

Identifying High-Quality Sites

Essential Question

When can you trust what you find on the Internet?

Estimated time: 45 minutes

Lesson Overview

Students explore the idea that anyone can publish on the Internet, so not all sites are equally trustworthy. They need to carefully evaluate the sites they use for research, and then decide which ones they can trust.

As a class, students discuss how print materials (books and newspaper or magazine articles) are published. Then they compare and contrast this process with publishing on the Internet, learning that there are no built-in checks for accuracy or quality on the Internet. Because of this, they must use their own criteria to judge the trustworthiness and usefulness of websites.

Standards Alignment –

Common Core:

grade 6: RI.2, RI.3, RI.7, RI.8, SL.1a, SL.1b, SL.1c, SL.1d, SL.2, SL.5, SL.6, L.6

grade 7: RI.2, RI.3, RI.8, RI.10, SL.1a, SL.1b, SL.1c, SL.1d, SL.2, SL.5, SL.6, L.6

grade 8: RI.2, RI.8, RI.10, SL.1a, SL.1b, SL.1c, SL.1d, SL.2, SL.5, SL.6, L.6

ISTE: 3b, 3c, 3d, 4c

Learning Objectives

Students will be able to ...

- understand how the ease of publishing on the Internet might affect how much they can trust the content of some sites.
- learn criteria that will help them evaluate websites.
- apply the criteria to a site to determine how trustworthy and useful it is.

Key Vocabulary –

trustworthy: accurate and dependable

publish: to present a finished piece of work to the public

evaluate: to carefully examine something to figure out its value

criteria: standards on which you base a judgment

Materials and Preparation

- Preview the images and slideshow from the Huffington Post article “Fake Hurricane Sandy Photos Spread On Internet As Storm Barrels Toward Northeast.” Prepare to show them to students. (www.huffingtonpost.com/2012/10/29/fake-hurricane-sandy-photos-internet-northeast_n_2041283.html).

Note: Depending on what news stories are trending, the Huffington Post may feature controversial sidebar content on its site. You can work around this by presenting the Hurricane Sandy slideshow in full-screen mode, or by taking screen shots of the “real” photos and show them to students offline. Additionally, given new recent natural disasters like Hurricane Harvey and Irma, you can explore other related stories and modify the discussion accordingly.

- Review the **Test Before You Trust Student Handout – Teacher Version**. Preview the sites listed on the handout, and read through the discussion questions and the Website Test that students will perform.
- Copy the two-page **Test Before You Trust Student Handout**, one for each pair of students.

Family Resources

- Send home the **Research and Evaluation Family Tip Sheet (Middle & High School)**.

introduction

Warm-up (10 minutes)

SHOW students a few photos from the “Hurricane Sandy” slideshow, found at the bottom of the page of the Huffington Post article, “Fake Hurricane Sandy Photos Spread On Internet As Storm Barrels Toward Northeast” (www.huffingtonpost.com/2012/10/29/fake-hurricane-sandy-photos-internet-northeast_n_2041283.html).

Note: This slideshow shows *real* photos from Hurricane Sandy. You’ll want to show these real photos to students first, before showing them the fake ones featured in the rest of the online article. If you decide to use Snopes.com’s “Hurricane Sandy Photographs” instead (www.snopes.com/photos/natural/sandy.asp), read the “Origins” paragraph as a class and have students analyze a few of the photos listed.

ASK:

What kind of role do you think the Internet played in helping people learn about Hurricane Sandy?

Guide students to recognize that the Internet played a big role in helping people stay informed about Hurricane Sandy. Many people posted photos online (like the ones in this slideshow) to help illustrate the impact that the hurricane had on the Northeast. Others turned to online news sources to help learn about the hurricane’s status and the damage it had done. People who were affected by the hurricane also used sites like Facebook and Twitter to update others on how they were doing.

SHOW students the image of the Tomb of the Unknown Soldier at the top of the article page. Click on the image.

TELL students that this is an example of a Tweet that someone shared during the hurricane. Invite a student volunteer to read the image’s caption out loud (“AMAZING PHOTO: Even a hurricane won’t keep the honor guard from the Tomb of the Unknown Soldier this morning.”)

ASK:

What if I told you that this photo wasn’t actually taken during Hurricane Sandy?

Students’ reactions will vary.

EXPLAIN to students that this photo was actually taken a month earlier than when the hurricane hit. Taken out of context, the photo went viral online and was even picked up by major news outlets like NPR and the Washington Post. People misinterpreted it to be a snapshot of the hurricane.

