

i-SAFE K-12 CURRICULUM SCOPE 06-07

GRADES K-4

Scope and sequence – i-SAFE materials are available in topic modules to provide the teacher with flexibility in creating a program of instruction that best suits the needs of each unique class. Therefore, the sequence of topics is not critical. For the early elementary grades, however, it is recommended that lessons and activities on Cyber Community Citizenship be implemented first to provide a better basis of understanding of the abstract concept of Cyberspace.

Module: Cyber Community

Cyber Community Citizenship (Core)

Grade K

The i-SAFE character, i-Buddy, is used to introduce the abstract concept of a community on the Internet through interactive, hands-on activities.

Strategy introduced: Students should have adult assistance when using the Internet.

Grade 1

The i-SAFE character, i-Buddy, is used to introduce the abstract concept of a community on the Internet and reinforce that students should have adult assistance when using the Internet.

- Cyberspace is described as a community that contains places to visit, just like in the real community. It is called the cyber community.
- Parents are identified as the primary educators who make rules to keep their children safe when in the physical community and when using computers and the Internet.

Grade 2

Grade 1 concepts are introduced and built upon by introducing the following:

- A community has rules to help keep its citizens safe. A good citizen is one who knows and follows the rules of a community.
- Community rules/laws are compared to Internet-use rules.

Grade 3

Grade 2 concepts are introduced and built upon by introducing the following:

- Places in communities are identified by addresses.
- An Internet address is called a URL.
- Terminology introduction and discussion: appropriate and inappropriate, and how the terms apply to Internet use
- Age-appropriate strategies are introduced to exit inappropriate Web sites.

Grade 4

Grade 3 concepts are introduced and built upon by introducing the following:

- Definitions for inappropriate e-mails are described with age-appropriate terminology.
- Age-appropriate strategies are introduced to handle inappropriate e-mail.
- Concept introduction: Inappropriate Web sites can be fixed so that responsible cyber citizens cannot get out of them easily.

Citizenship and Safety

Grades 3-4

Supplemental lesson to core Cyber Community Citizenship; cyber community concepts are expanded upon with a focus on cyber citizenship and safety rules.

Module: Online Personal Safety

Personal Safety (Core)

Grade K

The i-SAFE character, i-Buddy, is used to introduce the abstract concept of safety while online and reinforce that students should have adult assistance when using the Internet through the following:

- Concept introduction: e-mail
- Discuss: how rules of the community, such as “Do not talk to strangers,” help safety.

Grade 1

Grade K concepts are introduced and built upon by introducing the following:

- Terminology introduction and discussion: uncomfortable, and age-appropriate strategies for uncomfortable situations
- Introduction of the FBI Internet Safety Tips
- Strategy reinforced: Students should have adult assistance when using the Internet.

Grade 2

Grade 1 concepts are introduced and built upon by introducing the following:

- The importance of rules and laws
- Expansion of FBI Tips description
- Strategy reinforced: Students should have adult assistance when using the Internet.

Grade 3

Grade 2 concepts are built upon by expanding the concepts with a definition and discussion of the term “trusted adult.”

Grade 4

Grade 3 concepts are introduced and built upon by introducing the following:

- Concept introduction: identifying information
- Discussion of other forms of cyber communication
- Terminology introduction and discussion: permission

Safety and Identity

Grades 1–4

Supplemental lesson/activity to the core Personal Safety; an activity designed to demonstrate the meaning of personal/identifying information

Text-Messaging Safety

Grades 3–4

Supplemental lesson/activity to the core Personal Safety; introduction to specific text messaging and its associated safety strategies (including cell phones)

Play it Safe Online

Grade 4

Supplemental activity to the core Personal Safety facilitated by a PowerPoint presentation to highlight the ways personal, identifying information is revealed through Internet communications

Module: Cyber Security

Cyber Security (Core)

Grade K

The i-SAFE character, i-Buddy, is used to introduce the abstract concept of the computer virus and reinforce that students should have adult assistance when using the Internet.

Grade 1

Grade K concepts are introduced and built upon by introducing new terminology and discussion.

Concept introduction: A computer virus is a computer program.

Grade 2

Grade 1 concepts are introduced and built upon by introducing expanding explanations, vocabulary, and age-appropriate computer virus prevention techniques.

