

Where Students Get Connected:

A brief on Computer and Internet Use by Young Americans

At the turn of the century, Americans turned a corner. For the first time, the majority of Americans described themselves as computer- and Internet-users. In fact, two-thirds of Americans use computers and 54% use the Internet (Kleiner & Lewis, 2004). And the trend is even stronger among Young Americans – those between the ages of 5 and 17 – where 90% use computers and nearly 6 out of 10 are on the ‘Net (Kleiner & Lewis, 2004).

Unfortunately, schools are impacting youngsters’ usage of computers and the Internet in unusual ways. Although nearly all schools and classrooms have computers and are connected to the Internet (Kleiner & Lewis, 2004), few schools are allowing students to apply these resources toward meaningful, engaging learning activities. As a result, an increasing number of students are finding school to be an irrelevant place – where they are locked out of the basic resources they feel are necessary to learn, to communicate, and to develop.

The Internet is the most significant instructional delivery tool since the schoolhouse, yet Young Americans are far more likely to access it from home (78%) than from school (68%) – unless they are poor or have less-educated parents. One immediately evident result of schools’ decisions to keep students disconnected while in class is a stratification of access along social and economic lines to the most important medium since the printing press. By restricting access to the Internet, schools continue to exacerbate potentially devastating divides.

In October 2003, the National Center for Educational Statistics released a report entitled “Computer and Internet Use by Children and Adolescents in 2001.” The report draws from the 2001 Current Population Survey section on computer and Internet usage. Approximately 26,000 5-17 year-olds – both enrolled and not enrolled in schools – were surveyed about their computer and Internet use at home as well as at school.

Here are some highlights:

Young Americans are connected – at an increasingly younger age.

Nearly all (90%) describe themselves as computer users. About 60%, overall, are Internet users. More than half (53%) of all elementary- and middle school-aged youngsters are Internet users. Nearly half (43%) of 5-10 year olds are Internet users.

Age	Percent who use Internet
By age 5	25%
By age 9	50%
Between age 15-17	75%

Table 1: Internet Usage among Young Americans

Young Americans use the Internet for essential activities.

The Internet is a transparent component of many youngsters' lives. Young Americans use the Internet in critical realms of their lives. Overall, more than 4 out of 10 use the Internet for schoolwork. More than one-third of all youngsters – and two-thirds of those who use the Internet – use it as a means of communication.

Use Internet for:	% of Internet Users	Percentage of all YAs
Schoolwork	72%	42%
Communications (email/IM)	65%	38%
Gaming	62%	36%

Table 2: Tasks for which Young Americans use the Internet

Schools provide an essential access point to computers for a significant population of youngsters. Overall, Young Americans are far more likely to use computers at school (81%) than at home (65%), *unless* ... their parents are highly-educated (e.g., some grad school) or they live in an affluent household. In fact, the gap widens as usage lessens across most factors. For instance, controlling for affluence and education, the gap between computer/Internet usage at home versus at school is **greater than 30 points** for those who:

- Are Black or Hispanic;
- Live with parents who did not complete high school;
- Live with a single mom;
- Live in household where adults speak Spanish only; or
- Live in poverty (household income < \$20k/year).

Schools also play a significant role for those Young Americans who access the Internet from only one location. The majority of those who are poor (52%) and those whose parents are not high school graduates (59%) access the Internet only from school – compared to those who do not live in poverty (26%) or who live with more educated parents (39%). Nearly sixty percent of youngsters who live in Spanish-speaking households and access the Internet from one location only, do so from school.

Young Americans living in poverty are twice as likely to access the Internet from school only, compared to those not living in poverty.

Digital divides are still prevalent.

The digital divide exists among both adults and youngsters; though, the gaps among adults are wider than those among children and adolescents. That's the good news. The bad news, however, is that going to school dramatically increases the opportunity for Young Americans to access computers—but not necessarily the Internet. The Learning Lockdown in schools is exacerbating the Internet Divide among *every* measured demographic.

Seemingly intractable divides along predictable lines, regarding computer and Internet usage are evident throughout this report. Statistically-significant divides exist along racial, economic, and educational lines. Similar divides exist when considering parental income and educational attainment factors.

