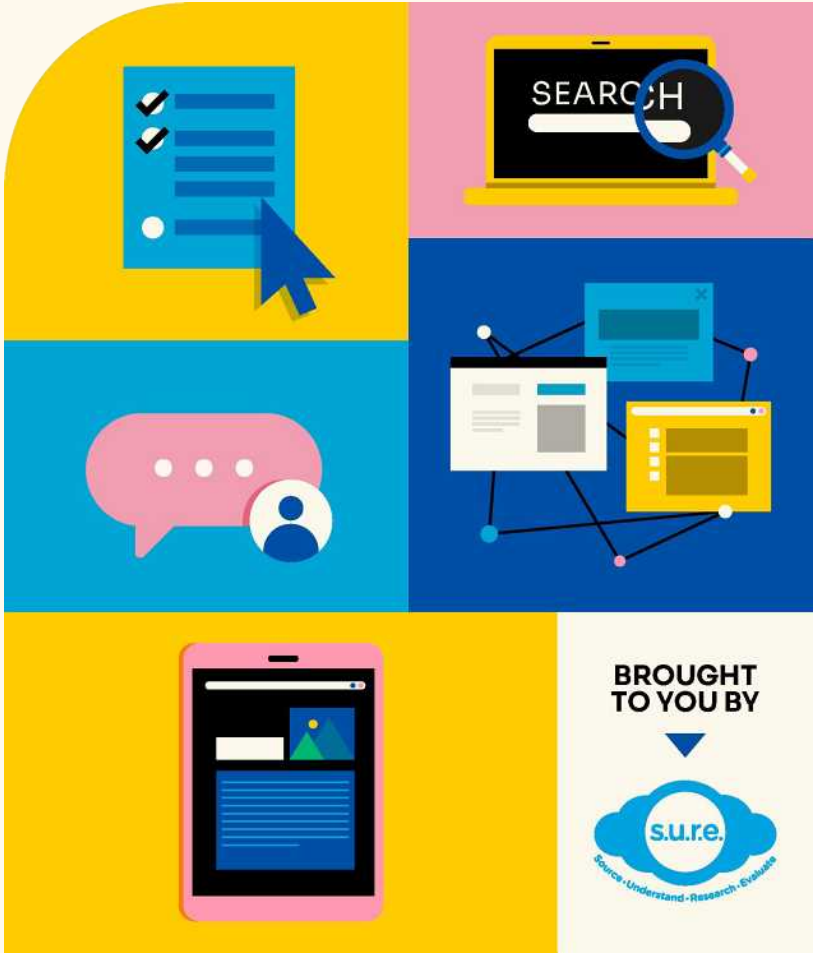
ADVANCED

Research

In this topic, you will:

- Learn to investigate topics more effectively by navigating different resources
- Understand how algorithms affect our search results



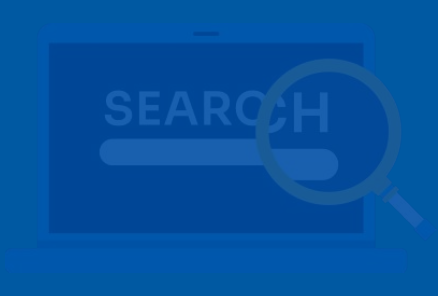
DISCLAIMER:

NLB declares no affiliation, sponsorship, nor any partnerships with featured brands or trademarks. All rights and credit go directly to their owners.

GOT IT!

s.u.r.e.
Source · Understand · Research · Evaluate

Having a research strategy



How search algorithms work

Avoiding biases and blind spots

s.u.r.e.
Source · Understand · Research · Evaluate

Good research entails gathering information about a topic to come to a detailed and nuanced understanding of a subject.

