objective

It has become a crucial skill for students to navigate the Internet successfully. Students will be exposed to the Internet’s basic functionality, including communication, collaboration, creativity, and the cloud. They will learn the basics of search engines and how to use the Internet to solve everyday problems.

Students will be able to:
- explain that the Internet is a way to connect with people and obtain information
- understand how they can use the Internet to solve everyday problems.
- use search engines to search basic queries.

materials

- Handout: Search Engine Practice
- Video: The Internet and Chet, http://brk.mn/13z
- Video: Searching, http://brk.mn/140
- Handout: Healthy Technology Habits
- Parent Handout: Internet Use
- Parent Handout: Search Engines
- Parent Handout: Healthy Tech Habits

timeline [45]

- Introduction to the Internet: 5 minutes
- Internet Uses: 15 minutes
- Search Engines: 15 minutes
- Finding a Healthy Balance with Technology Use: 10 minutes

Whenever you encourage or require students to go online while teaching this or other material, please make sure any online activity is consistent with any school, district, or other applicable policies, as well as any applicable privacy laws and regulations.
ASK “What do you think of when you hear the word ‘Internet’?”

SAY “The Internet is a group of computers all over the world, all connected to each other. The computers are connected by radio, actual wires, and even wires at the bottom of the ocean. It’s what allows you to communicate with and access information from other people instantaneously, whether through email, Facebook, Skype, games, apps, or more.”

ASK students to brainstorm ways that they use the Internet, recording their responses on a whiteboard or poster.
- If students are relatively experienced Internet users, students could list their favorite/most visited websites, or provide specific examples of where they go on the Internet to complete tasks.
- Some examples include:
  - Social media (Facebook, Instagram)
  - Online gaming (PBS Kids, Disney, Sprout, etc.)
  - Publishing their own work (specific blogs, YouTube)
  - Find information (Wikipedia, Dictionary.com)
- Use discretion; students may list websites that contain inappropriate content.

SAY “We are now going to watch a video where Ruff [the main character] needs some help creating a birthday party.”

Watch “The Internet and Chet”: http://brk.mn/13z

ASK “What are the problems Ruff encountered while planning a party for Chet? How did he use the Internet to help solve them?”
- Get Chet a present: Donated in his name and ordered a trampoline.
- Get Chet a cake: Looked up a recipe online.
- Invite friends: Send an e-invitation.
ASK “What else could Ruff have done?”
   – Get Chet a present: Find an article to learn how to make one. Buy something.
   – Get Chet a cake: Look up a recipe online. Order a cake.
   – Get Chet a card: Make him an ECard (environmentally friendly too!).
   – Invite friends: Make a Facebook event. Send out Evites.

search engines [15]

ASK students if they have ever used Google or another search engine before.

EXPLAIN that Google is an example of a search engine. You can use search engines to find out information about what you’re interested in. However, because search engines can also lead you to information that is inaccurate, it’s important to figure out where/whom the information is coming from and whether you can trust that website.

INSTRUCT students to write down three topics they are interested in and then use a search engine to look up facts or answer student questions about a topic. Either demonstrate in front of the class or ask students to look things up in pairs/groups.

EXPLAIN that the Internet is over nine million times bigger than a book (of 300 pages).1 Imagine how long it would take you to find what you were looking for without something that told you to look in a specific place! Search engines are like a book index, showing you the relevant information you looked for.

ASK students to consider whether a source is trustworthy, and what factors might make a website reliable, such as the domain name (.gov/.edu versus .net/.com) or whether a website uses citations and lists their sources.

Watch video: http://brk.mn/140

Pass out “Search Engine Practice” handout (p. 32-33), have students work in pairs to complete. If students do not have access to computers/Internet, or will have difficulty reading the worksheet, go through the activity as a class. Explain that everyone might have different answers, because they might find information in different places.
   – Make sure SafeSearch is turned on.
   – Discuss answers as a class, as well as any difficulties that arose for students.

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1 This statistic was taken from http://www.worldwidewebsize.com on March 16, 2016.
EXPLAIN to students that technology can be helpful, but it can also be distracting and keep us from engaging in the real world. It can be hard or impossible to do multiple things at once (“multitask”), such as reading a book and watching a movie at the same time. Everyone should think about how to find a healthy balance, but you might need to reflect more on your habits if you’re ignoring people and responsibilities in order to use technology more often.

Watch video: http://brk.mn/141

ASK
- “What was Ruff also doing when he was on the trapeze?”
  - He was texting.
- “Was he able to text with both hands and use the trapeze? Why/why not?”
  - Because he was texting with both hands, he was unable to still use the trapeze.
- “What happened when Ruff used the map in order to find his way somewhere?”
  - Because he didn’t look where he was going, he fell into a puddle.
- “What was Chet doing during the video?”
  - He was playing a video game the whole time.
- “Was it a problem that Chet was playing games?”
  - He played so much he forgot to sleep.

Pass out the “Healthy Technology Habits” handout (p. 36-37), and have students work in groups, sharing their responses and solutions to the questions. If you choose to use the bottom part, have each student work individually on measuring how often they use technology.

