fully 93% of teens use the internet, and teen use of the internet has intensified in recent years. In 2006, 89% of teens accessed the internet from home. This is fairly consistent with our survey data from 2000 and 2004, which showed that a similar percentage of teens accessing the internet from home.

Home access matters because online teens who access the internet from home are more likely to access the internet multiple times a day than teens who access the internet from somewhere other than home. The convenience of home access enables frequent internet use in ways that school or library-based internet access do not.

While the percentage of teens who access the internet from home has stayed relatively constant, the percentage of teens who report accessing the internet from school, from someone else's house, and from the library has varied over time. The percentage of online teens in this survey who say they used the internet at school is 75%, up from 64% in 2000; the number who used it at someone else's house is 70%, a modest increase from the 64% who did so in 2000; and the number who use it at libraries is 50%, up significantly from 36% of online teens in 2000.

Online teens continue to lead active offline lives.

Online teens as a whole are quite active offline, though less so than certain subgroups of users such as content creators and social network users. Half the online teens in this survey report being part of a school sports program, 36% report being part of a school club like drama or language, 42% report taking part in some other extracurricular activity like band, and 58% report participating in an after-school club or sports program that is not affiliated with school. These percentages are consistent with the numbers reported in the 2004 Teens and Parents survey.¹⁸

When it comes to teens' internet use, information gathering trumps communication activities.

While teen internet behaviors around social networks and content creation have been getting plenty of recent attention, teens still engage in a variety of activities online that cross the spectrum, from information seeking to communicative and creative endeavors. While content creation is an important and growing online activity, the two most popular

¹⁸ For historic offline activities data, please see our *Teens and Technology* Report at http://www.pewinternet.org/PPF/r/162/report_display.asp and the Teens and Parents 2004 Data set available from http://www.pewinternet.org/PPF/r/48/dataset_display.asp.

Part 3. Teens' online activities

internet activities among teens in the most recent Pew Internet Teens and Parents survey have to do with information gathering rather than communicating.

Teen Internet Activities	
Do you ever...?	Online Teens (n=886)
Go to websites about movies, TV shows, music groups, or sports stars	81%
Get information about news and current events	77
Send or receive instant messages (IMs)	68
Watch video sharing site	57
Use an online social networking site like MySpace or Facebook	55
Get information about a college or university you are thinking of attending	55
Play computer or console games online	49
Buy things online, such as books, clothes, and music	38
Look for health, dieting, or physical fitness information	28
Download a podcast	19
Visit chatrooms	18

Source: *Pew Internet & American Life Project Survey of Parents and Teens, October-November 2006.* . Margin of error for teens is $\pm 4\%$.

While entertainment information seeking is the most popular internet activity in this survey (81%), the percentage of online teens who use the internet to get news or information about current events also remains high (76% in 2004 vs. 77% in 2006). There are no statistically significant differences between the number of male and female teens who look for news (both hard news and entertainment news) online.

African American teens are more likely to look for college information online.

African American teens who use the internet are significantly more likely to go online to look for information about colleges and universities they are thinking about attending than white teens. Fully 79% of black online teens say they use the internet to look up information about colleges and universities, compared to 51% of white online teens. Overall, 55% of online teens say they look for college information on the Web. As online teens get older and closer to graduating from high school, they are more likely to report using the internet to get information about colleges and universities they are interested in. Of these older teens, girls are more likely than boys to use the internet to find information about potential colleges. Over 80% of older girls look for college information online, compared with 67% of older boys.

Girls are more likely than boys to look up health, dieting, or fitness information on the Web.

Twenty-eight percent of online teens say they use the Web to find information about health, dieting, or physical fitness, which is not a significant change from the 31% of teens in 2004 who said they used the Web to learn about these topics. As in 2004, there is a statistically significant difference between the sexes in terms of the popularity of this activity. Over one-third (34%) of online teen girls report looking up information about health, dieting, or physical fitness, compared with only 22% of boys. In general, older girls (ages 15 to 17) are more likely to report using the internet to find information about these topics.

The number of teens who report instant message use has dropped since 2004.

Despite its continued popularity in relation to other internet activities, the percentage of online teens who report having ever used instant messaging dropped a statistically significant amount from 75% in 2004 to 68% in 2006. This does not necessarily mean that instant messaging is declining in popularity among teens. Rather, it could be that instant messaging functionality has been integrated into so many social networking and gaming applications that teens no longer recognize instant messaging as a separate technology.

In comparison to the average online teen, content creators are much more likely to use instant messaging technology. Three-fourths (76%) of content creators use instant messaging, compared to 54% of non-content-creators and 68% of all online teens. The frequency with which teens are online predicts how likely they are to use instant messaging. Teens who access the internet daily have a greater likelihood of using instant messaging (78%) than teens who access the internet weekly (60%) or less often (31%).

