When using the internet for research, it is especially important to evaluate the information we find. Search engines, like Google, find websites of all levels of quality. So, how can we quickly sort through what’s credible and what’s not? This learning module will introduce a Four-step Strategy for Evaluating Online Sources. We will start by checking and identifying key quality indicators to get our first impression; then we will follow the clues to investigate and discover more evidence; next, we will read laterally and think critically about the content; and finally, we will reflect on our own biases and assumptions and practice what we learn.

Now, let’s get started. The first step is to evaluate sources to get our first impression.

First impressions can help us take a moment to stop and think about a source before deciding to use it. But which parts of a website or article should we focus on? There are six factors that are closely related to the quality of the source that we can check: the URL, date, author, about page, links or citations to sources, and layout.

First, we can check the URL of the website to identify if the source is reputable or recognizable and what the domain name of the source is. The article Renewable energy explained is published by the U.S. Energy Information Administration and the URL ends with “.gov,” which indicates it is the top-level domain name of the US government.

We can find the logo of the U.S. Department of Energy on this EnergySage website. However, the domain name .com indicates the source is a commercial website rather than a government source. The article Exercise and Depression is published by WebMD, which is also a for-profit website. Compare it with the article More evidence that exercise can boost mood, which is published by Harvard Medical School. The domain name .edu indicates the source is from a US-based post-secondary institution. Comparatively, the .org domain is commonly used by non-profit organizations such as the website pmi.org from Project Management Institute and the website pewresearch.org for Pew Research Center. But we need to be careful with .org sites! Unlike the .gov or .edu domain which is exclusively reserved for government websites and educational institutions, the .org domain can be registered by anyone, not limited to an organization or non-profit. Although the .gov or .edu website generally provides more authoritative content, we should also do a quick author check to see who put the content on there. The .com domain is a mixed bag- it can have everything from clickbait to reliable news outlets.

Second, we will check the date of the online source and ask “when was the article written or updated?” and “what time period does the content cover?” The date that the article was written or updated is often listed above the title or at the end of the article. Sometimes, the article doesn’t have the date, but we can look inside the article for clues. This article Exercise Improves Mood doesn’t offer a publication date and the references are more than a decade old. The article from NYP doesn’t have a date either, but we can locate the year 2018 in the content to know the article was published after then. The WorldAtlas article was written in 2017, but certain information was from 2011 and 2014. Therefore, it is important to look at both the date that the article was written and the period that is covered by the content to see if the source is up-to-date. We will take a deeper look at the up-to-dateness of articles in the next video.

Third, we can check the author of the online source and ask “Is there an author?” “Is it a person or an organization?” Typically, we will find the author under the title of the article. Sometimes, you would need to scroll down to the bottom of the page to find the author like this article the Biggest Avocado Producing Countries in the World. If we look at this interview What Does Too Much Screen Time Do to Children’s Brains?, you’ll notice there’s no author immediately listed, however a child behavior expert, Dr. Jennifer Cross, is consulted and provides her insight throughout. Sometimes, articles don’t have a single author, but they can be written by an organization or a company. For example, the article Exercise Improves Mood can be considered written by the American Institute of Stress. Wikipedia is an example of anonymous authors, in which case, there is no way of finding out if the person who wrote the article is an expert on the topic or not. Having author information is a sign of relatively good quality as compared to anonymous sources. If we want to learn more about the author, we can move on to see if the website has an About page.

The about page helps us learn a lot more about the creator of the website, who they are and what they do. It is usually located in the header or footer area of the website. The About US section of EnergySage explains the website “was developed with funding from the U.S. Department of Energy’s Sun-Shot program.” That is probably why they show the department’s logo on their website, but it is very misleading. The About page can sometimes reveal the website was created by an individual such as the Horror Film History website or created by a group of fans such as the History Place website. The About page provides some information for us to further evaluate the purpose of the website, which we will discuss in more detail in the next video.

The 5th thing to look for is to see if the content has links or citations to other sources. This article College Hunger Research links to the 2018 Government Accountability Office report. When the mouse hovers over the link, its URL will appear on the bottom left corner of the screen. So, we can tell the linked website is a .gov government website. But the link to food pantries on college campuses is not a link to an external source; it is a link to another article from Feeding America. The article from Investopedia provides links to related key terms on their website but uses citations for external sources. Although this Wikipedia article doesn’t indicate who wrote the entry, it often provides decent references. For the topic of screen time, the Wikipedia article can be used to find many good sources on this topic. Links or citations not only demonstrate the source is based on some research but also allow us to track evidence and verify its accuracy. We will talk about it in more detail in later videos.

Finally, we can get our first impression by looking at the layout of the website. Does it provide easy navigation? Or does it contain too many distractions? A good layout often means that the material is professionally created and the creator cares about the readability of the content. The Investopedia article offers a table of contents, a navigation panel to related topics, and takeaways for easy navigation. The article from Mckinsey & Company, offers PDF download and visual chart exhibits for readers to easily access and understand the content. Compare them to the article from Worldometer, where the content is surrounded by distractive advertisements, and the WorldAtlas article, where short content is separated by ads. We will find these websites focus more on maximizing ad revenues than the readability of the content.

Now, let’s summarize what we learned from the first step of source evaluation. We can check URL, date, author, about page, links/citations to sources, and layout to get our first impression of the source quality. In the next video, we will talk about how to further evaluate sources through the CRAAP test.