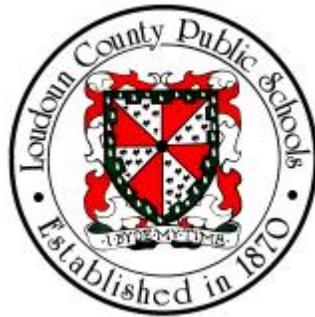# Internet Safety Program

Understanding and Mitigating the Risks

LOUDOUN COUNTY PUBLIC SCHOOLS

2008

Department of Instruction

Internet Safety Program

Understanding and Mitigating the Risks

BENEFITS AND RISKS OF THE INTERNET

Along with providing a plethora of information, the explosive growth and use of the Internet has made possible entirely new forms of social interaction, activities, and organizations. Young people who are drawn to these new forms of socialization easily adapt to the new technologies; however, unfortunately they do not always have the experience or knowledge to understand the potential risks.

Loudoun County Public Schools (LCPS), in collaboration with parents and community members, strives to educate and support students to take advantage of the Internet's benefits while reducing its risks.

Those risks are identified as follows:

- Inappropriate Contact – Children need to know how to recognize and protect themselves against contact with cyber-bullies, hackers, phishers, and predators. People aren't always who they say they are. The Internet is a place to enhance existing relationships, not a place to meet new people.

- Inappropriate Content – This includes both content that is viewed and content that is uploaded by users. Children need to understand that the Internet is *forever*: Everything they post online is tracked and stored and will follow them to future job interviews and college entrance interviews.

- Inappropriate Conduct – Because the web environment can feel anonymous, some youth act with diminished social inhibitions. Children must understand that the Internet is a public forum: anonymity is a myth. They sometimes need help to be the good person *on*line that they are when they're *off*line (ikeepsafe.org, 2008).

MITIGATING RISKS: ACCEPTABLE USE POLICY

The Loudoun County Public Schools Acceptable Use Policy (AUP) provides specific guidelines to employees and students to ensure a respect for themselves and the property of others - both physical and intellectual. It prohibits use by division employees and students of the division's computer equipment and communications services for sending, receiving, viewing, or downloading illegal material via the Internet.

MITIGATING RISKS: FILTERING THE INTERNET

Instructional Technology Services deploys the 8e6 Professional Edition Internet filtering solution. It offers high-performance, enterprise-level filtering with the R3000 Internet Filter. An appliance optimized for speed and scalability, the R3000 provides 90+ categories and millions of Web sites in the 8e6 Database. Deployed in "pass-by" or transparent mode, the R3000 sits outside the flow of network traffic to "watch" rather than "stop and check", delivering network compatibility with a high degree of performance. Important product features include the following:

- Internet Filters: Includes URLs and/or IP addresses, file types (e.g. MP3, MPEG, .zip), HTTP, HTTPS, FTP, Newsgroups (NNTP), and TCP Ports.
- Internet Threat Blocking: Including spyware, malicious code and phishing sites.
- Instant Messaging and Peer-to-Peer Blocking: Utilizes 8e6's Intelligent Footprint Technology (IFT) to block IM and P2P servers by signature or pattern.
- Real-Time Probes: Allow administrators to monitor user Internet activity as it happens.
- "X-Strikes" Blocking: Locks down a user's workstation when administrator-defined thresholds for accessing inappropriate Web sites are exceeded.
- Proxy Pattern Blocking: Blocks anonymous proxies using signature-based/network pattern detection.
- Google/Yahoo! Safe Search Enforcement: Forces the Safe Search mode "on" for all searches, including images within the Google or Yahoo! search engines.
- Customer Feedback Module: Sends frequent, non-categorized URLs from participating customers back to 8e6 on a daily basis. Selected URLs are reviewed and added to 8e6's standard library categories.
- Synchronization Central Management Console (SCMC): Allows administrators to synchronize and manage multiple units without independently configuring each unit so as to provide efficient management.
- Directory-based Authentication: Utilizes directories such as Windows Active Directory, Windows NT and LDAP.

The Instructional Technology Services Network Engineer has been designated as the administrator of the 8e6 Internet filtering program. Management procedures support CIPA compliance, and procedures for temporarily unblocking sites for instructional purposes have been developed and implemented.

MITIGATING RISKS: EDUCATING PARENTS

In an effort to educate parents regarding the benefits and risks of the Internet, Loudoun has published a parent resource page. In addition, school principals will promote awareness with parents through a variety of venues to include monthly newsletters, PTA and PTO meetings, school webpage, and others.

MITIGATING RISKS: WEB PUBLICATION POLICY

Loudoun's Web Publication Guidelines articulate simple policies and procedures for publishing text, photographs, and video. It also addresses safe procedures for blogging and podcasting.