However, as we have seen consistently over time, the most active users of instant messaging are older girls – 82% of online girls ages 15-17 report that they use IM. This fits with our other findings which situate older girls as the most active communicators. Not only are there statistically significant differences between the number of girls who report that they use instant messaging (74%) and the number of boys (62%) who report doing so, but there are also significant differences between the percentage of teens ages 15-17 who use instant messaging (77%) compared with the percentage of teens ages 12-14 who instant message (60%).

Visiting a chatroom has declined significantly in popularity since 2000.

In 2000, 55% of online teens reported going to online chatrooms, while in 2006, only 18% of teens say they visited chatrooms.¹⁹ Since 2000, there have been prominent campaigns to raise awareness among parents and teens about the possible dangers of the chatroom space, which may have contributed to the drop in the popularity of chatrooms. Chatrooms are also a fairly old method of communicating with others on the internet, and it could also be that teens find that using newer means of communication such as instant messaging or sending messages over social networks are safer and more attractive internet activities.

Over half of all online teens use social networking sites.

Fully 55% of online teens in this survey reported using social network sites like MySpace or Facebook. In general, girls are more likely than boys to use social networking sites (49% of boys compared with 61% of girls), and older teens are more likely to visit these sites than younger teens (47% of those age 12-14 say they go to social networking sites compared with 63% of 15-17 year olds). While only a bit over half of all online teens report having ever gone to a social network site, 70% percent of online girls aged 15-17 say that they have done so. For more detail on this topic, see the Teens and Social Networking data memo.²⁰

Fewer teens are buying products online.

The number of online teens who buy products like books, clothing, or music online decreased to a statistically significant degree from 43% in 2004 to 38% in 2006. While there are no clear reasons why teens are less likely to have purchased something online, we do find that there is a relationship between the amount of money made by the parents and the likelihood that the teen will buy items online. Online teens with high-income parents are more likely to buy items online than online teens whose parents earn less money.

More than half of all online teens visit video sharing sites.

In the most recent Pew Internet survey, 57% of online teens said that they watch videos on video sharing sites such as YouTube and GoogleVideo. Online teens with parents who have high levels of income and education are more likely to visit video sharing sites such as YouTube or GoogleVideo than other online teens. Older online teens, especially older online boys (ages 15-17), are more likely to report watching videos on video sharing sites such as YouTube and GoogleVideo than younger teens.

¹⁹ We did not include a question about visiting chatrooms in the 2004 Parents and Teens survey.

²⁰ Lenhart, Amanda and Mary Madden. "Social Networking Websites and Teens: An Overview." Pew Internet and American Life Project. January 2007. http://www.pewinternet.org/PPF/r/198/report_display.asp

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Podcasting is a relatively new activity for the Pew Internet & American Life Project to track, and as such, was not included in the 2000 or 2004 Parents and Teens surveys. Almost one-fifth of online teens (19%) say that they download podcasts in the latest survey. Online teens whose parents have at least a college education are more likely to download podcasts so they can listen to or view them at another time than teens with parents who have lower levels of education.

Wealthy teens are more likely to engage in multimedia Web activities.

This survey includes a number of online activities that we have not included in previous surveys, such as going to video sharing sites, using social networking sites, and downloading podcasts. Online teens whose parents are affluent and well educated are more likely to have engaged with a wider range of these newer internet activities such as downloading podcasts and visiting video sharing sites than online teens whose parents are less educated and have lower incomes. As noted in the Online Video report,²¹ wealthier people are more likely to have broadband connections that enable access to a richer array of online activities and content.

Almost half of all online teens say they play games online.

Fully 67% of teens report playing computer or console games (such as Xbox or PlayStation), and 49% of those teens say that they play games online. Boys are more likely than girls to play computer or console games, and younger teens are more likely to play computer or console games than their older counterparts. Furthermore, teens who play video games are also more likely to report that they hang out with their friends in person, than teens who do not play video games. Teens who play video games are also likely to go online more frequently than non-gaming teens. Teens whose parents earn less than \$30,000 annually are more likely than wealthier teens to play computer or console games and to play those games offline.

There is one significant correlation between playing video games online and other internet activities. Teens who play games online are also more likely to go to video sharing sites than teens who don't play games online. Fully 63% of teens who play games online report going to video sharing websites, compared with 47% of teens who don't play games online, which is most likely related to the overwhelmingly male nature of the populations who engage in these activities.