To achieve this, we'll need a well-rounded research strategy that makes use of varied and relevant resources.

s.u.r.e.
Source · Understand · Research · Evaluate

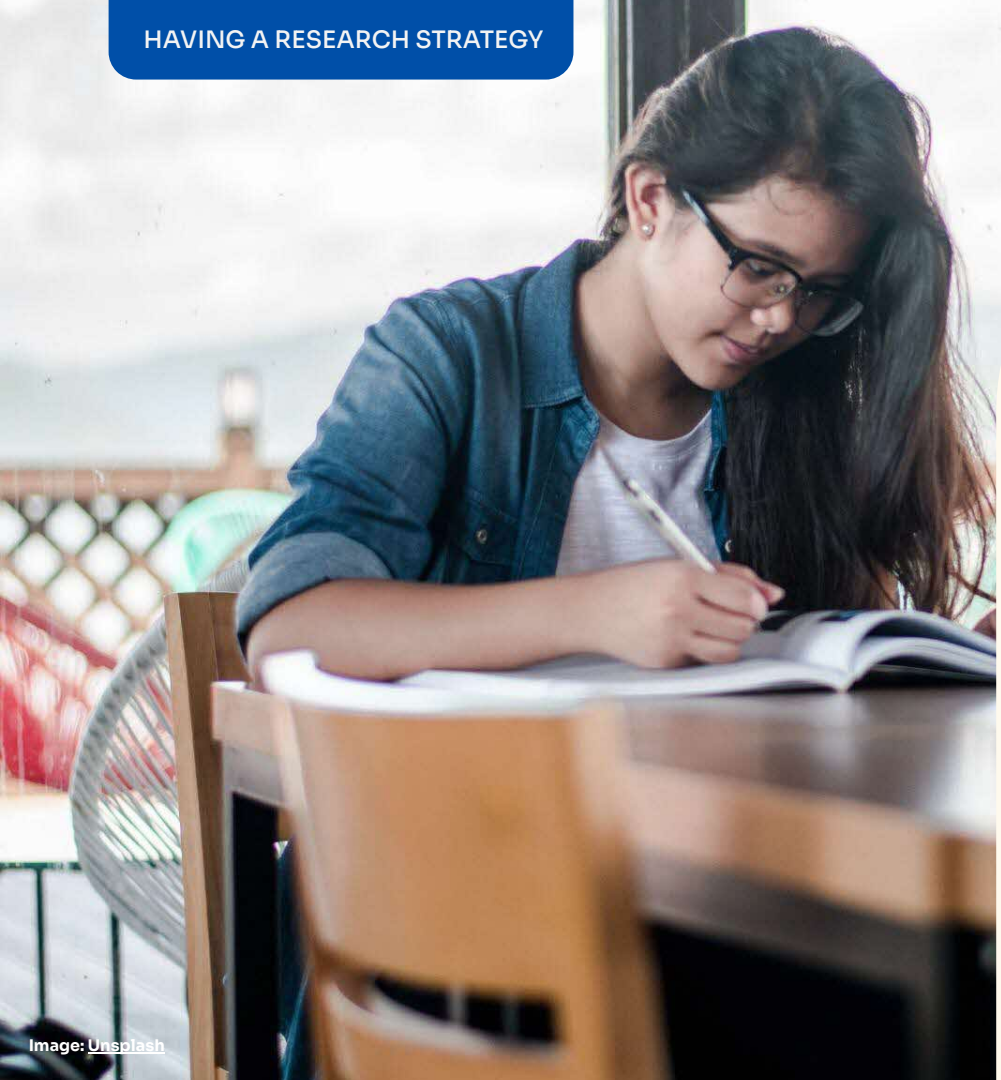


Image: Unsplash

Where do you start?

- Before starting your research, you will first need to select a topic. Write down what you already know about the topic and what you would like to know more of.

- From there, you can develop research questions that will help you find the information you need.

s.u.r.e.
Source · Understand · Research · Evaluate

Definition

With your research questions in mind, you can then identify the keywords you will like to use in your search.

