

Lesson Note – Research Skills

Research skills are extremely important in student life and also in the workplace. Nowadays, students know how to **search**, but they don't know how to **research**. Searching just means finding out a fact, like "What is the capital of China?". Research means answering a complex question by learning about it from many sources. A question like "How do the different areas of China differ in their culture?" would require research, not search.

This lesson will talk about six aspects to good research skills:

1. Research Attitude
2. Where to research
3. How to research
4. Paraphrasing versus Quoting
5. Evaluating the credibility of a source
6. Citation

1: Research Attitude

Imagine you are feeling very sick, and you go to the doctor. The doctor asks you to describe what's wrong. You only just started to describe your situation, and then the doctor says, *"Yeah yeah OK I get it. Here's a medicine that should help. You can leave now. I want to go on break."* Would you trust the doctor's recommendation? Of course not! He treated you with such a rushed attitude, there's no way his recommendation is good.

Many students would criticize that doctor, yet they have the same kind of attitude towards their own research! They just quickly Google a topic and look at the first 1 or 2 pages, hoping to be finished as fast as possible. That rushed attitude and low-quality work will be obvious in the final presentation or essay.

That's why the first step to research is to have a good attitude towards researching. Be patient and logical towards everything you read, and look at many sources. Your teacher will probably tell you the minimum number of sources you need.

2: Where to Research

Most students nowadays simply use Google (or Baidu in China). If the topic is simple or causal, then Google is fine. If the topic requires formal research, then you should use **Google Scholar**: <https://scholar.google.com/>. Google Scholar will give you research articles done by scientists, Masters students, and PhD students.

For example, if you have a casual or simple topic like "10 different ways to cook a potato", then Google is fine. You don't need any formal scientific research for that kind of topic. But if your topic is something like "Advice for Better Sleep", then you should make sure to get some proper research articles from Google Scholar because Google will have a lot of random opinions that aren't backed by evidence, whereas Google Scholar articles are all backed by evidence.

Another good place to do research is the **TED website**: <https://www.ted.com/talks>. People who present a TED talk are usually experts on their topic, and they did a lot of research on their topic. So if my topic is “Advice for Better Sleep”, I can simply search “sleep” on the TED website, and I’ll find many talks that I can listen to. In these talks, the speakers will probably tell me where they did their research, and I can go check those out as well.

One more tip is to ask your teacher for where to research. For example, if you are taking a business course, and your research topic is about “How to start your own business”, you can ask your professor for some good resources. The professor is an expert in that subject, so she might tell you about the Harvard Business Review journal and the McKinsey Insights journal.

3: How to Research

Now that we’ve talked about where to research, let’s talk about how to research.

Before you even start researching, it’s important to make a plan for what exactly you will put in the search bar on a search engine. For example, if my topic is sleep advice, I might make a plan to research

- “sleep advice for men”
- “sleep advice for women”
- “sleep advice for teenagers”
- “does napping affect sleep”
- “foods to help sleep”

Then, I will go and search each question one at a time. This keeps me organized and focused during my research.

When you read an article, make sure you take notes. You can open a Word document and write down the website link, the question, and then notes on the answer from that website. Your teacher can do a demonstration in class.

It’s also important to try wording your search terms using different **key words**. For example, if your topic is “How to sleep better”, you can search in Google, “How to sleep better.” That will give you some results. But don’t stop there! Try searching similar terms like “sleep advice”, “sleep tips”, “How to improve sleep”, etc. Different key words will give you different results.

4: Paraphrasing versus Quoting

4A: Paraphrasing

When you find a website or article that you want to take notes on, make sure you take notes *using your own words*. Let’s do an example. Let’s say I’m researching about sleep advice, and I come across this article:

In each category, you can find specific actions that you can take to make it easier to fall asleep, stay asleep, and wake up well-rested.

Creating a Sleep-Inducing Bedroom

An essential tip to help fall asleep quickly and easily is to make your bedroom a place of comfort and relaxation. Though this might seem obvious, it's often overlooked, contributing to difficulties getting to sleep and sleeping through the night.

