Information Overload: How to Teach Students to Filter Information in the Information Age

by Charles Silberman

Technology has revolutionized our world. It has without a doubt created new forms of communication and learning, doing business, socializing, fame, and entertainment, among others. In fact, technology has sent us into an information age like nothing we have seen before. According to an article in The Atlantic, there are now 935,950,654 websites. That was in 2015, so this means that there is a tremendous amount of information floating around on the Internet as of now. As an educator, that makes me wonder how much bad information there really is out there and how we can get students to know the difference.

While these are questions I will answer, it is better to understand the current state of information use in education. Knowing this sets the stage as to why it is so important that students learn how to filter information. I am an elementary school teacher with limited knowledge of middle school and high school. However, having spoken to students and teachers who are at those levels, I have enough information to come to general conclusions about Internet information use.

At the elementary school level, technology use is somewhat limited. Students, for example, may be given a computer to work on, but they are only allowed to access certain applications or a handful of educational websites. In other words, they experience electronic information from a very narrow scope. As students begin the third grade and continue through the fifth grade, they are introduced to more information. From websites approved for instructional use, to teacher recommended websites, to perhaps some general searches, students see just enough information to be able to complete reports and projects. However, this does not take into account the access they have to phone applications, Internet use at home, or other technological access outside of school.

Come middle school and high school, students have a different level of access to information. Now, course syllabi are found online along with places for needed information pertaining to class assignments. Students may also have access to the school's electronic library database as well as other county online databases. Again, this does not take into account the amount of Internet usage outside of school, and that is where things get troubling.

According to the PEW Internet project on teens, 95% of all teens ages 12-17 are now online as of 2012. One can only imagine that that statistic has not changed. Yahoo states, "According to a new study by Northwestern University, almost one-third of teens are using online resources to seek out information about health-related issues like dealing with depression, eating healthier and cutting back on their soda intake. Because there's only so much Mountain Dew you can drink before you stop and say to yourself, 'Hmmm, this looks like anti-freeze and might be destroying my insides.' For every factual, well-balanced article about the importance of sleep for teens, there are those that claim that tampons contain

asbestos or that lip gloss causes cancer." Teens and, as one can presume, pre-teens are searching for information that is of the utmost importance, but they are not always finding credible information, which is scary. As educators and parents, it is our job to teach students how to differentiate good, useful, and accurate information from advertising and junk. But how can we accomplish this?

This brings me back to my original question — how much bad information is out there and how do you get students to know the difference? While there is no real way to know how much bad information is out there, there are concrete steps that can be taken to help children learn how to sort out the good from the bad. Half the teens surveyed in the Yahoo article said they click on the first link that comes up, which is usually an advertised link. Below are some strategies to ensure your child, no matter the age, is engaging in smart searching to find quality information.

1. Checking Sources

When teaching children to search the web, you want to ask them some critical questions. Is the information deep? Does it come from a reputable source? Does the site ask for personal information, or is it littered with pop-up ads? Is the information up to date? Use these questions as benchmarks for Internet searches. If the websites students are finding do not match the benchmarks, they must keep searching.

2. Ask Good Questions and Go Beyond the Surface

Teach students how to search for the right information with the right questions. For example, if they are doing a report on physical activities for good health, have them find ten different sources to support that topic based on ten more narrow questions. For example, they may look for the best lower body physical activities, the best playground activities, or the best strength exercises for good health. Have students make a fact tree stemming from the main question to ten facts based on the answers to the more narrow questions. This will teach children to find multiple, reputable sources by separating questions from the general to the more specific.

3. Patience

Students today generally have short attention spans due to the instant response of technology. This can make having to go through a detailed search that takes time a tall task. Challenge students to come up with questions that are not searchable online. Use opinion questions such as what is the best Fast and Furious movie and why? Which singer is better, Miley Cyrus or Megan Trainor? Encourage students to use a wide variety of sources when answering these types of questions, and see who creates the most convincing case. For example, for a question like the second one they may want to look at what others have said, box office numbers, and the types of awards they have earned.

4. Respect Ownership

It can be tempting and easy to just copy information from a website and paste it into a report without thinking about the consequences. In fact, I knew a student who once printed a web page on a musician he had to do a report on for music class. Clearly, he did not understand the consequences of plagiarism or the value of ownership. Make the point of plagiarism personal. Ask the students how they would

feel if it was their work, whether it is a dance move, drawing, song, poem, or any other form of intellectual property, being stolen. Make them understand the personal nature of trying to pass off someone else's work as their own.

5. Use of Social Networks

It is inevitable that students will want to reach out to their friends for answers or even use sites like Wikipedia. To combat this, have students ask themselves questions. How would the information being offered be useful to a report on Barack Obama, where their family came from, and the like? How would they incorporate that information into a report? When it comes to sites like Wikipedia, which are social collaboration sites, emphasize that paying attention to the source the information comes from in one of their articles is important when deciding how valid the information really is.

6. Consider Other Factors

Researching accurate information is not just about a set of skills. It is also about the environment in which it is done. Remind students that they should not fall prey to distractions while researching such as email, text, or social media. According to research at the University of Michigan, homework can take between 25 to 400 percent longer with these distractions. In addition, things like sleep and anonymity play a role. When students are online, they are more likely to share more information than they usually would offline. This can lead to bullying, so if students are researching in groups, be sure they stay on topic.

Despite the information overload facing our youth every day, helping them sort through it to find the right information is still possible. Understanding the limitations the educational system puts on how much and in what form students access information versus what they see outside of school can help one realize the importance of teaching skills for better searching. Teaching search skills, like anything else, takes time and patience. But the results show that it is worth it for a child to learn what is right the first time around instead of acting on the premise of bad information.

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