

Internet Generation Gap:

An Analysis of Student Assessments and Parent Surveys from an Active Learning Internet Safety Environment

Focus: Recent survey statistics, which expose discrepancies between youth and parent responses to questions about Internet behavior, have exposed the existence of an Internet generation gap. Previously there has been no data to evaluate baseline Internet behaviors of youth, parent perceptions of their children's Internet usage, and the behavioral change impact of Internet safety education.

As part of its unique education and outreach initiative, assessment data from i-SAFE America provides a profile of these elements and uncovers danger signs created by this gap.

What is the gap?

Analysis of i-SAFE assessments and surveys indicate a noteworthy variance in parent and student perceptions about general safety on the Internet, and reported student Internet usage and conceptions about the consequences of that usage.

PARENT'S INTERNET ASSUMPTIONS*:

88% of parents feel they know “some” or “a lot” about where their children go or what their children do the Internet.

92% stated they have established rules for their child's Internet activity.

YOUTH PERCEPTIONS / BEHAVIORS REGARDING THE INTERNET**:

33% do not share what they do or where they go on the Internet with their parents.

40% do not discuss Internet safety with their parents.

23% stated their parents complain about the amount of time they spend on the Internet.

14% stated their parents have **no idea** how much time they spend on the Internet.

34% said their parents had not established any rules for their Internet activity.

**1050 parents responded to our Parent survey.*

***Approximately 7000 students (grades 5-12) from 30 states.*

Based on the survey results, the overwhelming majority of parents indicate that they have established rules regarding Internet use for their children and families. In analyzing the student assessment surveys, we find a discrepancy in the fact that the students surveyed report the opposite. 92% of parents surveyed indicated they have established Internet activity rules for their children, while 34% of students surveyed indicated that their parents had not established Internet activity rules.

Why is it a big deal?

The Internet has dramatically changed the world we live in. The Internet has also created an entire new world, a global community, in which anyone who logs on can pose as anyone or do just about anything they desire. Internet use has grown exponentially since the late 1990s, and it has essentially defined a new way of sharing information and interacting with others throughout the world.

Students today will be global citizens for the rest of their lives. Students view the Internet in a much different way than adults. However, the Internet provides a medium that allows a student to believe that the communication they are having online is with a respective peer when in many instances the person on the other end is really an adult. Even though students may be aware of the dangers inherent in communicating online, we continue to see them make decisions about engaging in a behavior as if it were a one-time situation.

Parents provide their children with a computer and Internet access. Many have the perception that the computer is a tool that helps make their kids smarter, helps them keep in touch with their friends, and keeps them off the streets and out of trouble. While there is no disputing the advantages this technology affords, the misconception that nothing harmful can happen from using the Internet is still prevalent despite recent cases of child abduction, online identity theft, and lawsuits from downloading of music, movies, and other types of intellectual property.

Today's youth have grown up with the Internet as a core element of society, and many are much more Internet savvy than their parents. A 2003-04 i-SAFE America study indicates that 30.1% of students surveyed felt that their parents' Internet skills were either *weak or very weak*.¹ Likewise, 53.9% of parents felt that their children were *proficient or experts* in computer use.²

There appears to be a notable disparity between parents and young people in their computer knowledge and proficiency. This difference is further heightened when noting that young children and teens are online constantly. According to a National Telecommunications & Information Administration report, 90% of American youth ages 5-17, or 48 million kids and teens, use the Internet.³ Of nearly 4400 students surveyed in a 2002-2003 study, four out of five (81.1%) spent at least one hour a week on the Internet⁴, and parental estimates showed that three in ten children (29.8%) spent more than 6 hours a week on the Internet⁵.

Unfortunately this proliferation of Internet use among kids and teens, constituting a large and highly influential segment of the American population, has exposed a very dark side of the World Wide Web. The anonymity of the Internet and ease in creating different identities has opened up an entire new avenue for online predators, identity thieves, hackers, and other devious individuals. Since kids and teens are typically unaware of the tricks and techniques that these predators use to deceive their victims, and since most use the Internet as an everyday part of their lives, young people are at risk to a higher degree than other Internet users.