Take a poll of the number of hours each student in the class spends on the Internet every day.

ASK students about how their family members or friends use technology. Do they use phones when they eat together? What do they use their phones for? (Homework, watching videos, playing games, etc.) Estimate the amount of time their family members spend looking at a screen.

ASK students how they feel when they are trying to talk to someone but the other person is distracted by a piece of technology.
extension

- Ask students to discuss healthy use of technology with their family, or keep track of how they interact with technology (TV, phones, computers, radio, etc.) every day for a week.
- “Technology Quiz:” http://brk.mn/14m
  - As a class, walk through the different questions, stopping after each question to guess as a class before discussing the answer. Not all of the questions in the quiz are covered in the videos listed in this lesson plan, but the correct answers come with brief explanations online.
- Parent Handouts:
  - Internet Use (p. 38)
  - Search Engines (p. 39)
  - Healthy Tech Use Balance (p. 40)
  - Distribute to students and ask them to discuss healthy technology usage habits with their family members.
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Search for answers

Search Engines are a crucial tool for students today (that's you!). Use Google to find the answers to these questions! Make sure that SafeSearch is turned on—if you have questions, ask a friend, or ask your teacher. There are multiple right answers, so you and your neighbor might find different answers.2

1. Where do you go online to send a birthday card?
You could use many websites to create a card online. You could also send an email message.

Source: (which websites did you look at?)
Some examples include:
- Blue Mountain (https://www.bluemountain.com/ecards)
- Hallmark (https://www.hallmarkecards.com/)
- American Greetings (http://www.americangreetings.com/ecards)

2. How do you make a trampoline out of paper?
Students may have a variety of answers. There are a few instructions online on how to make an origami trampoline. There is also someone who made a paper trampoline on which he could jump.

Source: (which websites did you look at?)
Some examples include:
- Origami trampoline: https://www.youtu.be/je5JdMuzbQ4
- Full-size paper trampoline: https://youtu.be/_yLDHOGD8R4

2 Specific technology platforms are mentioned only as examples to help curriculum users gain additional insight into the types of products available in this space. These examples should not be understood to constitute any type of endorsement of a particular product or service by BKCIS. Please keep in mind that you will want to make sure any online activity is consistent with any institution, school, district, or other applicable policies, as well as any applicable privacy laws and regulations.
3. Are UFOs real?
While you could find many sources online that will claim UFOs with aliens are real, students should recognize that not all sources online are reliable. You can also find others that say that UFOs aren’t real, but it is up to your students to determine which sources are more reliable. Any resource that can cite facts from reliable sources (e.g., experts, research papers, etc.) can have credibility. Students should examine resources and recognize that “UFOs aren’t necessarily alien spacecraft. And some purported UFOs aren’t UFOs at all.”

Source: (which websites did you look at?)
Some examples include:
- UFOs are real: http://brk.mn/143

reflection

1. When you look for information online, can you trust everything you find? Why/why not?
You cannot trust all information you find online. Anyone can post information online, which means you get information representing many points of view. It also means that people can post false information. In order to learn what is true, you have to learn to check information you see online against other sources.

2. How do you know that information online is useful and trustworthy? Name one example of trustworthy info and how you can tell.
Information that is taken from experts, research papers, or reputable news sources can generally be trusted. However, just because you read it in a newspaper doesn’t mean you should trust it outright. It takes a series of experts, journalists, and others to come together and agree on the facts so it is important that many people report the same information independently. When you know that your friends, parents, teachers, or others around you are trustworthy, you should be able to rely generally on information that they give you—but remember that you can always check their sources to see for yourself!


Search Engines are a crucial tool for students today (that’s you!). Use Google to find the answers to these questions! Make sure that SafeSearch is turned on—if you have questions, ask a friend, or ask your teacher. There are multiple right answers, so you and your neighbor might find different answers.

1. Where do you go online to send a birthday card?

Source: (which websites did you look at?)

2. How do you make a trampoline out of paper?

Source: (which websites did you look at?)
3. Are UFOs real?

Source: (which websites did you look at?)

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reflection

1. When you look for information online, can you trust everything you find? Why/why not?

2. How do you know that information online is useful and trustworthy? Name one example of trustworthy information and explain how you know that it can be trusted.
Technology and the Internet can be incredibly helpful, allowing you easy access to information and resources. However, they can also distract you from your everyday life: homework, family, friends, and more.

scenario 1

Blossom and Ruff decide to have a fun day at the park. Blossom misses being able to have long, deep conversations with Ruff. She has set up a picnic so that they can spend all day talking. But they get to the park, and Ruff won’t stop texting other people. He’s clearly not paying attention to anything Blossom says.

- How does this make Blossom feel? Has something like this ever happened to you?
  Blossom may feel disrespected, since she is putting in a lot of effort to spend time with Ruff and he is ignoring her. Students should reflect about whether they have ever been Blossom or Ruff in this situation.