Teens are more likely to own desktop computers than any other type of digital technology.²²

²¹ Madden, Mary. "Online Video." Pew Internet & American Life Project. July 2007. http://www.pewinternet.org/pdfs/PIP_Online_Video_2007.pdf

²² Please see our "Parent & Teen Internet Use" data memo for additional discussion of attitudes towards technology and household gadget ownership. http://www.pewinternet.org/PPF/r/225/report_display.asp

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Almost three-quarters of teens (72%) own a desktop computer, compared with 63% who own cell phones, 51% who own iPods/MP3 players, 25% who own laptops, and 8% who own personal digital devices. Older teens are slightly more likely to own these devices, and teen girls, especially older teen girls, are more likely to own cell phones than their male counterparts.

Not surprisingly, the more money their parents earn, the more likely teens are to own a large array of gadgets (including laptops, cell phones, and iPods). Older teens are more likely to report owning desktop computers than younger teens.

The majority of teens have a positive attitude toward gadgets.

The experiences that teens have with certain gadgets can affect how teens feel about technology in general. Teens who have desktops and cell phones are more likely to say that gadgets make life easier than teens who do not own those particular technology devices. Fully 91% of teens who own desktops (the type of computer that teens are most likely to own) think gadgets make their lives easier, while 81% of teens who do not own desktops think the same. Similarly, 92% of teens who have a cell phone think gadgets make their lives easier, compared to 81% of teens who also have a positive attitude toward gadgets, but do not own a cell phone.

Teen Gadgets					
<i>Do you personally happen to have each of the following...</i>					
	<i>All Teens (n=935)</i>	<i>Boys 12-14 (n=223)</i>	<i>Boys 15-17 (n=248)</i>	<i>Girls 12-14 (n=208)</i>	<i>Girls 15-17 (n=256)</i>
Desktop	72%	69%	78%	63%	79%
Cell phone	63	45	74	55	79
iPod/MP3 player	51	49	59	47	50
Laptop	25	21	28	27	24
Personal digital device (Sidekick, Blackberry, Palm Pilot, etc)	8	9	10	6	7

Source: Pew Internet & American Life Project Survey of Parents and Teens, October-November 2006. Margin of error for teens is ±4%.

Methodology

The Parents & Teens 2006 Survey sponsored by the Pew Internet & American Life Project obtained telephone interviews with a nationally representative sample of 935 teens age 12 to 17 years old and their parents living in continental United States telephone households. The survey was conducted by Princeton Survey Research Associates International. The interviews were done in English by Princeton Data Source, LLC, from October 23 to November 19, 2006. Statistical results are weighted to correct known demographic discrepancies. The margin of sampling error for the complete set of weighted data is $\pm 3.7\%$.

Details on the design, execution and analysis of the survey are discussed below.

DESIGN AND DATA COLLECTION PROCEDURES

Sample Design

The sample was designed to represent all teens ages 12 to 17 living in continental U.S. telephone households. The sample is also representative of parents living with their teenage children.

The telephone sample was pulled from previous PIAL projects fielded in 2004, 2005, and 2006. Households with a child age 18 or younger were called back and screened to find 12 to 17 year-olds. The original telephone samples were provided by Survey Sampling International, LLC (SSI) according to PSRAI specifications. These samples were drawn using standard *list-assisted random digit dialing* (RDD) methodology.

Contact Procedures

Interviews were conducted from October 23 to November 19, 2006. As many as 10 attempts were made to contact every sampled telephone number. Sample was released for interviewing in replicates, which are representative subsamples of the larger sample. Using replicates to control the release of sample ensures that complete call procedures are followed for the entire sample.

Calls were staggered over times of day and days of the week to maximize the chance of making contact with potential respondents. Each household received at least one daytime call in an attempt to find someone at home. In each contacted household, interviewers first determined if a child age 12 to 17 lived in the household. Households with no children in the target age range were deemed ineligible and screened out. In eligible

households, interviewers first conducted a short interview with a parent or guardian, then interviews were conducted with the target child.²³

WEIGHTING AND ANALYSIS

Weighting is generally used in survey analysis to compensate for patterns of nonresponse that might bias results. The interviewed sample was weighted to match national parameters for both parent and child demographics. The parent demographics used for weighting were: sex; age; education; race; Hispanic origin; marital status and region (U.S. Census definitions). The child demographics used for weighting were gender and age. These parameters came from a special analysis of the Census Bureau's 2005 Annual Social and Economic Supplement (ASEC) that included all households in the continental United States that had a telephone.

Weighting was accomplished using Sample Balancing, a special iterative sample weighting program that simultaneously balances the distributions of all variables using a statistical technique called the *Deming Algorithm*. Weights were trimmed to prevent individual interviews from having too much influence on the final results. The use of these weights in statistical analysis ensures that the demographic characteristics of the sample closely approximate the demographic characteristics of the national population. Table 1 compares weighted and unweighted sample distributions to population parameters.

²³ In households with more than one 12 to 17 year-old, interviewers asked parents about, and conducted interviews with, a child selected at random.