In designing your sleep environment, focus maximizing comfort and minimizing distractions, including with these tips:

- **Use a High-Performance Mattress and Pillow:** A [quality mattress](#) is vital to making sure that you are comfortable enough to relax. It also ensures, along with your [pillow](#), that your spine gets proper support to avoid aches and pains.
- **Choose Quality Bedding:** Your [sheets](#) and blankets play a major role in helping your bed feel inviting. Look for bedding that feels comfortable to the touch and that will help maintain a comfortable temperature during the night.

I should not simply copy and paste the text on that website and use it in my own presentation. That would be **plagiarism**, which is considered cheating. Universities take it very seriously and you might even get kicked out. So how do I use my own words?

Let's look at an example: The article says *"An essential tip to help fall asleep quickly and easily is to make your bedroom a place of comfort and relaxation. Though this might seem obvious, it's often overlooked, contributing to difficulties getting to sleep and sleeping through the night."*

When we change something into our own words, that's called **paraphrasing**. In order to paraphrase, you have to **change some key words** AND **change the sentence structure**.

Here's an example of bad paraphrasing:

"An important tip to fall asleep fast and easy is to make your bedroom a location of comfort and relaxation." What's wrong? The writer just changed some words. That's still plagiarism.

Here's another example of bad paraphrasing:

"Making your bedroom a place of comfort and relaxation is an essential tip to help fall asleep quickly and easily." What's wrong? The writer only changed the sentence structure. That's still plagiarism.

Here's an example of correct paraphrasing:

"One of the most basic but often forgotten advice for getting a good night's sleep is to make sure your bedroom has a comfortable and relaxing environment." Notice how this sentence paraphrases the two sentences from the article by changing the key words and the sentence structure.

4B: Quoting

It is okay to use other people's words as long as you quote them. But remember that most of your presentation should be in your own words. The only time you should quote someone else is because what they said is so good that if you paraphrase it, the impact of the sentence will be gone.

For example, if I'm doing a presentation on education, I might quote Einstein and say: Einstein once famously said that, *"Everybody is a genius. But if you judge a fish by its ability to climb a tree, it will live its whole life believing that it is stupid."*

The way Einstein said that is really powerful, so I don't want to paraphrase it because saying it in different words won't be as powerful. Another reason I want to quote Einstein is because Einstein is a very famous and credible person, so quoting him adds credibility to my research.

5: Evaluating the Credibility of a Source

Credibility means how believable the information is. You can evaluate the credibility of a source by using **CRAP**:

- **Currency** – how old is the article?
- **Relevance** – how closely does the information fit your topic?
- **Authority** – is the author an expert on the topic?
- **Purpose** – why did the author write this article?

Usually, a source has higher credibility if it was published recently, but it depends on the topic. Some topics are not very time-sensitive. For example, if my topic is "How to cook an apple pie", then it doesn't really matter when the published date of the article is. But if my topic is "The Impact of COVID-19 on the World", then I'd want more up-to-date articles.

A source has higher credibility if it directly relates to your topic. For example, let's say I'm researching "The Impact of COVID-19 on Canada". I find two articles, one talking about COVID-19's impact on Canada and the other on North America. Both are relevant, and both might have different but useful information. However, the one about Canada is more directly linked to my topic, so I should read that one first.

When you read an article, try to find out about the author. Sometimes, under the author's name, there will be a little bit of information about the author. Often times, there might not even be an author. If the website publisher is famous, then it's probably okay. But if the website is not famous and there's also no author name, then the credibility is low.

Lastly, think about why the author wrote the article. Let's say my research topic is sleep advice. I find an article written by a blogger who is being sponsored by a sleep mattress company to promote the mattress. In the article, she says that having a good mattress is essential for a good night's sleep. Should I take it seriously? Probably not because the author is being paid to say it. Whereas if I find a research study on Google Scholar done by scientists, I can probably trust their information.