INVITE students to share their reactions to this photo and the way it went viral. (You may also choose to show other “fake” photos of the hurricane that are featured on the site.) Encourage them to consider how this kind of mistake can easily happen online.

teach 1

Can Anyone Be an Author? (10 minutes)

DEFINE the Key Vocabulary term **publish**.

INTRODUCE students to the idea that the Internet has made it easy for anyone to become an “author” and “publish” information for other people to read.

ASK:

How is the process of publishing printed material (newspapers, magazines, books) different from publishing on the Internet?

Although many websites are written by people with expertise on a particular topic, this isn't always the case throughout the Internet. Sometimes people who create or post on blogs do not have a background in the subject matter, and there is no editor to hold them to a high standard. By contrast, most respected book publishers and newspaper editors look for authors who know a lot about their subjects. They also have skilled editors and fact checkers who review the information in these publications for mistakes.

DEFINE the Key Vocabulary term **trustworthy**.

POINT OUT to students that people who create or post on blogs and other websites are not necessarily experts in the subject. Their "facts" may not be true. They often don't fix errors when some are found. They may pretend that their opinions are facts. They may even choose to include unkind or harmful statements.

INVITE students to name an article they might want to write for a school magazine or a website for kids. Are they qualified to be authors of that article? Why or why not? Explain to students that to be a reliable author, they don't need to have advanced degrees or important jobs. They just need to know a lot about their subject, have trustworthy sources of information on their subject, and check their facts carefully.

teach 2

Test Before You Trust (20 minutes)

EXPLAIN to students that, while there are generally fewer rules about what can and can't be published on the Internet, there are a growing number of sites that have high standards for publishing information. Therefore, though it is important to use a critical eye when looking at websites, you shouldn't automatically assume that online information is incorrect or of lesser quality than information in books or newspapers.

DEFINE the Key Vocabulary terms **evaluate** and **criteria**.

EXPLAIN to students that it's important to know how to evaluate information online to make sure that it's trustworthy. Tell them that they are going to learn some criteria for evaluating high-quality websites, which is especially helpful for research projects.

DIVIDE students into pairs. If your class has access to a limited number of computers, you may assign two or more pairs to work at the same computer and look at the same website; each pair should complete its own handout.

DISTRIBUTE the **Test Before You Trust Student Handout**, one for each student. Refer to the **Test Before You Trust Student Handout – Teacher Version** for instructions on how to guide students through this part of the lesson. Students will evaluate assigned websites based on a 30-point test, then score their sites and discuss the results.

closing

Wrap-up (5 minutes)

You can use these questions to assess your students' understanding of the lesson objectives. You may want to ask students to reflect in writing on one of the questions, using a journal or an online blog/wiki.

ASK:

How do you know whether you can trust the information you find on a website?

Sample responses:

- The author is an expert and received awards.
- The site is run by a respected organization or type of website (e.g., .gov, .edu).
- It comes from a well-known newspaper.
- I got there from a link on another site that I trust.

Why should you be careful to evaluate websites before using their information in research projects?

Anyone can publish material of any quality on the Internet. If students' sources are reliable, then their research projects won't contain inaccurate information.

Do you think that you could apply what you have learned to sites that aren't just for school research, such as a site about your favorite singer or sports team?

Students should recognize that they can use the Website Test to evaluate the quality of all different kinds of websites, not only ones for school purposes.

Identifying High-Quality Sites

Name of Site

URL

Website Test

Purpose of the Site	Circle one	Add details to explain
1. Can you tell if the site is fact or opinion? (If the information seems one-sided, or biased, you will have to go elsewhere to hear the other side of the issue.)	YES NO	
2. Is the site free of advertising?	YES NO	
3. If there are ads, is it easy to tell the difference between ads and content?	YES NO	
4. Is the site sponsored by any organizations?	YES NO	
5. Is it clear who the site is for? (for example, college students or young children)	YES NO	
6. Is the tone calm and fair? (Sites that are mean and angry may not be good sources of information.)	YES NO	
7. Is the site open to everyone? (no age requirements, fees, passwords, or registration)	YES NO	
8. Is the site's domain .edu, .net, .org, or .gov? (If you see a ~ in the URL, it may be a personal site, not an official site.)	YES NO	