The Evolution of Predators

In the past, predators aspiring to victimize their prey would have to meet, interact with, and secure the trust of their victims in the physical world. A typical depiction of this scenario is an older-aged man walking a puppy near a busy public playground. Children are enticed by the puppy and flock to the man to play with the dog. The man establishes a sense of trust with the children through the puppy, and after a few visits to the playground and subsequent interaction with the children, the predator emerges when the man invites a child to his house to play with additional (often fictitious)

animals. The child, almost blinded by the opportunity to play with more cute puppies, agrees and unwittingly becomes a victim.

Today, the Internet has created a whole new playground in which predators lurk and lure children. Internet chat rooms and Instant Messaging (IM) applications are widely popular among the young American online population. The cloak of secrecy and anonymity that these forums provide creates an ideal situation for online predators to meet and interact with their potential victims. These predators are essentially invited into their victims' houses or bedrooms, and often the victims do not realize they are in danger until it is too late.

An FBI report says "By using chat rooms, children can chat for hours with unknown individuals, often without the knowledge or approval of their parents. Investigation reveal(s) that computer sex offenders (have) used chat rooms to contact children. Chat rooms offer the advantage of immediate communication around the world and provide the pedophile with an anonymous means of identifying and recruiting children into sexually illicit relationships."⁶ 40% of children report that "if their parents knew with whom they chatted, they would have concerns." Dissecting these figures further, almost 10% of students indicated their parents would restrict Internet use and 8% would actually take the computers away⁷ if their parents knew with whom they were chatting.

Chat Room Usage Among American Students (Grades 3-12)

(i-SAFE America Pre-Assessment Surveys, 2002-04)

GRADE	% OF STUDENTS USING CHAT ROOMS	% CHANGE (from grade 3)	POPULATION (users/total number of responses)
3	16%	N/A	346/2184
4	18%	2%	679/3032
5	22%	6%	239/1093
6	31%	15%	698/2254
7	40%	24%	1016/2508
8	41%	25%	546/1330
9	38%	22%	254/665
10	37.7%	22%	75/199
11	26.8%	11%	33/123
12	14.9%	-1%	13/87

The number of students that communicate in a chat room steadily increases from grades three to eight—where it peaks. As a student enters their high school years, their need to communicate online decreases and is replaced by more social activities in the “real world,” such as dating, sports, and other extra-curricular activities. They become much more mobile (for example, they get their drivers license) and would rather “hang” with friends than “chat” on the Internet.

Note: Even though the high schoolers' chat room participation drops, it is important to remember that these are likely “hard-core” chatters whose social interaction with peers is minimal and therefore remain very receptive to online relationships and communication.

Predators can log on to a teen chat room and meet a child or teenager while pretending to be someone who is the same age and interested in the same music, movies, or sports. The predators then establish a sense of trust with the victim. The communication moves from the chat room to IM, then to e-mail and eventually the telephone. While the child believes they have made a new friend, the

predator's ultimate goal is to set up a face-to-face meeting with their soon-to-be victim. This process, the one by which online predators generally operate, is known as *grooming*.⁸

Dangers Kids and Teens Face While Online

Kids and teens face a variety of potential dangers while online. These dangers include, but are not limited to:

- *Victimization* by child predators as a result of online communications—chat rooms, message boards, and Instant Messaging. As used here, *victimization* is the exploitation of young people via Internet-related communications, abduction, molestation, rape, and/or murder.
- *Exposure to inappropriate material* online. Inappropriate material as defined here is adult or child pornographic images, online alcohol and cigarette sales, online hate sites, or other material deemed to be unfit for viewing by young people. In this case, exposure to this type of material by kids and teens is inadvertent or deliberate.
- *Identity theft* is America's fastest-growing financial crime¹. Individuals can have their credit rating destroyed, amass unknown debts, or have criminal records created by identity thieves. An awareness of the information that identity thieves use, along with the methods they use to obtain that information, are i-SAFE keys to preventing identity theft. In their normal online communications, kids and teens may not realize they are providing identity thieves with the personal information they need.
- *Cyber-bullying* is a rapidly growing phenomenon. Kids and teens are using chat rooms, message boards, blogs (personal online journals), and other forms of online communication to create and spread rumors or hurtful information about their peers.
- *Intellectual property* violations, e.g., free downloading, copying, and distribution of music, movies, and other types of media, while very popular, are nonetheless illegal. Students and their parents have been hit with lawsuits and fines for this relatively easy and immensely popular form of intellectual property theft.
- *Plagiarism*, or someone using someone else's work as his or her own, is not a new phenomenon. However, the wealth of information available on the World Wide Web, along with the *copy and paste* ease of use that the Internet affords, has taken plagiarism to an entirely new level in the information era.

Internet Safety for American Youth—Various Approaches

Risk taking is a natural part of children's lives. They take risks in order to grow, including trying new activities, generating new ideas, and experimenting with new roles. However, they can also find themselves in trouble with their risk taking. Concern over such risky behaviors has led to the creation of many types of intervention. Some of these interventions have attempted to manipulate kids/teens beliefs, values, and behaviors, hoping to get them to act more cautiously. Other interventions have attempted to improve their stability to make sensible decisions, hoping to get them to make wise choices on their own. Having general decision-making skills enables kids and teens to protect themselves in many situations—both online and in the physical world.

Many programs have been developed by various organizations to help American youth avoid online hazards. Combating the growing epidemic of online youth victimization has become a national concern after a few high profile cases of Internet-based abductions and murders were brought to the media spotlight in recent years. The FBI says that child pornography and sexual exploitation of children through online means is the most significant crime problem that it confronts⁹.

Various programs (publicly and privately funded) have focused on a variety of means to approach this problem. The *Netsmartz Workshop*, a project funded by the National Center for Missing & Exploited Children, focuses on utilizing interactive web-based technology to create games and software "to teach kids rules to keep them safe online."¹⁰ According to *netsmartz.org*, "The NetSmartz Workshop provides Boys & Girls Clubs of America with original, animated characters

and age-appropriate, interactive lessons that use the latest 3-D and web technologies to entertain while they educate.” *Netsmartz* information and multimedia technologies are primarily distributed via an association with the Boys & Girls Clubs of America.

GetNetWise.org and *Protectkids.org* are both websites with extensive Internet safety information for kids and teens. GetNetWise is billed as a “User empowerment campaign and Web site designed to give Internet users a user-friendly, easy-to-find, online resource that can be found on the most popular entry points to the Internet, as well as on many of the most popular Web sites.”¹¹ *Protectkids.org* “Help[s] to protect our children against the dangers on the World Wide Web.” The Internet safety information derived from these organizations is primarily through their respective websites and various links to other related sites.¹²

The aforementioned approaches are effective in helping educate kids and teens, as the information provided by those programs is thorough, accurate, and relative to Internet safety. They provide Internet safety information and tips to children and teens in a manner that speaks and maintains the attention of the intended audience—from primarily a web-based forum.

Other organizations focus on educating youth about Internet safety but are primarily focused on web-based learning applications. The information learned through online Internet safety activities, while effective, may be lost or diluted due to the proliferation of Internet use among kids and teens—other online activities or information may take precedence over web-based Internet safety activities. Learning this information in “real life” helps students retain this knowledge as they can build an association between the physical and cyber worlds. The difference lies in the fact that active learning is the primary mode of the i-SAFE Program.

The Difference in Active Learning Lessons

The i-SAFE America Safe Schools Education Initiative and Outreach Program focuses on proactively educating and empowering the youth of America to safely and responsibly take control of their Internet experiences. The i-SAFE Program encourages the extension of valuable Internet safety knowledge and skills throughout the students’ schools and communities. The i-SAFE Program utilizes Best Practices in education to create an active, real-life atmosphere and provide a physical aspect to the hazards and consequences of risky or inappropriate online behavior—an aspect that is more difficult to acquire through solely web-based learning modalities.

