

Rules for Digital Citizenship

The Internet contains a vast wealth of knowledge. Many school leaders argue that students should use technology at school because it puts “the world at their fingertips.” While it’s true that there are fun, educational, and exciting things to discover online, there are also dishonest and, at times, scary things masquerading as truth. We need to be aware of what is out there and we need to teach our students the same. We must treat the Internet like we treat the real world—with some caution, fairness, and all around good citizenship. We know the importance of stressing dangers to students about talking to strangers online, sending money to that African prince, or even clicking that weird link for a game download, but we forget to teach them how to properly use the Internet in other ways.

Searching the Internet

Remember when we were in school and had to spend hours learning how to use dictionaries, encyclopedias, and even the card catalogue? Now that the way we conduct research has changed, I don’t see educators teaching students new research skills. I often see teachers turning students loose on Google and hoping for the best. Then they are disappointed when all the students have the same information from the same Wikipedia page. If students are doing a project on “climate change” and are told to search the Internet for information, more than likely they are just going to Google “climate change,” which will return 183,000,000 results. Where do you even start with that? And how do we get them to dig even deeper? If you asked them to find the different arguments about whether climate change is true or not, they will probably enter that entire sentence in a Google search bar. I remember I would give students a question to research, and they would get frustrated when they couldn’t find anything after using that entire question as a search phrase. Putting the entire sentence in the search bar causes Google to look for every word in the sentence. Every “the,” “what,” and “is.” That replaces really good results with irrelevant ones.

So what are some tips that will help students with research? Once you go to google.com and search for your term, you will get the results page. Under your search bar, there are more options: Web, News, Images, Videos, and More, which has a dropdown button with Maps, Flights, and Apps. Search engines scour the entire web. The News option will look for news sources

mentioning your search terms. Using Images (which my students love to do) will display images of your search terms. Choosing the Videos option will display videos, mostly from YouTube with a few website results. The Books option searches for books containing your keywords, but Google actually gives you a substantial amount of a book to read through for preview purposes. The Maps option looks for maps in an area or for that information on a map. The Flights option looks for flights. Lastly, Apps looks for apps in the iTunes and Play store that refer to the keywords.

Google also provides an “advanced search” option. On a search result page, you’ll see a “cog” or a “gear” in the top right area. When you click that, you’ll get the advanced search menu that allows you to search for all words, exact words, any of these words, or even none of these words. Let’s say I was searching for information about the state of Alabama. I would put “Alabama” in the “search for all words” box but would put “football” and “tide” in the “none of these words” box so that I would not have to dig through all the University of Alabama football links. The tool also allows you to search by region, language, last update, site or domain, file type, and usage rights. I love the site or domain options because I can search within a site that I know is reliable. For example, I know that National Geographic does a lot of research on coral reefs, so I could search for articles inside of nationalgeographic.com. The usage rights option is great when looking for music and pictures that you can legally use without violating copyright laws.

When you use Advanced Search, you are actually using Boolean operators. Boolean operators are simple words you can use to help generate more specific searches. Here is a list of some that are helpful and what they do:

“exact phrase”	Putting quotes around words will launch a search for those exact words.
OR	Putting OR between words leads to a search for sites with one of the words/phrases. Example: “climate change” OR “global warming”
-word	Putting a - before a word is the same as “none of these words;” in the Alabama example above, you would put -football .

site:	Putting a URL after site: allows you to only search within that site. As we used in the example above, you would use site:www.nationalgeographic.com to search within that site. You can also search within a domain like .gov or .edu.
+word	Google will search for abbreviations or synonyms at times. When you put a + before the word, it will turn off that search function.
1..10	Putting two periods between numbers searches for range. That sounds silly, but if you were doing a report on Germany during WWII, it would help to search Germany 1939..1945.
define:word	Putting define: in front of a word returns six definitions of that word.
filetype:	Search results will have a certain file type. For example, dogs filetype:ppt will give me results containing only PowerPoints that are about dogs. Other file type examples include JPG, MP3, and PDF.
movie: and loc:	If you put movie: and a movie name, your search will return movie times. Add loc: and your city and you can find local movie times.
weather:	Search for weather in your area by putting weather: in front of your city name.
stocks:	Use your stock abbreviation after stocks: to get current ticker information.
in	Using in will give you conversions. Examples: 12 feet in inches, miles in feet, 80 degrees Fahrenheit in Celsius

Knowing these tricks can save students a lot of search time. You also need to remind them how important keywords can be. Sometimes they need to break their search into parts. Give them examples of long questions and let them practice breaking them up into parts. A great website for practicing this is googleaday.com. Google A Day asks questions that you have to break up. If you stick the entire question into the search bar, you will not find the answer. You get three questions a day and receive points based on how fast you are able to provide an answer. I just played it recently and one of the three questions was "Who was the editor who worked with the author

to publish the novel that won the Pulitzer Prize for Fiction in 1961?” If you put that into Google, you won’t find the answer. But if you search for “Pulitzer prize for fiction 1961,” you’ll find out the winning book was “To Kill a Mockingbird,” and then you can search for the editor. The first time kids play the game, they often get frustrated. When students attempted to find the answers themselves with no guidance, they rarely found the answer. But when we looked at the questions and broke them up together, they realized the importance of specific searches.