Grade 3

Grade 2 concepts are introduced and built upon by introducing expanding explanations, vocabulary, and age-appropriate computer virus prevention techniques.

Grade 4

Grade 3 concepts are introduced and built upon by introducing the following:

- Terminology introduction and discussion: e-mail forwards
- Terminology introduction and discussion: automatically, as it is related to viruses and e-mail
- Reinforcement of age-appropriate computer virus prevention techniques

Spam Scam Safety

Grades 3–4

Supplemental lesson to core Cyber Security; an introduction to spam, dangers associated with spam, and associated safety rules

Module: Intellectual Property

Intellectual Property (Core)

Grade 3

The i-SAFE character, i-Buddy, is used to introduce the concept of intellectual property through age-appropriate definitions and a comparison of tangible property to property found on the Internet

Grade 4

An introduction to the concept of intellectual property is used to develop an age-appropriate understanding of how students can use online intellectual property correctly by citing sources.

Module: Cyber Bullying

Cyber Bullying (Core)

Grade 3

The concepts of cyber bullying as compared to kindness online are introduced through a focus of relating them to behaviors in the physical world. Netiquette is introduced. Students identify courses of action and resources.

Grade 4

The concepts of cyber bullying and kindness online are introduced with a focus on netiquette. Students identify courses of action and resources.

Movement and Music

Internet Safety Songs

Grades K–4

A collection of songs available for download or an audio CD with accompanying movement activity plans for teacher use provides an active mode for reinforcement of concepts learned in core curriculum.

GRADES 5–8

Scope and sequence – i-SAFE materials are available in topic modules to provide the teacher with flexibility in creating a program of instruction that best suits the needs of each unique class. Therefore, the sequence of topics is not critical.

Module: Cyber Community

Cyber Community Citizenship (Core)

Grade 5

The Internet community is compared to the physical community, highlighting their similarities and the ways people interact within them.

Enrichment goal: Use materials created in the lesson/activity to create a poster project.

Grade 6

The Internet community is compared to the physical community, focusing on responsibilities as citizens.

Enrichment goal: Use a choice of materials created in the lesson/activity to create an awareness campaign.

Grade 7

The Internet community is compared to the physical community, with a focus on who participates, how people interact, and the roles of community leaders.

Enrichment goal: Write and publish articles for the school and/or local newspaper about what has been learned.

Grade 8

The Internet community is compared to the physical community, with a focus on evaluating the appropriateness of Web sites considering age group, intended use, and reliability of information.

Enrichment goal: Create a poster awareness campaign.

Cyber Bullying

Grade 5

Students investigate and identify key concepts associated with cyber bullying and learn strategies to avoid it.

Enrichment goal: Make a display to provide anti-cyber bullying awareness information to students of the school.

Grade 6

Students investigate and identify key concepts associated with cyber bullying and netiquette, including an expansion of definitions and discussion of motivations of bullies.

Enrichment goal: Develop a pledge wall about cyber-bullying awareness.

Grade 7

Students investigate and identify key concepts associated with cyber bullying and netiquette, including an expansion of definitions, discussion of consequences of cyber bullying, and techniques to avoid/report bullying.

Enrichment goal: Create and broadcast public-service announcements (PSAs) about cyber-bullying awareness at school and/or locally.

Grade 8

Students investigate and identify key concepts associated with cyber bullying and avoidance strategies, as well as an introduction to the cyber-stalking concept and laws governing online harassment.

Enrichment goal: Design and distribute an informational brochure about how to recognize and handle cyber bullying.

Grades 6–8

Webcast – Cyber Harassment: Online Bullying and Stalking

This investigation of cyber-harassment issues focuses on definitions of bullying and stalking as they apply to the Internet, rules, laws, and consequences, and the Ryan Halligan story.

Enrichment goal: Create a poster campaign to make others aware of how to deal with cyber bullying.

Safe Web Site Design

Grades 5–8

Supplemental lesson/activity to the core Cyber Community Citizenship; learners develop a comprehensive understanding of safety tips to remember when designing and building their own Web sites.

Negative Networking (Gangs Online)

Grades 6–8

Supplemental lesson/activity to the core Cyber Community Citizenship; learners develop an understanding of ways the Internet can be used to have a negative impact on society, such as its use by gangs to network.