From 2002 to the present, i-SAFE America has provided interactive Internet safety lessons to students in their classrooms and administered pre- and post- assessment surveys to measure the effectiveness of the i-SAFE curriculum.

The i-SAFE curriculum is designed to foster active participation between students and their teachers through classroom discussions and cooperative group learning activities. Integral to each lesson at all grade levels is the incorporation of an empowerment activity, which provides students with the opportunity to share what they have learned about Internet safety with their peers, their families, and other community members. In this way, students internalize and take ownership of the concepts learned.

The i-SAFE Internet safety curriculum is correlated with each of the *National Educational Technology Standards for Students (NETS)* published by the International Society for Technology in Education (ISTE) Integrating the i-SAFE curriculum with these (and other) standards provides teachers, technology planners, teacher preparation institutions, and educational decision-makers with

frameworks to establish enriched learning environments supported by technology. For more information about the i-SAFE Curriculum Lessons, please visit www.isafe.org and enter the Educators area on the website.

i-SAFE America is committed to the process of Continuous Quality Improvement (CQI) in the delivery of its Internet safety education curriculum. In pursuit of CQI, i-SAFE America has developed assessments that poll students' current Internet activities and attitudes (i.e., pre-assessments) as well as to what degree students are willing to embrace the concepts taught and shared in the Internet safety lessons (i.e., post-assessments).

The Assessments and Surveys as the Basis of the Analysis

The results of the assessments, administered prior to the first lesson, at the conclusion of the final lesson, and three to six weeks after the conclusion of the final lesson, are from a nationwide sample. Students represented grades 5-12, although the majority of responses were from grades 5-8, since those grade levels were the primary focus for implementation of the i-SAFE curricula for the first grant year.

A Parent Survey is distributed as an integral part of the i-SAFE curriculum. It is designed and incorporated into the Predator Identification Lessons to encourage students to involve their parents in understanding the challenges that students face while online.

The pre-assessments provide i-SAFE with a dynamic resource that helps enable the curriculum to stay up-to-date with students' needs and ever-changing technology. Data generated by the assessments also becomes a tool in promoting the need for Internet safety among parents, teachers, and community leaders. The post-assessments focus on behavioral and attitude changes of students resulting from the curriculum, which helps to gauge the effectiveness of the i-SAFE program from students' perspectives. The assessments are more concerned with gathering information regarding long-term Internet safety practices (behavior based) than whether or not a student can recount facts from the i-SAFE lessons (knowledge based).

That being said, the lessons and related post assessments focus on three (3) key concepts:

- ◆ *Core Knowledge:* We share core concepts, vocabulary, skills and knowledge that give students a foundation on which to build.
- ◆ *Self-Efficacy:* We examine the level of confidence that a student has in implementing the safe Internet practices and/or behavior.
- ◆ *Reasoned Action:* We focus on students' intentions to embrace Internet safety practices. According to this perspective, the most important determinant of an individual's behavior is his/her intent and rationale to perform the behavior. We want students to understand how to make reasoned decisions and choices about where they go and what they do on the Internet, and also to understand the consequences of their Internet behavior.

In order to reinforce the student's "buy in" or willingness to embrace the i-SAFE message, a Delayed Assessment was developed and is administered 3 - 6 weeks after completion of the i-SAFE curriculum. This assessment asks specifically what actions a student has taken and gauges whether or not their approach to Internet safety is improving, and whether they have exhibited a behavioral change as a result of the Internet safety information provided by i-SAFE America.

Delayed Assessment Figures

<i>IMPACT OF THE i-SAFE CURRICULUM ON YOUTH*:</i>
80% are more careful about the personal information they share in a chat room or in e-mail.
76% are more careful about where they go and what they do on the Internet.
54% have made an effort to discuss Internet safety with their parents.
45% have had discussions with their friends about Internet safety.
79% are less likely to meet someone new from the Internet <i>face to face</i> .
68% are more careful about the music they download from the Internet.
<i>*Survey taken 3-6 weeks after completing i-SAFE America curriculum. 1500 students (grades 5-12) in 15 states participated.</i>

Results show that, as a result of the information learned through the active i-SAFE Curriculum Lessons, students are consciously making an effort to increase their safety online. They want to increase communication between themselves and their friends or parents, and they have taken the initiative to check whether they needed to modify their online behavior because of the information they learned from i-SAFE.

