Previously, for the first step of source evaluation, we checked the URL, date, author, About page, links/citations to sources, and layout to get the first impression of source quality. For the second step, we will do more investigation with the CRAAP Test and check the currency, relevance, authority, accuracy, and purpose of a source.

Firstly, let’s dig deeper into the idea of a source being current. In the last video, we identified the publication date of an article. Here we can further ask, “is the article out-of-date for my topic?” “Can I find more current information?” The need for an updated source can vary from field to field. We typically need to think about how fast the field changes. For health or technology topics, you rarely want to look at sources more than 10 years old, while for history, sources that are decades or even centuries-old might be useful. Figuring out if something is up to date can be especially tricky when dealing with data. Suppose, we are researching immigrants in the United States. We find the 2019 Yearbook of Immigration Statistics released by the U.S. Department of Homeland and Security. Is this source current and up-to-date? This Yearbook may not be current, but when we made this video in summer 2021, the 2019 yearbook was actually the most recent one available. For statistics, it is very common to see a time lag from the period the data is collected to the date that it is published. The 2020 Yearbook would be released in September 2021. As you watch this video, what is the most up-to-date Yearbook of Immigration Statistics that you can find? Let’s take a look at another example. In the last video, we looked at the WorldAtlas article, the Biggest Avocado Producing Countries in the World. The author wrote this article in 2017, but the years mentioned in the article are 2011 and 2014, so the information on this page is pretty out of date. For the same topic, we also found a List of Countries by Avocado Production from Wikipedia. 2018 is its most recent data, but can we find more up-to-date information? The Wikipedia page provides some clues: the data is from the Food and Agriculture Organization Corporate Statistical Database. We then searched this database and found a data query page that indicates the most recent data for avocado production is from the year 2019. So, through some investigation, we are able to find the original data source and the most up-to-date information.

Next, let’s look into the relevance of the source and ask “does the content relate to my topic or answer my question?” “Is the source appropriate for research purposes?”For example, if we are writing a paper about avocados with a focus on health. We may come across articles about the high environmental impact of growing them -- like how mature trees need about 20 gallons of water a day during the irrigation season. It is very interesting, but it doesn't really fit our thesis. But, when evaluating relevance, it is also important to be aware that the sources don't need to match the thesis argument entirely to be considered relevant. If a source can be used to support only a smaller point we are making, it is still relevant. So, if our research question was whether or not we should buy and eat avocados, we could use the article about high water use as an example of reasons not to eat them, especially given severe water shortages in some places where they are grown.

Here comes another question: if we are writing a research paper for a class on avocado-producing countries, is the WorldAtlas article the Biggest Avocado Producing Countries in the World relevant? The answer is probably not. Why? Because the website is designed for general interest, not for research purposes. As the about us page of the website describes, it is a “Geography Resource” and “a source of information to those who are simply curious about the world they live in.” So, when evaluating relevance, we also need to ask “is the source appropriate for the research project?”. The WorldAtlas article might be fine, if we are just reading it for personal interest, but if writing a research paper for a class that requires scholarly or other high-level sources, it won’t make the cut. Comparatively, for a research paper, the most relevant source to consult for avocado-producing countries is the FAO’s data on Avocado Production.

In the last video, we did a quick check to see if the source has an author. The CRAAP test takes it a step further and asks us to consider if the author can claim to be an authority on the topic. We might ask “Does the author have education or experiences that make them an expert on this topic?” Let’s look at the WorldAtlas article again and check its authority. We can find the article is written by Amber Pariona and the link shows Amber is “a freelance writer, English as a foreign language teacher, and Spanish-English translator.” There is no indication that the author is professionally trained to provide expertise on this topic. Comparing it to this article on avocados from World Economic Forum, we’ll notice the author, Manuel Ochoa Ayala is an academic researcher for the Economic and Business Research Institute, along with a link to a long bio to show that the author is a recognized expert in the field. Let’s take a look at another example. Suppose we are researching how artificial intelligence will change the world. We may find articles written by people who are really into the topic, but not experts, like the article from the mobileappdaily. On the other hand, there are articles written by experts in the field, based on extensive scholarly research like the article from Brookings.edu. The second article is more authoritative in this case.

Another A of the CRAAP test represents the accuracy of the source. We can ask, “is the information accurate? “Where does it come from?” “Can I verify it with a source?” Let’s take a look at the List of Countries by Avocado Production from Wikipedia again. The article doesn’t provide the most recent data for the year 2019, and previous years’ data are not accurate either when compared with the FAO data. A good practice is to get back to the original data rather than trusting the reprinting of it. Another reason we are encouraged to verify with the original source is to make sure they are being represented accurately. For example, this article from Yahoo life is reporting on a recent study and suggests in the title “You Should Be Eating an Avocado Each Day for Better Gut Health.” Following the link to the actual study, we can see that it does say that eating avocados is good for your gut health, but it doesn’t actually recommend that people eat an avocado each day! The author’s claim doesn’t accurately reflect the original source. It is a distortion of the original research and contains an overgeneralization fallacy which we will go over in more detail in the next video. In some cases, the accuracy of facts can be verified by using fact-checking sites accredited by the International Fact-Checking Network. In other cases, publication procedures such as peer review or editor review can help ensure the accuracy and reliability of sources. Peer review is the independent assessment of a research paper by experts in the field. For an online journal article, you may have to look up its information for authors or the manuscript submission process to see if it is peer-reviewed. An editorial review means that someone other than the author reviewed it for basic factual and spelling or grammar mistakes. Most major news outlets like newspapers are editor-reviewed, but many online sources, especially blogs and social media are not reviewed at all.

Lastly, we will review the purpose of the online source, asking “What is the purpose of the website?” “What potential biases does it have?” Let’s take a look at the article from Avocados from Mexico. It features a testimonial from a registered dietitian and nutritionist. Since the About US page tells us the organization’s purpose is to market Mexican avocados, we should take their claims about the health benefits with caution. Compare it with the article from the Food Revolution Network. Because the company is committed to healthy, ethical, and sustainable food for all, the article would probably be more objective, mentioning the downsides of avocados. Here’s a different example-- the Talent Gap Report from the Project Management Institute. The report predicts 2.3 million people will need to enter the project management field every year to meet the high job demand. Because the organization’s purpose is to advance the project management profession, we again need to be cautious of potential biases when using the report results. How could we decide to use the source or not? This is a topic that we will address in our next video.