Keyword

Term that defines the scope of the research topic

- Keywords are formulated in reference to the answers you hope to find.
- For instance, you would include words like “statistics” or “data” if you are looking for numerical figures.
- They should be specific to your question but you can also include related words not found directly in your question.

s.u.r.e.
Source · Understand · Research · Evaluate

Depending on the type of information you are looking for, you can choose which channel to use for your research as well.

Search engines will bring us to the most popular results on the Internet. This means that we can get a good overview of a situation but might not get a very detailed or nuanced understanding of it.

Newspapers and **media outlets** can give you access to current affairs and fact-checked information from official sources.

Blogs can help us tap into the opinions that others are sharing on the Internet.

Images: Google, Yahoo, The Straits Times, Channel News Asia, Daniel Food Diary, MoneySmart

Information from **archives** and **academic journals** can give you analysis and insights from experts, such as historians and researchers.

Images: National Archives of Singapore, Jstor, Instagram, Tiktok, Youtube

Video platforms and **social media** can contain useful contemporary information like interviews and first-hand accounts.

Remember that sources have biases!
Always keep in mind the author's or organisation's potential intent when reviewing information.

s.u.r.e.
Source · Understand · Research · Evaluate

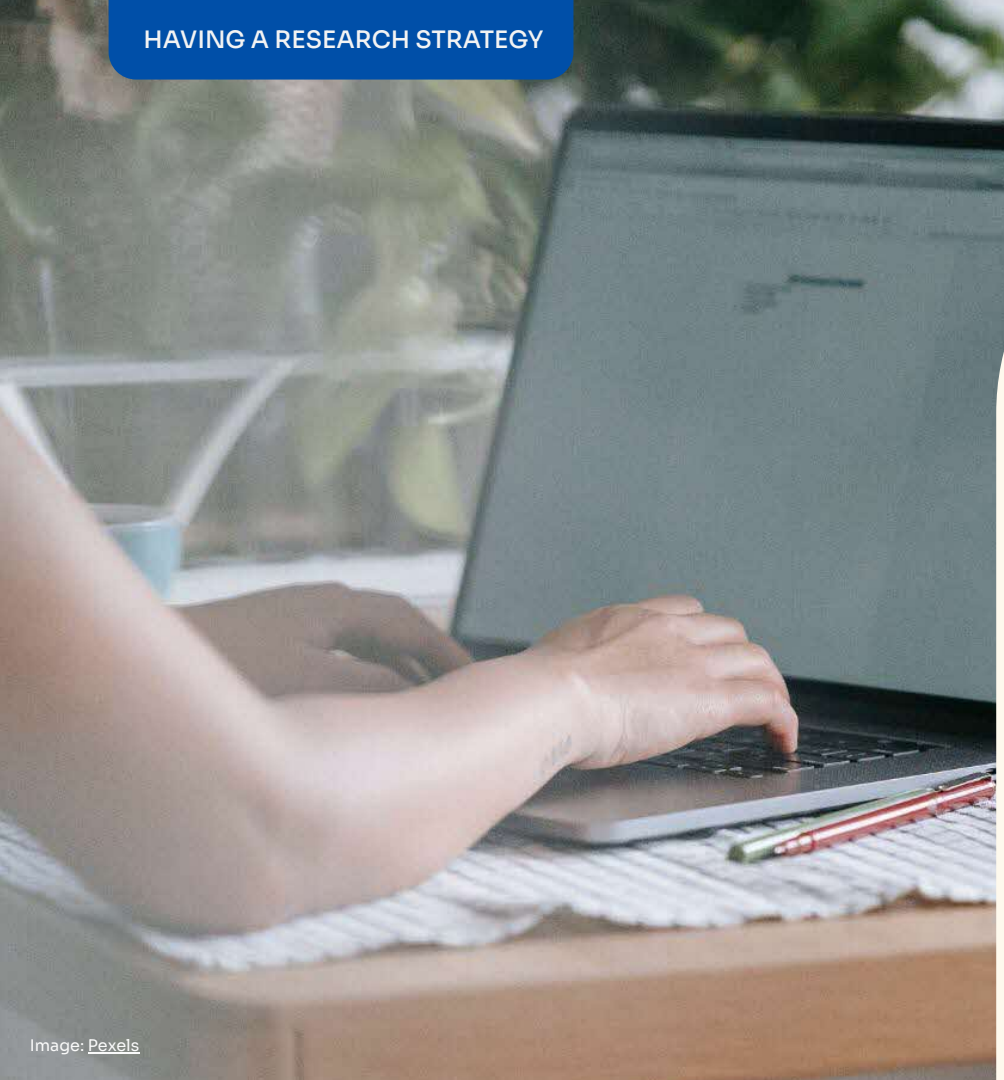


Image: Pexels

You are now ready to start your search!

- Keep your search queries simple, descriptive and straight-to-the-point.
- If you're not getting your intended search results, you can broaden your search by using related terms and a variety of platforms.

s.u.r.e.
Source · Understand · Research · Evaluate

How search algorithms work

Having a research strategy

Avoiding biases and blind spots

s.u.r.e.
Source · Understand · Research · Evaluate

Search engines are widely used by everyone worldwide, but what is wrong with just ‘searching it up’?

To answer this question, we will first need to understand how **search algorithms** work.

s.u.r.e.
Source · Understand · Research · Evaluate

Case study:

SEARCH ALGORITHMS

Image: Unsplash

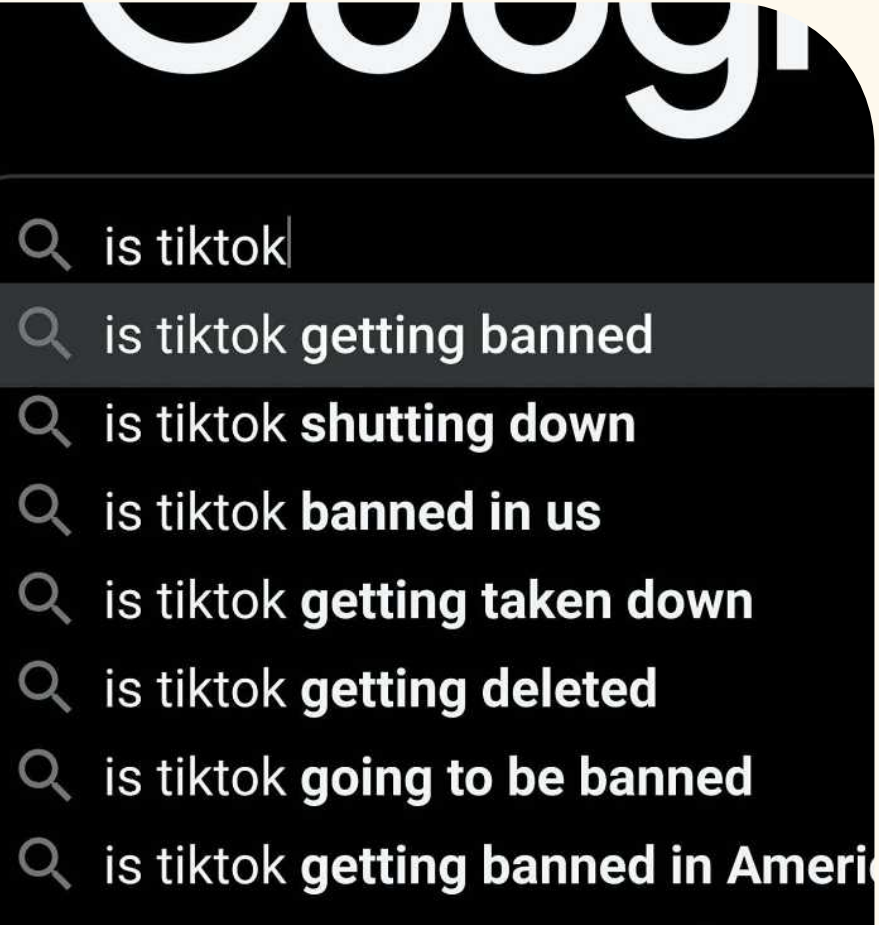
s.u.r.e.
Source · Understand · Research · Evaluate

Search algorithms help search engines determine the type of information to show users.