So what should students do with all the results they find while researching? Bookmarking is an important part of research. Students need to cite their sources but often they forget where they found the information. Websites are not like books that you can pull from the shelf later. You need to teach students to save searches, because once they close a link, that site may be difficult to find again. There are many websites that bookmark sites. Many also serve as social bookmarking sites that allow students to share links with others. My favorite is Diigo, which is so easy to use that I’ve been using it for more than seven years. The site allows you to save thousands of bookmarks, and a tagging feature helps you categorize and locate your bookmarks. When I log into my Diigo account and click the “volcano” tag, I get all the sites I saved with that tag. A few other options are Evernote and Web Clipper, which lets you highlight and annotate over information on the page you are bookmarking. If you are a Chrome user, you can click the star inside of the address bar to instantly save the link to favorites. When it saves the link, you have an option to put the link into a folder. To find those links again, click on the Chrome menu (the button with three horizontal lines) and choose the menu option.

Validity of Sources

Another research skill students need when searching the web is the ability to tell if a website is trustworthy or not. This is not always the easiest skill to acquire. Here are a few questions and tips that I always have my students consider when reviewing a site:

- **Does the information on the site correspond with information you found on other sites?**
 - I emphasized the importance of using multiple resources.

- **Is this site a 'blog' or a news site?**
 - There is nothing wrong with blogs, but they are often more opinion-based than research-based. I always made sure students knew they could use blogs, as long as they supplemented this information with content from other sites.
- **Look at the domain of the website.**
 - Sites that have .edu and .gov may have more research-based information, while sites with .org may be owned by the organization and thus biased.
- **Look for the author's biography or other information about the author.**
 - Most sites, even new sites, will have information about the author. Look at that information and make sure that the author is credible.
- **Does the page cite its sources?**
 - Wikipedia gets a bad rap, but the best part of a Wikipedia article is the resources at the end. Not only are these sites great places to start searches, but they can also help you check the information given.
 - If a source uses statistics or infographics, make sure it is not an organization that would benefit from others believing the information.
- **When was the article written?**
 - Information changes. If you are doing a project on George Washington, an older resource would not be a problem. But if your project is on climate change, the newer the information, the more accurate it will be. Imagine trying to learn about "new technology for the classroom" from an article that was written in 2005. Pay attention to dates.
- **What is the author's tone?**
 - If the author's content sounds angry or condescending, it was probably written with more emotion than facts.
- **Is the site professional looking?**
 - This is not always the best way to judge a site, but if it is messy and full of errors, approach with caution.

- **How many ads are on the page?**
 - If there are more ads than content, the author's top priority is getting clicks and making a profit. Also be careful about clicking on the ads; they can put malware on your computer, especially from a site that has software to download.

In addition to this list, Common Sense Media has a great lesson that gives students a checklist for looking at sites. There is also a Hurricane Sandy lesson that looks at sites that posted fake information during the hurricane. Your students don't have to use these checklists every time they conduct research, but they are good reminders of best practices when choosing which sites to trust.







One of my favorite sites for learning about fake information on the Internet is [All About Explorers](#). It is a fantastic site that offers different ways for students to learn about explorers, but it also contains false information on Explorers A-Z. At the end of the article, you can find other sources that are real. There is also a treasure hunt that allows students to compare and contrast information from this site and real sites and a webquest that helps students find real information about the explorers. It's a great site for both young and middle school students to use.

Copyright Infringement

No matter how well students learn these research strategies, if they are not good digital citizens that follow copyright rules and respect others' work when writing a paper or doing a project, then it doesn't matter. Since the digital age began, piracy and stealing other's work has been an issue. I remember a guy in my class telling everyone the website he copied and pasted his essay from during my first year in college. I was stunned that someone actually did this and even more surprised that many of my peers didn't even realized that was cheating. Even adults attempt to get away with this kind of behavior. I have a friend, [Krissy Venosdale](#), who has an amazing educator blog that focuses on STEM and creativity. She often writes fun and inspirational quotes about learning and makes posters of them. At least once a month, she finds someone on Teachers Pay Teachers, Amazon, or Etsy selling her quotes or posters. They are making a profit off her work. I was in a workshop a few months ago and the educator leading the workshop said, "Have you tried Google Images yet? You just search for what you are looking for, save the picture, and then you can use it for whatever presentation you are making." I almost fell off my chair, but like this educator, many don't realize they are breaking copyright laws by doing that.