Trustworthiness of the Author	Circle one	Add details to explain
9. Is the author identified by name?	YES NO	
10. Is the place the author works or the organization he/she belongs to given?	YES NO	
11. Is the author's biography provided, and does he/she have credentials related to the subject of the site?	YES NO	
12. Has the author or site received any respected awards?	YES NO	
13. Was this site recommended by a site you trust? (for example, by a homework help site)	YES NO	
14. Are sources given for statistics?	YES NO	
15. Can the author be contacted if you have questions? (by email, street address, or phone number)	YES NO	
16. Is the site free of spelling, typographical, and grammatical errors?	YES NO	
Usefulness of Information	Circle one	Add details to explain
17. Does the site have enough information for your research?	YES NO	
18. Is most of the information on the site useful for your research? (If not, it may be hard to find what you need.)	YES NO	
Up-to-Date Information	Circle one	Add details to explain
19. Can you find the date the article, page, or site was created?	YES NO	

20. Can you find the date it was last revised?	YES NO	
21. Do all the links lead to active pages? (no dead links)	YES NO	
Ease of Use	Circle one	Add details to explain
22. Can you understand the text?	YES NO	
23. Is the type easy to see?	YES NO	
24. Do the titles and headings give a clear idea of the content?	YES NO	
25. Are there photos, maps, charts, or other illustrations that help you understand the information?	YES NO	
26. Is there a site map?	YES NO	
27. Is there a tool for searching the site?	YES NO	
28. Is there a “what’s new” feature?	YES NO	
29. Are links labeled clearly?	YES NO	
30. Do pages load quickly?	YES NO	

How many times did you circle YES? _____ out of a total of 30

Score your site!

25 – 30: You’ve got a winner! You can trust the information on your site, and it’s easy to use, too!

15 – 25: Proceed with caution. If you use any information from your site, be sure to fact-check it on a site you can trust. You can also quote the author’s opinion, but make sure you say that’s what it is.

0 – 15: Sorry, your site is a dud. It isn’t safe to use this site as a source of information, so find a better one.

Identifying High-Quality Sites

Directions

Before you begin the lesson, you may wish to preview each of the sites at the end of this handout. They contain tips that may help you prepare for the activity.

DIVIDE students into pairs and distribute copies of the **Test Before You Trust Student Handout**. Explain to students that they will **evaluate** websites to see if they are **trustworthy** sources of information for their research.

GUIDE students through the **Test Before You Trust Student Handout**. A copy of the handout appears on the following pages. Discuss each of the criteria, making sure that students understand what it means, and what to look for in a site to answer the questions.

EXPLAIN to students that the subject of their research is year-round education, also called year-round schooling. In most schools in the United States, students go to school for ten months in a row, then they have two months off. But some schools now operate on a different schedule: Students attend school for two or three months, and then have a shorter break. People have different opinions about year-round education. Kids don't have summers off. Some people think this is a great idea and has a lot of advantages; some think it's a terrible idea, with many more disadvantages. When the kids look at their websites, they will probably find lots of opinions about this issue, along with some facts.

Note: Make sure students understand that they will not actually be writing a paper about year-round education. Their purpose is to figure out whether the website they are viewing is a reliable and useful source of information on this subject. To do this, they will be giving their websites a "test."

ASSIGN each pair or group one of the websites listed at the end of this handout in the Site Preview. Allow 15 to 20 minutes for groups to complete and score their Website Tests.

ENCOURAGE students to write their observations in the "Add details to explain" column, reminding them that there are no correct or incorrect responses in this area. Assist students who are having difficulty with evaluating sites, using the tips outlined in the Site Preview.

INVITE students to share their sites' test scores, and explain why they would or would not use that site for research.

Website Test – Teacher Version

See the Site Preview at the end of the document for descriptions of the websites.

Purpose of the Site	Circle one	Add details to explain
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2. Is the site free of advertising?	YES NO	
3. If there are ads, is it easy to tell the difference between ads and content?	YES NO	
4. Is the site sponsored by any organizations?	YES NO	
5. Is it clear who the site is for? (for example, college students or young children)	YES NO	
6. Is the tone calm and fair? (Sites that are mean and angry may not be good sources of information.)	YES NO	
7. Is the site open to everyone? (no age requirements, fees, passwords, or registration)	YES NO	
8. Is the site's domain .edu, .net, .org, or .gov? (If you see a ~ in the URL, it may be a personal site, not an official site.)	YES NO	