Module: Online Personal Safety

Personal Safety UNIT (Core)

The personal safety unit for each of the grades 5 through 8 is comprised of four mini-lessons/activities to facilitate a variety of implementation strategies and time frames.

Grade 5

Unit lessons:

- Safeguarding Your Identity While Online: Screen Names and Passwords
- Protecting Personal Information
- Online Strangers, Predators, and the Grooming Process
- Online Personal Safety Review and Action

Enrichment goal: Create and present a cyber-safety presentation for parents or others.

Grade 6

Unit lessons:

- Safeguarding Your Identity While Online: Screen Names and Passwords
- Protecting Personal Information
- Online Strangers, Predators, and the Grooming Process
- Online Personal Safety Review and Action

Enrichment goal: Engage in a brochure distribution campaign.

Grade 7

Unit lessons:

- Safeguarding Your Identity While Online: Screen Names, Passwords, and Safety Resolutions
- Protecting Personal Information
- Online Strangers, Predators, and the Grooming Process
- Online Personal Safety Review and Action

Enrichment goal: Install the Library Safe Card Program in a school library/media center, or local library.

Grade 8

Unit lessons:

- Your Online Safety: Understanding the Issues
- Proactive Protection Online
- Online Strangers, Predators, and the Grooming Process
- Online Personal Safety Review and Action

Enrichment goal: Engage a lower grade in the lesson survey activity to promote cyber-safety awareness.

Text-Messaging Safety

Grades 5–6

Supplemental lesson/activity to the core Personal Safety Unit; introduction to specific text messaging and its associated safety strategies (including cell phones)

Personal Safety Continued

Web Logs: A Positive Approach to Blogging

Grades 5–8

Supplemental lesson/activity to the core Personal Safety Unit; the concepts of personal web logs (blogging) and relevant safety issues are introduced.

Enrichment goal: Develop a safe/secure blog for class or school use.

Online Shopping Risks

Grades 6–8

Supplemental lesson/activity to the core Personal Safety Unit; investigates safety and security issues surrounding online shopping

Enrichment goal: Design and post a web page about safety in online shopping.

Legal Trends in Cyber Safety and Security

Grades 6–8

Supplemental lesson/activity to the core Personal Safety Unit; investigates current legal trends concerning the Internet

Enrichment goal: Write letters to an elected official concerning an Internet safety or security issue, and discuss ideas for legislation or policy regarding it.

Social Networking

Grades 6–8

Supplemental lesson/activity to the core Personal Safety Unit; an investigation of the current trends in usage of social-networking sites, safety strategies for social networking, and the positive uses of these activities.

Enrichment goal: Create a public-service announcement to inform others about safe social networking.

Play it Safe Online

Grades 5–6

Supplemental activity to the core Personal Safety Unit facilitated by a PowerPoint presentation to highlight the ways personal, identifying information is revealed through Internet communications.

Module: Predator Identification

Predator identification (Core)

This lesson is facilitated with a PowerPoint presentation and an interactive activity for each grade level; it's easily implemented with multiple grade levels concurrently.

Grades 5–8

Investigate and identify key concepts associated with responsible and safe online interaction with a focus on issues associated with Internet predators, including key characteristics of suspicious online communication, the grooming process, and proactive techniques to reduce risk.

Enrichment goal: Engage parents in participation of the online parent survey.

Willing Participant

Grades 6–8

Supplemental lesson/activity to the core Predator Identification; provides a closer investigation into the concept of the willing participation in online relationships with strangers

Enrichment goal: Create a poster or bulletin board to inform others about strangers on the Internet and provide strategies to stay safe in online communication.

Module: Cyber Security

Cyber Security (Core)

Grade 5

Learners develop an understanding of the vocabulary terms “malware,” “malicious,” and “code,” as well as an understanding of proper e-mail protocol and the necessity of using caution when opening e-mail to protect computer security.

Enrichment goal: Create and distribute brochures to inform others about cyber-security issues.

Grade 6

Learners build upon what has been learned previously to develop an understanding of proper e-mail protocol and the necessity of using caution when opening e-mail to protect computer security.

Enrichment goal: Create cyber-security slogans, and post on a web page.

Grade 7

Learners become more familiar with security consequences of online communication and risky interaction on the Internet, such as virus downloading and cyber bullying, and develop strategies to maintain computer security.

