

Elementary children often have access to digital tools and the Internet long before they have developed the abstract thinking skills needed to recognize the consequences of their online choices. Just as students need to learn how to be productive and safe citizens in their local community, they need instruction on how to conduct themselves safely and responsibly in the digital world. By teaching digital citizenship skills, educators can promote effective use of Internet resources and protect elementary students from harmful online behaviors.

Setting the Scene

Bulletin Board

Create a "Citizenship: Rights & Responsibilities" display. Label one side "U.S. Citizenship." Download and print page 1 of the Constitution of the United States (www. archives.gov/exhibits/charters/constitution_zoom_1.html), the Pledge of Allegiance (http://parenting.leehansen.com/Printables/School/pledge-allegiance-poster.html), and the Oath of Allegiance recited by naturalized citizens (www. uscis.gov/us-citizenship/naturalization-test/naturalization-oath-allegiance-united-states-america). Add flags and other US symbols. Label the opposite side of the bulletin board "Digital Citizenship." Post a copy of the school or district's Acceptable Use Policy (AUP) and the "Be a Good Digital Citizen" poster from Upstart (www.demco.com/goto?BLK289621). Add pictures of computers, tablets, cell phones, a globe, and other digital symbols.

Use the bulletin board for a citizenship lesson for intermediate students. Collaboratively, create a Venn diagram of the similarities and differences between being a citizen of a nation and a citizen of a virtual space. Hand out "Be a Good Digital Citizen" bookmarks from Upstart (www.demco.com/goto?BLK290011) to serve as reminders.

Digital Citizenship Pledge

Download and print the Digital Citizenship Pledge from Common Sense Media (free registration required, www. commonsensemedia.org/educators/pledge_poster) for each class. Posters have space for customization with your own rules. After the students have completed the digital citizenship lessons, encourage them to sign the poster. Hang the posters in their classrooms.

Theme Song

"Pause and Think Online" (https://vimeo.com/72896796) is a catchy song about Internet safety provided by Common Sense Media. Enjoy students' remixed videos based on the song, as well as lyrics, instrumentals, and sheet music at www.commonsensemedia.org/educators/pause-video-contest. Collaborate with the music teacher to develop your own students' remixed videos.

Special Program

Invite a local police officer to speak about Internet safety. The program could be targeted toward intermediate students or their parents. Many police

departments have officers who specialize in protecting families from online dangers.

Lessons for Primary Students

Students in primary classrooms are capable of learning basic safety rules about being on the Internet. Ideally, whether at school or home, young children are closely supervised while online, but they still need guidelines for protecting themselves and interacting with others. The short videos listed below simulate real interactions students might have online. The videos could be played first for whole group viewing and then reinforced in centers where pairs of students re-watch the lessons.

Online Safety Videos for Primary

"Animal Magic with Lee and Kim" (www.youtube.com/watch?v=-nMUbHuffO8; 8 minutes, 38 seconds) is a British cartoon suitable for children ages 5–7. Lee and Kim learn to make good choices to stay safe while playing an online game. The video reinforces four tips: 1) people you don't know are strangers; 2) be nice to everyone online; 3) keep personal information private; and 4) when something makes you uncomfortable, tell a trusted adult. The video includes a bouncy song for remembering the rules.

"Internet Safety for Kids K–3" (www.youtube.com/watch?v=89eCHtFs0XM) was produced by Indiana University of Pennsylvania to to teach young students what the Internet is and how to stay safe when online. The rules are 1) don't go on websites without permission; 2) don't type anything on a web page without permission; and 3) don't share your username or password.

"Introduction to the Internet" (https://vimeo.com/21356838; 3 minutes, 30 seconds), a video from Common Sense Media, highlights a young boy who has three rules for Internet use: ask permission, talk to people you know, and go to just-right places.

"Mindful Messaging" (www.youtube.com/watch?v=GHnwpKVMeK8; 1 minute, 33 seconds), also from Common Sense Media, addresses text messages. In the video, a young girl texts her friends, and they misunderstand her tone. Common Sense Media provides a related lesson, "Showing Respect Online" (www.commonsensemedia.org/educators/lesson/show-respect-online-k-2; registration required). While the lesson plan is

labeled for K–2, the video would be appropriate for older children as well.