Trustworthiness of the Author	Circle one	Add details to explain
9. Is the author identified by name?	YES NO	
10. Is the place the author works or the organization he/she belongs to given?	YES NO	
11. Is the author's biography provided, and does he/she have credentials related to the subject of the site?	YES NO	
12. Has the author or site received any respected awards?	YES NO	
13. Was this site recommended by a site you trust? (for example, by a homework help site)	YES NO	
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20. Can you find the date it was last revised?	YES	NO	
21. Do all the links lead to active pages? (no dead links)	YES	NO	
Ease of Use	Circle one		Add details to explain
22. Can you understand the text?	YES	NO	
23. Is the type easy to see?	YES	NO	
24. Do the titles and headings give a clear idea of the content?	YES	NO	
25. Are there photos, maps, charts, or other illustrations that help you understand the information?	YES	NO	
26. Is there a site map?	YES	NO	
27. Is there a tool for searching the site?	YES	NO	
28. Is there a “what’s new” feature?	YES	NO	
29. Are links labeled clearly?	YES	NO	
30. Do pages load quickly?	YES	NO	

How many times did you circle YES? _____ out of a total of 30

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Site Preview

It would be helpful to preview the following sites before you begin the lesson. The tips may help you prepare for the lesson.

1. Wikipedia: Year-round School

http://en.wikipedia.org/wiki/Year-round_school

Students who use Wikipedia should gain some understanding of the process through which Wikipedia entries are composed and revised. The “author” of a Wikipedia entry is not a single individual, but a large community of volunteers who work from their own computers. Because a large community “polices” and edits Wikipedia entries, the information is usually as accurate as any other encyclopedia. But anyone can change an entry at any time, and it may take some time for the community to catch an error. Students who use Wikipedia should always factcheck their information against a second source. In any case, students should never use an encyclopedia as the only source for their research.

2. PBS NewsHour: Year-Round School Commits to Students from Middle School to Last Day of College

http://www.pbs.org/newshour/bb/american-graduate-july-dec12-scholars_08-21/

This site is a special “extra” for students from the PBS show *NewsHour*. PBS is generally considered a sound source of information on any issue, and *NewsHour* is one of the nation’s most respected news shows. Students should understand that in this case the show, rather than an individual, is the “author.” The Public Broadcasting System is free of advertising, though it does receive grants from the government and foundations; however, these are not supposed to influence its content. Because this feature is specifically meant for students, they may find it especially accessible and useful, as well as reliable.

3. About.com Year-Round Education: Pros and Cons

<http://712educators.about.com/cs/reformtime/a/yearrounded.htm>

“About” is a reputable directory site. Its authors and editors have some expertise in the subjects they write about, and they are charged with providing a balanced discussion of those subjects. This article clearly presents both sides of the issue. The site is supported by ads, but these are clearly labeled. (You may wish to make sure students understand that “sponsored links” are a form of advertising; they are placed in prominent positions on the site because someone pays to put them there.)

4. Family Education: Year-Round Schooling

<https://www.familyeducation.com/school/year-round-schooling/year-round-school>

Family Education is a website geared toward parents and families. In its articles on educational issues, the site seeks to present a balanced viewpoint. The site’s “Expert Advice” section uses well-qualified authors, but in this case the list of “pros and cons” seems to lean heavily toward the pros. The site is supported by advertising, and it is not always easy to tell where the content ends and the advertising begins. For example, users have to bypass an ad to get to the second layer of content, and a list of the “Top Ten Birthday Gifts for Teenagers” has links to particular products to buy. However, there does not appear to be any advertising related to the issue of year-round schooling. This is a useful site that students may nonetheless want to approach with some skepticism because of its commercial ties and occasional lack of balance.

5. The National Association of Year-Round Education

<http://www.nayre.org/>

This site and the one that follows are entirely dedicated to the issue of year-round schooling. This site takes a clear position in favor of year-round education. The site uses experts and factual material as well as opinions to back up its position. However, there may also be experts and factual material that supports the opposite position. If students wish to use the information on this site at all, they also need to find other sources to give their research balance.

6. Stop Year-Round School

<http://summermatters.com>

This site is run by a group strongly opposed to year-round education. It reflects a local battle over the issue in the schools in Auburn, Alabama. The site uses some fairly negative language to describe the opposing position. It does present some studies and some statements from experts to support its opinions, but it is one-sided. Students should understand that sites like these are important to community organizing on an issue. They are also useful for identifying the arguments on one side of the issue, but they are not a reliable source of balanced information.