- What should Blossom tell Ruff?
  Blossom should tell Ruff how she feels and express that she set up the picnic to spend time talking together. Since Ruff is her friend, he should respect her wishes.

scenario 2

Chet has a TON of homework to do tonight. He has two math worksheets, a reading response, and a science test tomorrow. He knows he needs to get started on homework right away, but decides to play a game of Revenge of the Ice Mice. One game leads to another, and before he knows it, it’s midnight and he hasn’t started his homework.

- Has this ever happened to you? When? What were you distracted by?
  Students should reflect on their own work habits and how they may get distracted.

- What should Chet do to prevent this from happening in the future? Whom should he ask to help him?
  Chet should not allow himself to start playing until he has finished his work. Chet could ask his parents to supervise his behavior. Students should reflect on their own strategies in this regard, as well as rules in their own household regarding technology use.
35

the internet and chet

Note: This activity is intended for students who regularly use technology.

How many hours do you think you have spent with different technologies for the last week? Fill out the chart below.
- Example: Yesterday, Susie spent 2 hours on her phone.

<table>
<thead>
<tr>
<th>Device</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smartphone</td>
<td></td>
</tr>
<tr>
<td>Tablet</td>
<td></td>
</tr>
<tr>
<td>Computer</td>
<td></td>
</tr>
</tbody>
</table>

Make a list of:

3 healthy technology habits (example: only watching TV after doing homework)
  1. Not using technology right before sleeping.
  2. Only using technology for fun after finishing homework.
  3. Putting away your phone during meals.

3 unhealthy technology habits (example: texting while walking)
  1. Checking your phone impulsively (e.g., every 5 minutes).
  2. Checking your phone while walking or driving.
  3. Reading messages that come in on someone else’s phone.

What is one healthy habit that you can commit to keeping?
Students should reflect on their own use and decide on a habit for themselves.

What is one unhealthy habit you can commit to breaking?
Students should reflect on their own use and decide on a habit for themselves.
Technology and the Internet can be incredibly helpful, allowing you easy access to information and resources. However, they can also distract you from your everyday life: homework, family, friends, and more.

scenario 1

Blossom and Ruff decide to have a fun day at the park. Blossom misses being able to have long, deep conversations with Ruff. She has set up a picnic so that they can spend all day talking. But they get to the park, and Ruff won’t stop texting other people. He’s clearly not paying attention to anything Blossom says.

• How does this make Blossom feel? Has something like this ever happened to you?

• What should Blossom tell Ruff?

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Chet has a TON of homework to do tonight. He has two math worksheets, a reading response, and a science test tomorrow. He knows he needs to get started on homework right away, but decides to play a game of Revenge of the Ice Mice. One game leads to another, and before he knows it, it’s midnight and he hasn’t started his homework.

• Has this ever happened to you? When? What were you distracted by?

• What should Chet do to prevent this from happening in the future? Whom should he ask to help him?
Note: This activity is intended for students who regularly use technology.

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Make a list of:

3 healthy technology habits (example: only watching TV after doing homework)

1. 
2. 
3. 

3 unhealthy technology habits (example: texting while walking)

1. 
2. 
3. 

What is one healthy habit that you can commit to keeping?

What is one unhealthy habit you can commit to breaking?
Internet Use
Parent Handout

Activity

Remember when you watched Ruff Ruffman plan a party for his mouse friend Chet? Tell your parents how bad Ruff was at planning the party (remember? He didn’t even invite any of Chet’s friends!), before Blossom stepped in and helped him use the Internet to plan.

Work with your parents to use the Internet to plan a family dinner!
A couple of ideas:
- How would you invite your friends?
- How would you find food to serve?
- Where might you look for decoration ideas?

For older students, this would be a great place to talk about budgeting and how the Internet can help you look for bargains.

Resources from Ruff

- Ruff Ruffman’s video on how to use a search engine:
  * http://brk.mn/140
Do your parents know what a search engine is? Do they know how it works? As a Humble Media Genius, you can explain it to them! Try to use an analogy, a comparison to something similar, to help them understand! Your teacher explained that a search engine is like the index of a HUGE book (or a list of things for you to look at). Ruff explained that a search engine is like Chet, who knows where everything in Ruff’s closet is. What explanation can you come up with?

resources from Ruff and around the web

- How search engines work:
  * http://brk.mn/14c
- Ruff Ruffman’s video on how to use a search engine:
  * http://brk.mn/140
healthy tech habits
parent handout

activity

The Internet is AMAZING, but if you spend all day with your eyes on a screen, you might be missing out on life! Learning to moderate and control technology use is a family activity. Talk with your entire family about healthy technology habits. What can you do as a family?

Some ideas:
- Use an app to track how much time on your phone, as well as the time you spend on each app you use. You could also make a big poster and use stickers to track your time.
  * Are you happy with the amount of time you spent? If not, how do you plan to change that?
- Create technology free family time. Perhaps make a “no phones at the dinner table” rule to encourage everyone to connect in person.

resources from Ruff and around the web

- Introduction to some basic Google features:
  * http://brk.mn/14d
- Parents who spend too much time looking at their screens:
  * http://brk.mn/14e
- Keeping kids safe on social media:
  * http://brk.mn/14f
- More resources from Ruff!
  * http://brk.mn/14b