Curricula for Primary

Common Sense Media provides a three-unit scope and sequence of 15 lessons for K–2 students (www.commonsensemedia.org/educators/scope-and-sequence). Many lessons include short videos (two are listed here) with lesson plans and handouts. Educators may particularly like the lesson in Unit 3 on "Powerful Passwords" and the link to Dinopass (www.dinopass.com), an online password generator that students can use to create strong passwords. Free registration on the site is required.

KidSMART (www.kidsmart.org.uk/teachers/ks1), produced by Children International, has online safety materials for primary students that can be used offline as well. Two e-books, The Adventures of Smartie the Penguin and Digiduck's Big Decision, support language-arts objectives and online safety. Books can be downloaded as PDFs or read full-screen. The "Fun Activities" tab on the toolbar has art and writing activities to do at school or home.

Lessons for Intermediate Students

Intermediate students have developed enough abstract thinking skills to benefit from more comprehensive Internet safety instruction than primary students. Many of the videos and lessons below cover more than one concept, and resources vary in the level of sophistication, so pick and choose the resources that will best align with your students' interests and background knowledge. Most, but not all, of the resources will require being online.

Password Protection

Lessons on password protection should cover two specific concepts: the use of strong passwords and the importance of keeping passwords private. Build your own background knowledge about password strength by reading "How Do I Create a Strong Password?" (www. webroot.com/us/en/home/resources/tips/getting-started/beginners-how-do-i-create-a-strong-password).

Password Word Sort: Use a closed word sort to introduce the idea of strong passwords. Print one set of Password Sort Cards on pages 8–9 for each student pair

or trio. Separate the cards and give each student group an envelope with the cards. They will sort the passwords into three categories: Weak Passwords, Stronger Passwords, and Strongest Passwords. Do not define the categories for the students; they should define the categories for themselves. After each team has sorted the cards, let students guide you in doing a whole class sort on the document camera or a chart. Discuss disagreements before voting on them. If time allows, test the passwords for strength. Use the printable Perfect Passwords Checklist (www.digizen.org/digicentral/perfect-passwords. aspx) or the online Password Meter (www.passwordmeter. com) to analyze the strength of the passwords.

Password Matching: People often choose weak passwords because they are easy to remember. However, stronger passwords created from sentences, phrases, favorite numbers, and letter substitutions can be memorable as well. In the matching activity, students will match the passwords from the previous activity with their meanings. Print one set of the Password Meaning Cards on pages 6–7 for each student group. Students then match the passwords with their meanings. The purpose of the activity is to demonstrate how stronger passwords are created and to encourage students to develop their own strong passwords, which they should keep private.

Password Rap: NetSmartzKids covers both password concepts in a 2-minute video, "Password Rap" (www. youtube.com/watch?v=DE5xKaf4E9E). The rap will be helpful as students attempt to create their own strong passwords and resist temptation to share their passwords with others.

Creating Passwords: Elementary students may have difficulty developing strong passwords on their own. Password Bird (http://passwordbird.com) generates passwords from two words and a date. The strength of the password is dependent on the words and dates children choose; using names or short common words might result in weak passwords. If students use Password Bird, encourage them to add special characters (^, }, #, etc.) to their passwords to increase strength.

Video: "Make Cyberspace a Better Place – Katie – Cybersafety" (www.youtube.com/watch?v=H0Qg1_-Xmr8) is a 90-second video about the consequences when a girl gives her password to others.

Video: "Online Safety Rule: Keep Passwords Private!" (www.schooltube.com/video/b44d75da172b450f9186/Online%20Safety%20Rule:%20Keep%20your%20 password%20private!; 1 minute, 18 seconds) is a video by sixth graders about what can happen when passwords are given to friends.

Online Is Permanent

You Can't Take It Back! (Science Lesson): Students do not always realize that once something is posted online, it never goes away, even if they delete it. Use a science experiment to demonstrate permanency. Each team of students will need a clear cup (about 6 oz.), about 8 oz. of water, one sugar cube, and a spoon; each individual student will also need a small paper cup.