7. *The New York Times*: “Classes the Year Round Pass the Test for Many”

<http://www.nytimes.com/1989/11/08/us/education-classes-the-year-round-pass-the-test-for-many.html>

This article is by a reputable reporter at a leading newspaper, *The New York Times*, and its facts are trustworthy. However, most of the people interviewed for this article support year-round education. The school chosen as a model in this article has found year-round schooling very successful. Again, students will want to be aware that factual articles can nonetheless contain a great deal of opinion, and may not always present the full picture. In addition, this article is more than 20 years old, which means it does not contain the latest facts and research on this issue.

Identifying High-Quality Sites

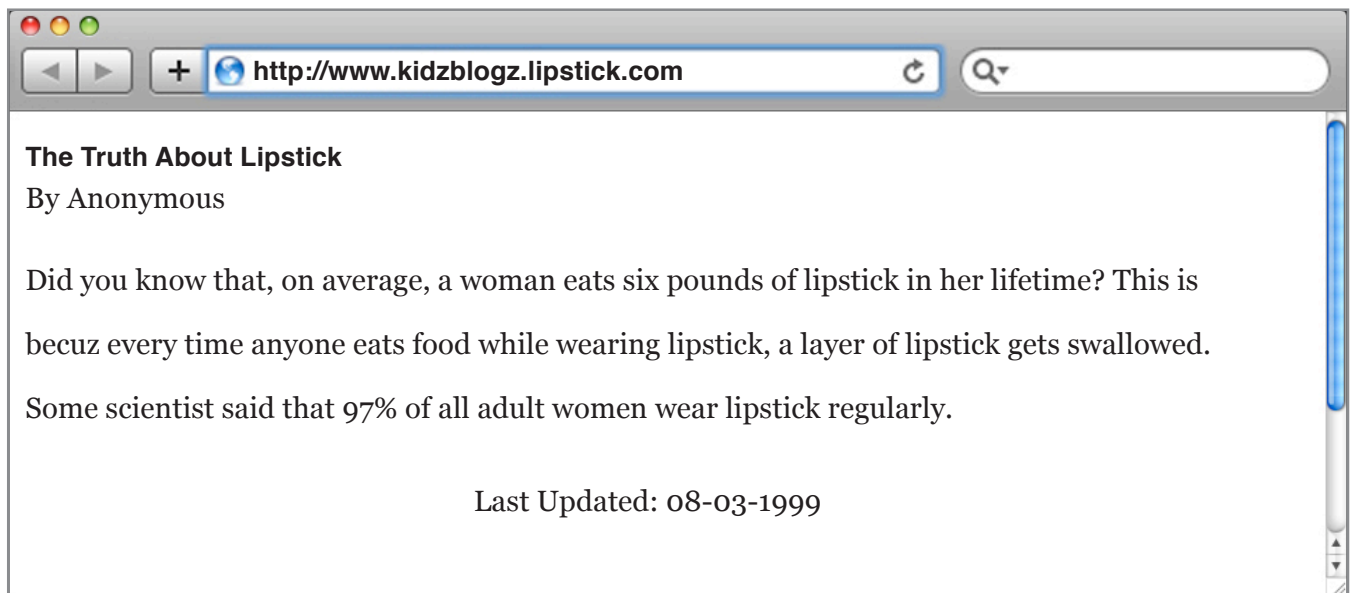
1. Which answer is a warning sign that a website might NOT have trustworthy information?

- a) The author is an expert
- b) The information comes from the site of a well-known newspaper
- c) It is not clear who the author is

2. True or false: Only experts can post things on the Internet, so everything you read online has been put there by people who know what they are talking about.

- a) True
- b) False

3. You and your friend Darren are partners for a science research project. Darren sends you a link to a website, but you don't think it's very good. Circle at least three things on the site that DO NOT seem trustworthy.



Identifying High-Quality Sites

1. Which answer is a warning sign that a website might NOT have trustworthy information?

- a) The author is an expert
- b) The information comes from the site of a well-known newspaper
- c) It is not clear who the author is**

Answer feedback

The correct answer is **c**. If you can't figure out the author of a website, you should wonder if its information is correct.

2. True or false: Only experts can post things on the Internet, so everything you read online has been put there by people who know what they are talking about.

- a) True
- b) False**

Answer feedback

The correct answer is **b**, False. Anyone can put things on the Internet, so you need to make sure that what you are reading is true.

3. You and your friend Darren are partners for a science research project. Darren sends you a link to a website, but you don't think it's very good. Circle at least three things on the site that DO NOT seem trustworthy.



Identifying High-Quality Sites

* DID YOU KNOW ...