Enrichment goal: Create and present safety and security skits to promote Internet safety awareness.

Grade 8

Learners become more familiar with security consequences of online communication and risky interaction on the Internet, and develop strategies to maintain computer security.

Enrichment goal: Develop activities, such as word games, for other students to reinforce Internet safety and security concepts.

Acceptable-Use Policies

Grades 5–8

Learners become familiar with what an acceptable-use policy (AUP) is, their school/districts AUP, and how to offer suggestions for revision based on what they have learned.

Enrichment goal: Draft a class letter/article regarding what has been learned about the school’s AUP, and make recommendations to administration, if necessary.

Spyware Risks

Grades 5–8

Review the security risks associated with downloading items online; learners develop understanding of the term “spyware,” the types of programs to which it applies, and how it can compromise personal information.

Enrichment goal: Develop public-service announcements about spyware awareness and prevention.

National Student Watch

Grades 6–8

Learners develop a comprehensive understanding of their school’s action or disaster plan in response to homeland security threats, and the means of relaying information concerning threats.

Enrichment goal: Create an Internet safety and/or security fair or cyber safety week.

Homeland Security

Grades 7–8

An activity integrates knowledge and concepts previously learned about hacking, steganography, malicious code (i.e. viruses and worms) with information on cyber terrorism to identify and comprehend the utilization of the Internet in cyber terrorism and cyber warfare.

Enrichment goal: Create a web quest on the topic of cyber security and homeland security, and provide it as a teaching tool for other students.

Module: Intellectual Property

Intellectual Property (Core)

Grade 5

Students investigate and identify key concepts associated with responsible use on the Internet, focusing on attributes and types of materials, definitions of copyright and plagiarism, and techniques to avoid IP theft and plagiarism.

Enrichment goal: Create posters or web pages to promote responsible use of intellectual property.

Grade 6

Activities build upon concepts introduced in previous grade levels or provide an age-appropriate introduction to investigate and identify key concepts associated with responsible use on the Internet, focusing on attributes and types of materials, definitions of copyright and plagiarism, techniques to avoid IP theft and plagiarism, and the consequences on intellectual-property theft.

Enrichment goal: Create awareness about responsible intellectual-property use by creating and broadcasting a public-service announcement.

Grade 7

Activities build upon concepts introduced in previous grade levels or provide an age-appropriate introduction to investigate and identify key concepts associated with responsible use on the Internet, focusing on attributes and types of materials, definitions of copyright and plagiarism, techniques to avoid IP theft and plagiarism, and the consequences on intellectual-property theft.

Enrichment goal: Present or broadcast the PSAs and/or jingles created in the lesson.

Grade 8

Activities build upon concepts introduced in previous grade levels or provide an age-appropriate introduction to investigate and identify key concepts associated with responsible use on the Internet, focusing on attributes and types of materials, definitions of copyright and plagiarism, and techniques to avoid IP theft and plagiarism.

Enrichment goal: Share the mock trial developed in the lesson on intellectual-property rights with others via a selection of modes.

Copyright and Fair Use

Grades 5–8

Supplemental lesson/activity to the core Intellectual Property; learners develop their knowledge of intellectual property by taking a closer look at copyright and fair-use laws.

Enrichment goal: Make an informational Web site banner for posting on school/district Web site.

Music Rules: Learn B4 U Burn UNIT

Grades 6–8

The Music Rules: Learn B4 U Burn unit for the middle grades is comprised of four lessons/activities to support concepts learned in the correlating i-SAFE Assembly Experience.

- Music Makers: Unknown Victims – Learners develop an understanding of the consequences of piracy to music industry workers.
Enrichment goal: Develop and post/publish posters and/or web pages to inform their peers about the issues surrounding music piracy, including how to legally obtain music via Internet resources.
- Peer-to-Peer Networking – Learners define and develop an understanding of the concept of peer-to-peer networks, and an understanding of the safety, security, and legal issues of using them.
Enrichment goal: Write and publish articles in the local or school newspaper, or on the school Web site, to inform peers about the risks surrounding the use of peer-to-peer networks.
- Music Copyright Basics – Learners develop an understanding of how copyright laws apply to music and how to apply the fair-use doctrine to music use. Learners are given opportunities to determine legal alternatives when using copyrighted music for school assignments and/or personal use.
Enrichment goal: Create reference brochures on the legal issues surrounding copyrighted music and how to use copyrighted music appropriately.
- Learn B4 U Burn – Investigates all aspects inherent to the issue of online piracy.
Enrichment goal: Develop PSAs to inform others about legal alternatives to illegal music piracy.