Instruct students to fill the clear cup about halfway with the water. Students then write descriptions of the water's appearance. Next, they pour small amounts of the extra water into their individual paper cups. Students drink this water and add descriptions of the water's taste. Then, have them drop a sugar cube into the clear cup and stir once before removing the sugar cube. Students write a new entry describing the appearance of the water in the clear cup and predict whether the taste will change. Have them pour a small amount of the water from the clear cup into their individual cups and drink the water. Then, they add a description of the water's taste.

Pose the following questions for students to talk about in their small groups and then for whole-group discussion:

- What did not change in the appearance or taste of the water?
- · What did change?

Draw an analogy to the Internet: The water is made up of many invisible molecules. When the sugar cube is added to the water, some of the sugar molecules are attracted to the water molecules and separate from the sugar cube. Even after the sugar cube is removed, some sugar molecules remain in the water and affect the water's taste. The Internet is made up of many connections around the world that are not visible.

When a user posts something—a picture, video, or text—anyone who sees it can capture it and keep it, even after the original post has been deleted. Once something goes on the Internet, it's impossible to remove it completely.

Video: "The Digital Footprint" (www.youtube.com/watch?v=4P_gj3oRn8s) is a 1-minute video that reinforces the idea that what is posted online is permanent.

Online Netiquette

Paper Blogging: Let students practice writing messages and comments on paper before they begin blogging online. Students write blog posts on colored paper, add pictures, and "publish" their posts by placing their papers on a common table. Peers read the posts and add comments via sticky notes. When each post has at least two comments, authors reclaim their paper blogs, and the whole class discusses comments that are "dead ends" versus comments that are "highways" for further conversation.

Many teachers have written about paper blogging. The following resources will provide the essentials for elementary teachers: "Making Paper Blogs to Prepare for the Online Experience" (http://theinspiredclassroom.com/2012/06/making-paper-blogs-to-prepare-for-the-online-experience) and "Paper Blogging—Blogging in the Classroom" (www.youtube.com/watch?v=tZEXDEsPNp4; 2 minutes, 42 seconds).

Video: "Bad Netiquette Stinks" (www.youtube.com/ watch?v=VBOiF4ius6A; 6 minutes, 45 seconds) is a video from NetSmartzKids on proper online behavior.

Video: "Share with Care" (www.onguardonline.gov/media/video-0004-share-care), managed by the Federal Trade Commission, emphasizes being careful about what is uploaded online and reinforces the permanency of postings.

Poster: The T.H.I.N.K. poster (downloadable from http://ictevangelist.com/digital-citizenship/) poses five questions to consider before posting. The link to the poster is half-way down the page and labeled "Digital Citizenship." After discussing the poster with students, display it near the computers as a reminder.

Cyberbullying

Interactive Lesson: "Garfield and Cyberbullying" (https://learninglab.org/life_skills/) is a three-part lesson on cyberbullying that features Nermal as the victim of cyberbullying. Students will watch a video, take an interactive quiz on cyberbullying, and apply the lesson to

new situations. This audio-supported interactive lesson introduces students to cyberbullying and its effects. Reinforcement lessons are available in the general curricula listed at the end of this activity guide.

Reading: "SSK Gets Cyberbullied" (www.wiredsafety.org/ flashandvideo/SSK-Cyberbullying.swf) is a cartoon about cyberbullying. It is not audio-supported and requires reading.

Links and Downloads

The topic of safe links and downloads is the least discussed in cyber-safety lessons and may be more commonly addressed for secondary students. Yet, it is often important at the elementary level to caution students against clicking on advertising links on web pages. Tell cautionary tales from your own experience or invite students to share experiences they have had when they have clicked on flashing links.

Video: "File Sharing" (www.kidsmart.org.uk/filesharing/) features a student sharing her story of a download that affected her computer.

Game: "Spam Swatter Game" (www.thinkuknow. co.uk/8_10/control/Spam-Swatter/) challenges 8–10 year olds to recognize spam e-mails. This real-life skill will be helpful throughout their lives.

Game: "P2P Threeplay" (www.onguardonline.gov/p2p) is a tic-tac-toe quiz game about the dangers of file sharing.