The word "gullible" is used to describe people who believe everything they're told. A popular joke about being gullible is to say to someone, "Hey, look! 'Gullible' is written on the ceiling." If he or she looks up at the ceiling, it's considered an example of being gullible!

Word Search

e e e a t r i o t n y
 e a t p u b l i s h h
 s i a a r i o m t n e
 e m u a r r r m r s
 e a l s r i o i e u k
 m g a a e w o w a f s
 e e v a t i o t v a
 u r e s h r o t n o h
 e y u r k p l a l r l
 w r g n i m a l f n l
 t a g w r e r t a s l

imagery trustworthy publish evaluate flaming rework

* WHAT DO YOU THINK?

Why should you be careful to evaluate websites before using their information in research projects?

1. Family Activity

Which two U.S. states have the largest populations? Which two U.S. states are the best to live in? Imagine you wanted to find the answers to the two above questions and you needed to back up your response with evidence and citations. The first question has a factual answer. The second question will require you to make some decisions about what you think makes a place "the best" to live in. What kinds of sources do you think would be high-quality, valid sources to cite in crafting your response to each question? Are there any sources you would NOT trust? Ask a family member or friend to guess which states have the largest populations, and then see if you can find the answer together! Use what you know about identifying high-quality sources to decide which resources to trust. Next, decide which states you think would be best to live in and see if you can find at least three facts to support your decisions.

2. Tech It Up!

Perform your search for the largest two states online and review the top five search results that you find. Make a table with three columns: "seems trustworthy," "doesn't seem trustworthy," and "not sure". Before you click on any of sites, put a check in the correct column. Then, follow the link and, with your family member or friend, use the information you find on the website to determine whether or not you think you were correct about its trustworthiness.

3. Common Sense Says ...

Keep in mind the following criteria as you try to determine whether or not a site is trustworthy: - Is the site opinion or fact? - Does the site have a clearly identified author? - Are sources given for the statistics? - Can you tell the difference between ads and main content on the site? - Is the site a .edu, .gov, .net, or .org site?

*** DO YOU REMEMBER ...**
 How you can know whether to trust the information you find on a website?

Common Sense on Research and Evaluation



What's the Issue?

It starts in about fourth grade. Your child comes home from school with a report to write. Off to the internet they go. But as you probably know, not everything they find on the web can be trusted. These tips will help you look beyond a site's slick appearance to determine whether it's offering high-quality, trustworthy content.

The internet is bursting with information. Some of it's correct, some of it's questionable, and some of it is just plain wrong. But the internet is typically the first place young people look when they begin researching a report or are just trolling for information on their favorite topic. Though it may start in elementary school, they'll continue using the web right through college and beyond.

Why Does It Matter?

Anyone can publish on the internet, so not all sites are equally trustworthy. Teens have the ability to be more skeptical, but younger children tend to believe what they read and accept it as the truth.

When children use sources they find online that aren't of high quality, they risk using incorrect information, getting only part of the story, and worst of all, denying themselves the opportunity to truly learn as much as possible about their topics of interest.

When children use a website for their research, they should make sure it's worthy of their trust. Fortunately, there are ways to evaluate the trustworthiness of a site. It takes looking beyond a website's inviting design to the substance and content of the material.

common sense says

Parent tips for all kids

Evaluate a website's credibility. You can help your child dissect a website for clues to its accuracy with a little spy work. Here are some questions to ask that help determine the quality of a site.

- *Who wrote this?* Check to make sure the author or organization is credible by looking at their title, expertise, and background.
- *Dot what?* If the web address ends in .edu, then the material is from an academic institution; if it ends in .gov, it's from Good Ol' Uncle Sam – and both of them are good signs!
- *What is the source of information?* Does the site come from a well-known newspaper or organization?
- *When was this updated?* Has the site been updated recently? If not, move on.
- *What is this linked to?* Was the site linked from another webpage that you trust? That's not always a slam dunk in the credibility department, but it's probably a good sign.

Compare multiple sources. Kids and teens should draw on several sites, for better accuracy. This will help them determine whether a piece of information is fact or fiction.

Watch out for ads. Help your kids notice when advertisers are trying to target them, and teach your kids to question what the ads are saying.

Parent tips for preteens and teens

Follow school assignment guidelines. Teachers often explicitly state their preferences for where students should search, how many sources they should gather, and in what format citations should be written.

Use Wikipedia as a springboard for searching. If kids need a jump-start on finding information about a topic, Wikipedia is easily accessible. Remind them that they shouldn't use it as a sole resource, only a launching point.