MITIGATING RISKS: INSTRUCTIONAL STRATEGIES

Loudoun employs a variety of instructional strategies to educate and protect students. They are as follows:

--Introducing the Network/Internet
All LCPS students each September are given an introduction to the school's computer resources and Internet safety by an adult staff member. As part of this introduction, the AUP is reviewed. In addition, secondary students and their parents are also asked to sign an acknowledgment of the AUP; elementary

students' parents are asked to sign the same acknowledgment. The following topics are addressed prior to each student being given his or her login and password:

1. Network/Internet Basics
   1.1. Logins/Privileges
   1.2. Network Overview
   1.3. Start Menu and Desktop

2. Responsibilities
   2.1. Respect Property of School District
      2.1.1. Work Space Area
      2.1.2. Hardware - computers, peripherals, printers, cameras, storage media, etc.
      2.1.3. Software
      2.1.4. Electronic Documents and Resources

   2.2. Respect Yourself and Others
      2.2.1. Login security
      2.2.2. Organization of Home Drive
      2.2.3. Ownership of Intellectual Property

3. Internet Safety
   3.1. Inappropriate Contact – Teach children how to recognize and protect themselves against contact with cyber-bullies, hackers, phishers, and predators. People aren't always who they say they are. The Internet is a place to enhance existing relationships, not a place to meet new people.
   3.2. Inappropriate Content – This includes both content that is viewed and content that is uploaded by users. Help children understand that the Internet is *forever*: Everything they post online is tracked and stored and will follow them to future job interviews and college entrance interviews.
   3.3. Inappropriate Conduct – Because the web environment can feel anonymous, some youth become dis-inhibited. Teach children that the Internet is a public forum: anonymity is a myth. Help them be the good person *on*line that they are when they're *off*line

--Researching on the Internet
Loudoun students are taught how to responsibly use the Internet for research. Strategies are outlined in the English Department's Information Literacy Framework developed in a collaborative effort of English teachers, librarians, and technology resource teachers.

--Embedding Safety Tips in Strategies in Curriculum
Lessons and activities in which students use the Internet for research or communication have embedded references to safe behaviors. The Department of Instruction will continue to embed those references as curriculum is further developed.

--Conversations with Students – Elementary
Loudoun County Public Schools encourages all adults – parents, librarians, teachers, counselors, and assistants – to engage students in conversation regarding their behaviors when using the Internet.

Developed by The National Center for Missing and Exploited Children as a resource for parents and teachers, NetSmartz.org provides some simple rules for elementary students; these can be used as talking

points for conversations with young children. These rules are also published by Netsmartz.org as a pledge for elementary students:

> Pledge for K-2 Students - http://www.netsmartz.org/pdf/pledgek2_eng.pdf
> Pledge for 3-6 Students - http://www.netsmartz.org/pdf/pledge36_eng.pdf

--Conversations with Students – Middle and High

Loudoun encourages all adults – parents, librarians, teachers, counselors, and assistants – to engage students in conversation regarding their behaviors when using the Internet.

NetSmartz.org provides more detailed guidance for secondary students; these can be used as talking points for conversations with children. These rules are also published by NetSmartz.org as a pledge for middle and high school students:

> Pledge for Middle/High School Students - http://www.netsmartz.org/pdf/pledgemshs_eng.pdf

MITIGATING RISKS: PROVIDING PROFESSIONAL DEVELOPMENT

LCPS requires all principals each year to provide awareness-level staff development to all teachers regarding the risks and the above articulated strategies to mitigate those risks. In addition Loudoun continues to provide awareness information in district-level professional meetings. Resources for parents and teachers are published on the Loudoun webpage and Intranet.

EVALUATING THE INTERNET SAFETY PROGRAM

This Internet Safety program will be evaluated annually by the Loudoun School Board Technology Steering Committee regarding accountability, effectiveness, impact, operations, and utilization. Responsible administrators will verify to the Tech Steering Committee that all procedures have been followed and activities enacted.

All Loudoun County Public Schools (LCPS) have access to telecommunications services and, through them, an avenue to the Internet. The Internet links thousands of computer networks around the world, giving Loudoun County students access to a wide variety of information resources. Students in LCPS use telecommunications and the Internet to participate in learning projects outside their community, to ask questions of and consult with experts, to communicate with other students, and to locate information to meet their educational needs.

However, with access to computers and people all over the world there is an availability of material that may not be of educational value in the context of the school setting. LCPS does not condone the use of such materials and does not permit the usage of inappropriate materials in the school environment. Also, LCPS is not responsible for the accuracy or the quality of information obtained through the Internet.

In using computer equipment and networks in schools for any purpose, all students need to act responsibly. Students must use appropriate language and behavior on computers and networks. Malicious behavior and unauthorized use of equipment or systems could be in violation of Policy §8–27 of LCPS, "Suspension from School by the Principal," and subject to disciplinary action.

LCPS staff monitors student usage of Internet access. Elementary students will be fully supervised when using telecommunications services. Secondary students will be observed closely by school personnel as they use telecommunications in the school building. Electronic protection will be established when and where possible. Secondary students will acknowledge these "Acceptable Use Practices" before using telecommunications services in schools by returning an agreement form to the teacher or librarian.

When parents or guardians sign that they understand the "Telecommunications Acceptable Use Practices" of LCPS, they are agreeing that they

- understand that Internet access is designed for educational purposes,
- recognize that it is impossible for schools to restrict access to all controversial material even with LCPS staff members monitoring students' access,
- will not hold LCPS responsible for materials acquired on the network,
- give the student permission to access the Internet services in school, and
- understand that this privilege may be revoked if the student violates the "Telecommunications Acceptable Use Practices."