Communication is the Key

An effective way to combat the grooming process is to keep the lines of communication open between a child and his or her family. Open communication helps create a sense of trust in the physical world while predators deceitfully attempt to establish a bond in the cyber world. Often this communication, or lack thereof, can be a simple step that makes the difference between a child becoming the victim of an online predator and an online predator being caught red-handed in the middle of the grooming process.

40 percent of fifth through eighth grade students do not discuss Internet safety with their parents, and when high school students were asked whether they discuss Internet safety with their parents, six in ten (61.1%) indicated they did not.¹³

An interesting discrepancy to remember: While 92% of parents indicate that they have established rules for their children's Internet activity, nearly one in three students (32.2%) indicate that their parents and guardians have not established Internet usage rules.

These figures indicate that the perception and definition of online use rules should be more clearly defined and agreed upon between parents/guardians and their children in order to maximize the online safety of the entire family.

Open communication needs to happen from both sides—parent/guardian and child. Consider these additional findings from i-SAFE America’s Student Pre-Assessment Survey (2002-04):

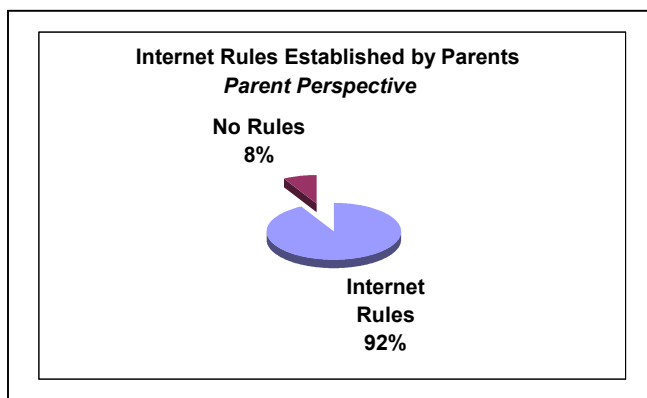
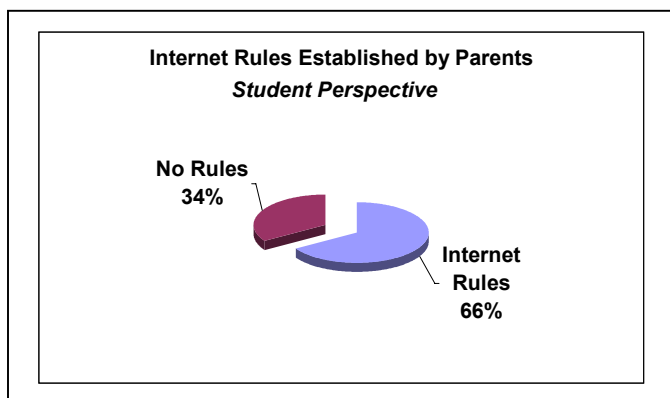
- **39.6%** of students DO NOT discuss Internet safety with their parents or guardians.
- **37%** of students felt that their parents would not approve if they knew where they were surfing on the Internet.
- **40.4%** indicate their parents would not approve if they knew whom they were *chatting* with while on the Internet.
- **23%** of students reported their parents complain about the amount of time they spend on the Internet.
- **34.1%** of students indicated they do not share what they do and where they go on the Internet with their parents.
- **52.6%** of parents feel that their ability to shelter their children from inappropriate material on the Internet is limited.