Table 1: Sample Demographics

	Parameter	Unweighted	Weighted
<u>Census Region</u>			
	Northeast	19.2	19.5
	Midwest	22.1	22.6
	South	34.9	34.3
	West	23.8	23.5
<u>Parent's Sex</u>			
	Male	44.3	43.3
	Female	55.7	56.7
<u>Parent's Age</u>			
	LT 35	10.5	9.9
	35-39	19.2	19.0
	40-44	28.6	28.2
	45-49	24.4	25.0
	50-54	11.8	12.0
	55+	5.5	6.0
<u>Parent's Education</u>			
	Less than HS grad.	12.5	10.0
	HS grad.	36.7	36.4
	Some college	22.5	23.7
	College grad.	28.3	30.0
<u>Parent's Race/Ethnicity</u>			
	White~Hispanic	67.3	71.0
	Black~Hispanic	10.8	10.4
	Hispanic	15.9	12.5
	Other~Hispanic	6.0	6.0
<u>Parent's Marital Status</u>			
	Married	82.8	82.3
	Not married	17.2	17.7
<u>Kid's Sex</u>			
	Male	51.2	50.5
	Female	48.8	49.5
<u>Kid's Age</u>			
	12	16.7	16.9
	13	16.7	16.2
	14	16.7	17.1
	15	16.7	16.6
	16	16.7	16.1
	17	16.7	17.1

Effects of Sample Design on Statistical Inference

Post-data collection statistical adjustments require analysis procedures that reflect departures from simple random sampling. PSRAI calculates the effects of these design features so that an appropriate adjustment can be incorporated into tests of statistical significance when using these data. The so-called "design effect" or *deff* represents the loss in statistical efficiency that results from systematic non-response. The total sample design effect for this survey is 1.36.

PSRAI calculates the composite design effect for a sample of size n , with each case having a weight, w_i as:

$$deff = \frac{n \sum_{i=1}^n w_i^2}{\left(\sum_{i=1}^n w_i \right)^2} \quad f$$

In a wide range of situations, the adjusted *standard error* of a statistic should be calculated by multiplying the usual formula by the square root of the design effect (\sqrt{deff}). Thus, the formula for computing the 95% confidence interval around a percentage is:

$$\hat{p} \pm \left(\sqrt{deff} \times 1.96 \sqrt{\frac{\hat{p}(1 - \hat{p})}{n}} \right) \quad f$$

where \hat{p} is the sample estimate and n is the unweighted number of sample cases in the group being considered.

The survey's margin of error is the largest 95% confidence interval for any estimated proportion based on the total sample—the one around 50%. For example, the margin of error for the entire sample is $\pm 3.7\%$. This means that in 95 out every 100 samples drawn using the same methodology, estimated proportions based on the entire sample will be no more than 3.7 percentage points away from their true values in the population. It is important to remember that sampling fluctuations are only one possible source of error in a survey estimate. Other sources, such as respondent selection bias, questionnaire wording and reporting inaccuracy, may contribute additional error of greater or lesser magnitude.

RESPONSE RATE

Table 2 reports the disposition of all sampled callback telephone numbers ever dialed. The response rate estimates the fraction of all eligible respondents in the sample that were ultimately interviewed. At PSRAI it is calculated by taking the product of three component rates:²⁴

- Contact rate – the proportion of working numbers where a request for interview was made – of 95 percent²⁵
- Cooperation rate – the proportion of contacted numbers where a consent for interview was at least initially obtained, versus those refused – of 62 percent
- Completion rate – the proportion of initially cooperating and eligible interviews that agreed to the child interview and were completed – of 79 percent

Thus the response rate for this survey was 46 percent.²⁶

²⁴ PSRAI’s disposition codes and reporting are consistent with the American Association for Public Opinion Research standards.

²⁵ PSRAI assumes that 75 percent of cases that result in a constant disposition of “No answer” or “Busy” over 10 or more attempts are actually not working numbers.

²⁶ The response rates for the original surveys that provided the callback sample averaged approximately 31 percent.

Table 2: Sample Disposition

	<u>Final</u>
Total Numbers dialed	7,399
Business	86
Computer/Fax	70
Cell phone	3
Other Not-Working	946
Additional projected NW	245
Working numbers	6,049
Working Rate	81.8%
No Answer	17
Busy	4
Answering Machine	201
Callbacks	22
Other Non-Contacts	88
Contacted numbers	5,717
Contact Rate	94.5%
Initial Refusals	1,603
Second Refusals	600
Cooperating numbers	3,514
Cooperation Rate	61.5%
No Adult in HH	19
Language Barrier	81
Ineligible - screenout	2,232
Eligible numbers	1,182
Eligibility Rate	33.6%
Interrupted	247
Completes	935
Completion Rate	79.1%
Response Rate	46.0%