- Whites are more likely to use computers and the Internet compared to both Blacks and Hispanics.
- Non-disabled youngsters are more likely to use computers and the Internet compared to their disabled peers.
- Inner city youths are less likely to use computers compared to their rural and/or suburban peers

The one place where schools seem to having a positive effect is with students with disabilities. Adults with disabilities are half as likely to use the Internet as their non-disabled peers. That gap shrinks to approximately 10% among children and adolescents.

The gap between White and Black Young Americans' usage of computers is 8 percentage points. But that gap nearly triples – to 21 percentage points – when considering Internet usage. Those gaps widen to 15 and 30 percentage points, respectively, when comparing White and Hispanic children and adolescents.

Young Americans from households where at least one parent attended graduate school are nearly two-and-a-half times more likely to be Internet users than those where neither parent graduated from high school (74% versus 32%, respectively).

Children and adolescents growing up in poverty are nearly half as likely to use the Internet compared with their non-poverty counterparts (37% versus 65%, respectively). The same is true for those in monolingual Spanish households versus non-monolingual Spanish households (29% versus 60%, respectively).

Note: There is No Significant Difference with Internet usage among inner city youths and single-parent households when controlling for factors such as family income and parent education.

Although differences no longer exist in access to and overall use of the Internet along gender lines, they do exist in relation to Internet use activities. Female Internet users are more likely to use email, whereas males are more likely to play games and find information. These data mirror those found in similar studies of adults (e.g., Weiser, 2000; Odell et al, 2000; Singh, 2002).

Interestingly, although there is virtually no difference among boys and girls in computer and Internet usage, **those raised by single moms are less likely to use computers and/or the Internet** compared to those raised by single dads

Lesson #1: If parents are educated and have the resources, kids use the Internet no matter where or with whom they live.

Internet and computer usage disparities are an adult problem, too. Divides among children and adolescents along social, economic, and racial factors still exist. However, those divides are far deeper among adults.

	Children and adolescents	Adults
Use computers	90%	60%
Use Internet	59%	54%

Table 3: Adults’ vs. youngsters’ overall computer and Internet usage rates

Computer usage at home

Overall, Young Americans use the computer at home to play games (59%), connect to the Internet (46%), and to complete school assignments (44%).

Nearly 4 in 10 Young Americans access the Internet in one location only. Of those, approximately two-third access from home. That leaves one-third – or, approximately 4.2 million youngsters – completely reliant upon schools as their gateway to the Internet.

Home computer use along racial lines divides into two camps: Whites/Asians and Blacks/Hispanics/Native Americans. Whites/Asians are twice as likely to word process, connect to the Internet, email, and complete school assignments. Young Americans in affluent homes are approximately four times as likely to email or word process from home than those living in poverty, and about three times as likely to complete schoolwork on home computers. Overall, girls are somewhat more likely than boys to word process, email, and complete school assignments on home computers.

There is a 21 percentage point gap in overall computer use between households where no parent has completed high school compared to those where at least one parent has some graduate school experience. The gap nearly doubles when considering word processing and more than doubles for completing school assignments. But, again, the real gap exists in connecting to the Internet. Consider this: only 15% of those living in the least-educated households connect to the Internet, compared to 68% in the most-educated.

Parting Shot ...

Young Americans are more likely to use computers at school than at home. Some demographic groups are far more likely to use computers at schools, including: Blacks, Hispanics, those living in poverty, single mother households, households with parents lacking high school credentials and Spanish monolingual households. However, children and adolescents overall are more likely to use the Internet at home (78% versus 68% at school). Children and adolescents from poor households and those whose parents did not complete high school are more likely to rely solely on schools for Internet access.

Nearly every classroom in America is connected to the Internet. The same is not true for every household. The same barriers that educators have struggled for decades to scale in traditional schooling – in many cases, with great success – are the same ones preventing

equitable, effective learning for young people in the 21st century both in and out of schools. Access to important technologically-enabled activities (e.g., communication, resources, and information) at home is driven still by social factors beyond the control of young people—namely, race, economics, and family arrangements. In schools, those barriers are diminished, but they aren't gone. Educators have a moral obligation to work diligently toward open, equitable access to the Internet for all students in all schools – regardless of race, economics, language, or family arrangement.

Educators cannot put a computer in every students' home, but they can provide access to Internet-enabled learning in every classroom. This, more than anything, will close the myriad, needless divides that anchor those without and return our schools to the democratic ideals upon which they were founded.

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