What are these copyright laws and how are we able to use what we find on the Internet? Let's start with the definition of copyright. Copyright is a law that protects authors and prevents others from making copies of their work, distributing copies of their work, performing or displaying their work, or making modifications to their work. This "work" includes literary, dramatic, musical, and artistic forms of intellectual property, not just pictures or logos by companies. I don't have to file anything with the government to automatically have my work fall under this law. If I write a blog post, it is immediately copyrighted because it is my work and no one can use it without my permission. I think every blogger has had their work copied at some point and it is a terrible feeling. Don't let others tell you it's a form of flattery; it is stealing.

While the digital age has made it easy to illegally use other people's work, [Creative Commons](#) has made it easy for people to license their work. Authors and artists can choose different options (listed below) to let others know how they can use their work.

	Attribution	Others can remix, change, share, and use work but they must give the author credit. This can be done commercially and non-commercially.
	Attribution-ShareAlike	Others can do the same as "attribution" but they must have the same license as the original work.
	Attribution-NoDerivs	Others can use the work but cannot make any changes. Credit must be given to author.
	Attribution-NonCommercial	Others can remix, change, share, and use work and they must give the author credit. This work can only be used non-commercially.
	Attribution-NonCommercial-ShareAlike	Others can remix, change, share, and use work and they must give the author credit. This work can only be used non-commercially. Creations must have the same license as the original.
	Attribution-NonCommercial-NoDerivs	Others can use the work but cannot make any changes. Credit must be given to author. Work can only be used non-commercially.

Using these indicators on websites makes it easier for others to know what they can do with your work, as well as how you can use the work of others.

Lastly, there is the concept of fair use. Fair use is often abused, especially by teachers. Fair use does not include taking others' work from the Internet without citing the source. Fair use means that in certain situations, small parts of copyrighted work can be used without permission. Here are the four different situations where copyright information can be used in this way:

1. Educational work
2. News reporting
3. Criticizing or commenting
4. Parody

If you use someone else's work for one of these purposes, you can only use it in one of these ways:

1. Use a small amount
 - Example: Using an excerpt from a movie in a presentation
2. Rework and use it in a different way
 - Example: Taking a photograph and having students make a watercolor of it
3. Use it for nonprofit purposes
 - Example: Putting characters on bulletin boards
4. Add new meaning and make it original
 - Example: Fractured fairy tales

Just because education falls into the fair use category does not mean you can use others' work whenever you feel like it. You can only use small amounts or you have to rework it. You must also credit the work. As educators, we cannot tell students not to copy and paste pictures and work from the Internet and then turn around and do it ourselves. Be mindful that students are learning from your online habits; if you cite your work, they will follow suit.

To help my students understand these concepts, I work with my class to brainstorm what falls under copyright and stealing. We discuss screenshotting a picture on Instagram and using it without permission. We talk about sharing music, such as downloading and using music from YouTube. These are things that students could encounter every day without realizing these actions are wrong. Eventually, we would discuss copying and pasting information into a project. That can be a huge problem for any class if it's not addressed early on. Students would turn in

work that they didn't even read and simply copied from an online source. When I caught on to this behavior, I would hand it back to them and ask them to do it again. I had a student turn in a paper on "space rocks." She was supposed to present her information to the class and decided to read her paper. She started to read about Pink Floyd and how psychedelic music was the beginning of the space rock genre. I could tell it was the first time she had ever read the paper. She had just Googled the topic and turned in the first result.

You must cite your sources when you use copyrighted work, a process that can be challenging at times. Most school districts have a common citation format. The district I work for uses MLA. The rules can be difficult to master. I have examples posted around my room to help students remember. There are also websites like Easy Bib that can help you cite sources correctly. They are learning just as much that way as they would working on a reference list from scratch. I have also learned that when students use Easy Bib, they are more likely to cite all their sources. Easy Bib also has an add-on in Google Docs so that students can create a works cited page inside their document. To cite quotes or pictures inside a Google Doc, there is a "research tool" that does a great job. Also, if you are inserting a picture in a Google Doc from the "insert" menu, the search only gives you public domain results so that you can use the pictures without worrying about obtaining copyright (it will also give you the link if you need to cite it).

Being digital citizens and using sources properly can feel like a huge task at first, but I tell my students to treat it like we treat everyday life. You don't steal things offline, so try your best not to steal things online. When we get help from others, we give them credit, so follow the same principles for online content. The easiest rule of thumb is, if it is not yours, then it is someone else's. If it belongs to others, give them credit.

References

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Embedded Link	Original Site	Archived Link
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All About Explorers	http://allaboutexplorers.com/	
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