6: Citation

Citation means giving credit to the sources you used in your presentation or essay. There are two types of citations: **in-text citations** and **works cited citations**. In-text citations go in the body of your presentation or essay. Works cited citations go in the Works Cited list at the end of your presentation or essay.

Let's go back to the example earlier:



The screenshot shows the SleepFoundation.org website. At the top is the logo and navigation links for 'SLEEP TOPICS' and 'SLEEP'. Below the header, a paragraph states: 'In each category, you can find specific actions that you can take to make it easier to fall asleep, stay asleep, and wake up well-rested.' The main heading is 'Creating a Sleep-Inducing Bedroom'. The text below reads: 'An essential tip to help fall asleep quickly and easily is to make your bedroom a place of comfort and relaxation. Though this might seem obvious, it's often overlooked, contributing to difficulties getting to sleep and sleeping through the night.' Another paragraph says: 'In designing your sleep environment, focus maximizing comfort and minimizing distractions, including with these tips:'. A bulleted list follows: '• Use a High-Performance Mattress and Pillow: A quality mattress is vital to making sure that you are comfortable enough to relax. It also ensures, along with your pillow, that your spine gets proper support to avoid aches and pains.' and '• Choose Quality Bedding: Your sheets and blankets play a major role in helping your bed feel inviting. Look for bedding that feels comfortable to the touch and that will help maintain a comfortable temperature during the night.'

Let's talk about the works cited citation first. Most of your sources will be websites. In order to do a citation using MLA format, you need to state in order

1. The author — Last name, First name
2. Title of article – in quotations “ ”
3. Publisher — in *italics*
4. Published date
5. URL

Here's an example of a works cited citation for that sleepfoundation.org article:

Suni, Eric, “Healthy Sleep Tips”, *Sleepfoundation.org*, July 30, 2020,
<https://www.sleepfoundation.org/articles/healthy-sleep-tips>

In your Works Cited section, you will have a list of all your citations like the one above. Organize the list in alphabetical order based on the last names of the authors.

For in-text citations, just put “(Author, Page #)”. So I might have a sentence saying,
“The best time to nap is after lunch, and naps should ideally be around 20 minutes long (Suni)”.

In this case, there is no page number because the source is a webpage without any page numbers.
Alternatively, I can say
“According to Suni, the best time to nap is after lunch, and naps should ideally be around 20 minutes long.”

The in-text citation “(Suni)” should be used in essays, whereas a presentation would use “According to Suni, the best length of a nap is 20 minutes long”.

Here is an example of a Works Cited List:

Works Cited

Anderson, Chris. *The Long Tail: Why the Future of Business Is Selling Less of More*. New York: Hyperion, 2006. Print.

Bendito, Petronio A. "Aspects of Visual Attraction: Attention-Getting Model for Art and Design." *Journal of Visual Literacy* 25.1 (2005): 67-76. Print.

Phillips, Scott. "Criminology: Legal Disparities In The Capital Of Capital Punishment." *Journal of Criminal Law & Criminology* 99.3 (2009): 717-755. *Academic Search Premier*. Web. 19 Mar. 2010.

SIL International. Home page. *Ethnologue: Languages of the World*. 2009. Web. 13 Oct. 2009.

Notice that it is a list of all the citations in alphabetical order.

Conclusion

Research skills are essential for your student career, especially in university. They continue to be important in the workplace, where you will often need to research complex questions. In today's lesson, we talked about

1. Research Attitude
2. Where to research
3. How to research
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Now, it's time for you to go and practice what you learned by actually doing some research!

Check Your Understanding Questions

1. What is a good research attitude?
2. Name two good to do research other than Google/Baidu
3. Give two advice for how to do research
4. Paraphrase this sentence: *"China is the largest of all Asian countries and has the largest population of any country in the world."*
5. When is using a quotation appropriate?
6. How can you determine if a source is credible or not?
7. Create a works cited citation for this article:

<https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1365-2648.2006.03693.x>