Module: Effective Outreach

Internet Safety Review Through Integrated Literacy Activities

Grades 5–8

Grade-specific lesson plans facilitate the review of core Internet safety topics and completion of language arts projects.

Enrichment goal: Provide stories and/or other projects to help younger children learn about Internet safety topics.

Additional Integrated Curriculum Resources

Internet Safety Review Through Integrated Math Activities UNIT

Grades 5–8

Introduction to Graphs

Learners will continue developing their understanding of online dangers through a math-themed lesson aimed at teaching basic graphing skills. Students will be introduced to the bar graph and practice making bar graphs.

Student activities focus on the following:

- development of a “living bar graph”
- translation of the living bar graph to paper
- practice in graphing basic questions

Graphing

Learners will continue developing their understanding of online dangers through a math-themed lesson aimed at using graphing skills. Students will learn three basic graph types along with their primary functions: line graph, bar graph, and circle graph.

Student activities focus on the following:

- review through discussion of Internet safety concepts
- definitions of the three types of graphs
- the graphing of statistics provided by i-SAFE

Survey and Statistics

Learners will continue developing their understanding of online dangers (specifically cyber bullying) through a math-themed lesson aimed at teaching basic survey and statistic skills. New vocabulary will be introduced, including “mode,” “median,” “mean,” “outliers,” and “range.”

Student activities focus on the following:

- review through discussion of Internet safety concepts
- review of i-SAFE statistics
- development of survey questions for provided topics
- use of class data from survey questions to compute the mode, median, mean, outliers, and range

Word Problems and Algebraic Equations

Review information on predator awareness while developing a comprehensive understanding of basic algebra terms and concepts. Concepts are taught in comparison to Internet safety themes. Students will practice building equations in relation to word problems.

Student activities focus on the following:

- review through discussion of Internet safety concepts
- creation of algebraic equations based on word problems
- finding solutions to created word problems

GRADES 9–12

Scope and sequence – A variety of i-SAFE materials are available for the high-school grades to provide the teacher with flexibility in creating a program of instruction that best suits the needs of each unique class. Therefore, the sequence of topics is not critical.

Library of Webcasts (subtitled)

Each video webcast is hosted by high-school students and provides topic-related discussion breaks and activities.

Privacy and the Internet

An Introduction to safety online focusing on personal information, online privacy, and various forms of online communication

Enrichment goal: Use the i-MENTOR Training Network as a resource to teach younger children about Internet safety.

Cyber Relationships

An investigation of safety in online communication focusing on how people interact and strategies for safe online interaction

Enrichment goal: Use the i-MENTOR Training Network as a resource to host the i-SAFE Assembly Experience.

Intellectual Property

Identify appropriate use of the Internet and intellectual property by covering the definition of “intellectual property,” related key terminology, rules, laws, and consequences.

Enrichment goal: Use the i-MENTOR Training Network as a resource to host an i-SAFE Assembly Experience on intellectual-property issues.

Security: Malicious Code

An investigation of Internet security issues, consequences, and computer security strategies relevant to the spread of malicious code

Enrichment goal: Use the i-MENTOR Training Network as a resource to distribute information about how to keep computer secure through the distribution of materials via an information table or resource.

Security: Cyber Citizenship

An investigation of citizenship issues presented by Internet use, focusing on hacking and hactivism, steganography, potentials of terrorist use of the Internet, and associated legal consequences; provides information on techniques to protect computers from external threats

Enrichment goal: Use the i-MENTOR Training Network as a resource to host a community leaders’ meeting on the issues of Internet safety and concern.

Social Issues

Developed around a collection of student-produced videos on Internet social issues, including the grooming process, online identities, and online relationships.

Enrichment goal: Create an Internet safety video or vodcast, and enter the Student Filmmaker Contest.

Pornography on the Web

Developed around the winning high-school entry in the Student Filmmaker Contest; presents the problems associated with the ease of access to pornography on the Internet.

Note: Educators will be cautioned to view the webcast first and determine whether the content is in accordance with school policies.