- ➔ They retrieve and categorise information from various parts of the Internet according to what the user is looking for.
- ➔ The order in which information is ranked is determined by few factors: a site's popularity, whether or not a site is an advertiser, or how content on a site is structured.

Image: Unsplash

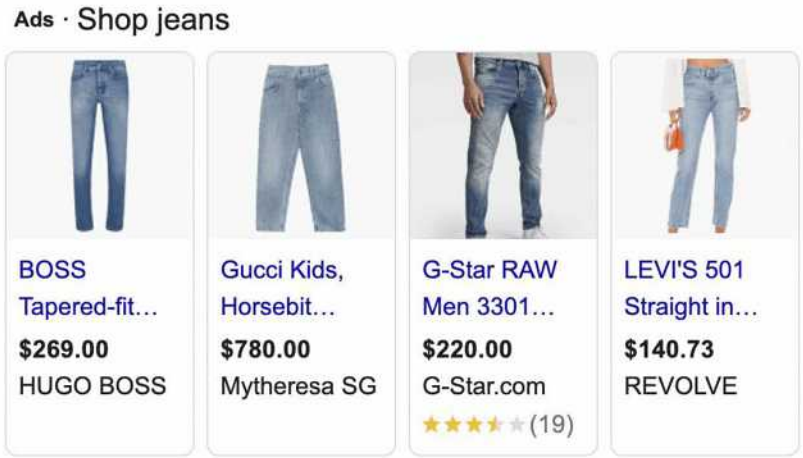
Image: Unsplash



- Popularity is used as a primary means to predict how relevant a result might be.
- This means that they can reflect and even amplify prejudiced and problematic views towards communities and issues.
- Top search results can exacerbate such biases by making popular but inaccurate sites appear more credible.

s.u.r.e.
Source · Understand · Research · Evaluate

Image: Google



- Results are also ranked on profitability.
- Spaces for the top few results are often reserved for sponsored links that are not necessarily the most accurate or relevant to a user's needs.
- Search engines also prioritise their own results in search pages.

Image: Unsplash

- Search algorithms put us in the danger of living in a ‘filter bubble’ by showing users search results for content they’re likely to enjoy based on their previous behaviour.
- This means that users might only consume content which aligns with their worldview.
- Users are thus exposed to single-sided arguments that perpetuate a skewed understanding of the world.

s.u.r.e.
Source · Understand · Research · Evaluate

Having a research strategy

How search algorithms work

Avoiding biases and blind spots

s.u.r.e.
Source · Understand · Research · Evaluate

As we can see, biased or restrictive search algorithms can lead to incomplete or an entirely incorrect understanding of an issue.

Strong research thus takes into account potential biases and blind spots.

s.u.r.e.
Source · Understand · Research · Evaluate

How can we ensure that we are carrying out accurate research?

- ➔ Always check the source of a piece of information, even if the website ranks highly on a search engine. Doing your own fact-checking helps you to verify the accuracy of the information given.
- ➔ Broaden your search by using alternative search engines, such as DuckDuckGo, that conduct searches without tracking your personal information.

Image: Unsplash

It’s your turn!

1. Write out a research statement you’d like to investigate.

2. Research your chosen topic on at least 3 platforms.

What are the potential biases and blind spots of your chosen search platforms?

How do your results work together to help you create a more well-rounded answer?

s.u.r.e.
Source · Understand · Research · Evaluate

There’s more!

Move on to the next topic **EVALUATE** to find out how you can effectively assess, critique, and use the information you’ve gathered.