Crediting Sources

Video: "What Is Copyright?" (https://jointhecteam.com/movies/CTeam.mov), a downloadable video, explains copyright in simple terms for students. The video can be reinforced with grade level–identified printables on the Educator Resources Copyright Learning Projects page (https://jointhecteam.com/educators_copyright_learning.html). Of particular value are the "Let's Copy Right" scenarios and the "Exploring Internet Content" worksheet.

Lessons and Activities: Music Rules (www.music-rules. com/teachers.html) provides downloadable materials to explain the rights and wrongs of collecting music files. The brochure for parents includes a great poster about online safety.

Sharing Personal Information/ Meeting Online Friends

Reading: Zoe and Molly Online (www.zoeandmolly. ca/app/en/teachers) has downloadable comic books, one for grade 3 and one for grade 4, about real online dilemmas children have experienced and reported to the Canadian Centre for Child Protection. The comics review the rules about online friendships and safety. An online experience extends the third-grade comic book to reinforce the learning.

Game: "Privacy Pirates" (http://mediasmarts.ca/game/privacy-pirates-interactive-unit-online-privacy-ages-7-9) is a game for ages 7–9 that reviews important safety rules about online friends. Also available as a free app (iOS and Android). Audio-supported.

Curricula for Intermediate Students

The Carnegie Cyber Academy (www.securemycyberspace. com/kids/index.html) has a full curriculum with online games, lesson plans, and printable pages. The Teacher's Guide includes ideas for combining online and offline activities.

Common Sense Media offers Digital Passport (www. digitalpassport.org/educator-registration), a free webbased app with five digital citizenship modules geared for grades 3–5. Teachers register themselves and their students, and the app tracks students' progress.

ConnectED (www.reallifeonline.ca/home.aspx) has curriculum for Internet safety for grades 4–6. Lessons include video clips, lesson plans, and ideas for culminating projects.

"Faux Paw The Techno Cat" (http://kids.ikeepsafe.org) has four lessons to address common problems children might face when they use the Internet. All lessons are available as video, slideshows, or PDFs.

- "Faux Paw's Adventures on the Internet" promotes safe online behaviors (4 minutes, 52 seconds).
- "Faux Paw and the Dangerous Download" addresses peer-to-peer music file sharing (8 minutes, 48 seconds).
- "Faux Paw Goes to the Games" advocates balancing real life and screen time (7 minutes, 23 seconds).
- "Faux Paw Meets the First Lady" demonstrates how to handle cyberbullying (7 minutes, 45 seconds).

KidSMART for intermediate students (www.kidsmart.org. uk/teachers/ks2/), developed by Childnet International, offers "The Adventures of Kara, Winston, and the SMART Crew" (www.childnet.com/resources/the-adventures-of-kara-winston-and-the-smart-crew), cartoons to illustrate safe online behavior. Lesson plans are available on the site.

NetSmartzKids (www.netsmartzkids.org) is not a scope-and-sequenced curriculum but a collection of well-designed resources. The NetSmartzKids "Interactive Adventure" (www.netsmartzkids.org/RoutersBirthdaySurprise/Adventure) delivers a story that engages users over several sessions. Students create their own usernames (no password needed) so they can save their progress and return later to complete the adventure.

Batman for me	Mary had a little lamb, little lamb
Mary & Ted	Chip (nickname) 06/21 (birthday)
Combination of April Fool 2000	Hollywood stars are often in the newspapers
Angel owes me \$20	Masked turtles are skaters
Great grapes	Balls go up

Who says it can't My cat rocks! be done? Smile: PacMan lives Three's a crowd forever, Buddy Top left row of Let me in keyboard **Favorite sport Counting to eight** (one of top 25 common passwords) One of top two Warning with punctuation common passwords

Password Sort Cards

12345678	password
qwertyui	letmein
Football	[b@MaN4m3
mARy&t3D	Mh@11,LL
ChiP0621	Oolapr20

Password Sort Cards

20Angel\$	H**@0itn\$
Beware!!	8)rSK8rz
Ba11\$Go^	Gr*tGr8p5
MyKatR0x!	Wsic~Bd1?
3'saCrowd	:]Pml4,B