Enrichment goal: Use the i-MENTOR Training Network as a resource to teach others about Internet safety.

Cyber Harassment: Online Bullying and Stalking

An investigation of cyber-harassment issues focusing on definitions of “rules,” “laws,” and “consequences” to victim and perpetrator, and featuring the Ryan Halligan Story

Enrichment goal: Promote and develop, if necessary, a school anti-cyber bullying policy.

Non-Webcast Lessons and Activities

Cyber Community

A survey is used to illustrate the Internet community in comparison to the physical community with a focus on the similarities and differences and appropriate versus inappropriate online interactions.

Enrichment goal: Engage parents in completion of the online parent survey.

Online Relationships

An activity and discussion about the concept of willing participation in online relationships with strangers and the roles that predators play

Enrichment goal: Set up a school DROP Box for dealing with Internet Issues and concerns from the school population.

Online Gambling

An investigation of the dangers and consequences of online gambling

Enrichment goal: Become certified in the i-MENTOR program.

Online Privacy

A closer look at how one willingly submits private information online; a guide to raise awareness

Enrichment goal: Learn to write a "Letter to the Editor."

Identity Theft

Provides a look at how identity theft occurs online and safety precaution strategies

Enrichment goal: Create a presentation for adults on how to avoid online identity theft.

Online Shopping Risks

A look at how to shop safely online and evaluate shopping Web sites

Enrichment goal: Develop informational brochures on online shopping safety.

Legal Trends in Internet Safety and Security

A look at current legal trends concerning the Internet

Enrichment goal: Write to a Congressional leader concerning a legal cyber security/safety issue.

Social-Networking Risks

An investigation of the current trends in usage of social-networking sites, safety strategies for social networking, and the positive uses of these activities

Enrichment goal: Develop a school advisory board for discussion and policy formation on cyber-safety topics.

Online Freedoms and the Culture of the Internet

An investigation of Internet-related laws in the United States and how other countries compare

Enrichment goal: Host a presentation for adults about Internet safety issues.

Homeland Security

Activity integrates knowledge and concepts previously learned about hacking, steganography, malicious code (i.e. viruses and worms) with information on cyber terrorism to identify and comprehend the utilization of the Internet in cyber terrorism and cyber warfare

Enrichment goal: Create a web quest on the topic of cyber security and homeland security, and provide it as a teaching tool for other students.

Music Rules: Learn B4 U Burn UNIT

This unit supplements the Music Rules: Learn B4 U Burn Assembly Experience.

The unit for middle grades is comprised of four lessons/activities to support concepts learned in the correlating i-SAFE Assembly Experience.

- Music Makers: Unknown Victims – Learners develop an understanding of the consequences of piracy to music industry workers.
Enrichment goal: Become certified in the i-MENTOR program.
- Peer-to-Peer Networking – Learners define and develop an understanding of the concept of peer-to-peer networks, and an understanding of the safety, security, and legal issues of using them.
Enrichment goal: Write and publish articles in the local or school newspaper, or on the school Web site, to inform peers about the risks surrounding the use of peer-to-peer networks.
- Music Copyright Basics – Learners develop an understanding of how copyright laws apply to music, how to apply the fair-use doctrine to music use; learners are given opportunities to determine legal alternatives when using copyrighted music for school assignments and/or personal use.
Enrichment goal: Create reference brochures on the legal issues surrounding copyrighted music and how to use copyrighted music appropriately.
- Learn B4 U Burn – Investigates all aspects inherent to the issue of online piracy
Enrichment goal: Develop PSAs to inform others about legal alternatives to illegal music piracy.

Service Learning UNIT

Student participants explore Internet safety concepts and the need for public awareness through public service on the issues of Internet safety and responsible use. i-SAFE works with schools and districts to provide authentication of service-learning credit.

The Service Learning Unit is available to educators and advisors who complete an online implementation plan at www.isafe.org. Participation in the i-SAFE Professional Development Program is not required. The unit is comprised of nine lessons to facilitate the implementation of i-SAFE programs and materials through public service.

- Public Service Announcements
- Orientation Presentation
- Student Assembly
- Community Posters
- Library Safe Card
- i-Adopt-A-School
- i-PARENT Program
- Community Leaders' Meeting
- Brochure Distribution