Computers in the Bedroom

A very important Internet safety tip is to place the primary household computer in a common family area. A computer with an Internet connection in a child’s bedroom is an open door to a preventable disaster. Yet, nearly one in five students (18.2%) polled by i-SAFE said that the primary computer they use is in their bedroom.¹⁴ Interestingly, more than one in ten parents (11.3%) revealed that their children’s primary computer is in their bedroom.¹⁵

While these figures may not be overwhelming percentages, when they are applied to the number of American kids and teens online (48 million), the figures become alarming. Based on the variance of reports from both students and parents (11.3% vs. 18.2%), between 5.4 million and 8.7 million youth have their primary computers in their bedrooms. Everyone who uses the World Wide Web is at risk if they are not armed with Internet safety knowledge and awareness. Kids and teens, already notoriously curious and relatively naïve, are even more at risk of victimization if they are left alone to navigate Cyberspace in the “comfort” of their own bedrooms.

When considering the numbers of students who use chat rooms, these figures show that millions of kids and teens are in this predicament, and that a substantial number of parents allow their children to continue inviting potential predators into their bedroom. This figure is especially concerning when recalling the discrepancy between parent-administered Internet use rules reported by both students and parents.



Conclusion

In review of the findings of the i-SAFE assessments and surveys, a noticeable gap has been discovered in comparing student and parent responses with regards to perceptions of youth Internet use. 92% of parents indicated that they have established rules for their children's online activities while 33% of students report that they have no such rules regarding Internet use. Also, while 88% of parents feel that they know "some" or "a lot" about where their children go or what their children do the Internet, student responses indicate differently. 33% of students surveyed do not share what they do or where they go on the Internet with their parents. 40% do not discuss Internet safety with their parents.

These figures show that there is a noteworthy disconnect in communication about Internet use among American students and their parents. This communication gap could be a major factor in the continued cases of Internet-related crimes against children. Parents need to open the lines of communication and emphasize to their children that there are many hazards and dangerous people in cyberspace; even those people who seem to be friendly may have ulterior motives that could lead to compromising situations. The victims of those situations may not realize they are being victimized until it is too late.

Communication is the key. Regardless of how the information is provided (via a web-based or active learning approach) parents and their children need to be on the same page through constant open and honest communication.

Internet use will undoubtedly continue to grow among kids and teens, and based on initial analysis of the i-SAFE America Curriculum Lesson pre-, post-, and delayed assessments, it appears that a combination of an active learning Internet safety program and open communication among children and their parents appears to be an effective approach to proactively educate and empower Internet users to take control of their online experiences.

Looking at the figures from the delayed assessments, the overwhelming majority of students who received the i-SAFE Lessons have exhibited and reported a behavior change by proactively taking empowered steps to help themselves increase their safety and welfare while online. As a direct result of the Internet safety information provided by the i-SAFE Lessons, they are increasing the necessary communication between themselves, their friends, and their families. This communication is the key to maximizing the safety of their online experiences.

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Endnotes

- ¹ (i-SAFE America Assessment Surveys, 2002-04, grades 5-12)
- ² (i-SAFE America Parent Survey, 2002-04).
- ³ (NTIA, A NATION ONLINE: How Americans Are Expanding Their Use of the Internet Washington, D.C. February 2002)
- ⁴ (i-SAFE America Assessment Surveys, 2002-04)
- ⁵ (i-SAFE America Parent Survey, 2002-04)
- ⁶ (The FBI's Innocent Images National Initiative—Operation Candyman Investigation, March 2002)
- ⁷ (i-SAFE America Assessment Surveys, 2002-04, grades 5-12)
- ⁸ (i-SAFE America Parent Presentation: Grooming Techniques—2004)
- ⁹ (FBI. "Online Pornography: Innocent Images National Initiative" Crimes Against Children. <http://www.fbi.gov/hq/cid/cac/innocent.htm>. March 2002)
- ¹⁰ (<http://www.netsmartz.org/flash/index.html>; FAQ link)
- ¹¹ (<http://www.getnetwise.org/faq>)
- ¹² (<http://www.protectkids.org>)
- ¹³ (i-SAFE America Assessment Surveys, 2002-04, grades 5-12)
- ¹⁴ (i-SAFE America Assessment Surveys, 2002-2003)
- ¹⁵ (i-SAFE America Parent Survey, 2002-2003)