



## Research Skills



Chetty 2019



### Research

- The process of searching

Carefully with a method

to answer a question

You will investigate and come up with YOUR OWN question.

Be sure to ANSWER the question through your research



### **Where to Begin? At the Beginning!**

Let's say you need some research resources for a paper you're writing for a class. You have a general topic— Historical Investigation —and you know you need resources, but you aren't sure how to get started.

Your impulse would be to start with the Internet, but instead, first consider what you need to find:

*quality, credible resources*

*about or related to your topic*

- What do I find interesting about the topic?
- What might I find useful to learn?
- What misconceptions do people have about the topic that I'd like to clarify?
- What myths exist about the topic that I'd like to dispel?
- What would I like to learn more about with regard to this topic?

### **Need to Narrow? Ask These...**

- **What do I find interesting about the topic?**
- **What might I find useful to learn?**
- **What misconceptions do people have about the topic that I'd like to clarify?**
- **What myths exist about the topic that I'd like to dispel?**
- **What would I like to learn more about with regard to this topic?**



## Curiosity

- Intellectual curiosity
- Aspects of society? Historical debates? Social and cultural changes? ...
- Ask questions to everybody (and to yourself)
- Look at what others are doing



## Asking the questions leads to...

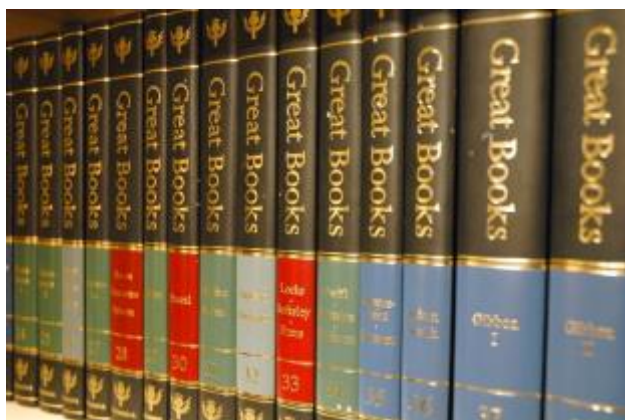
- The narrowing and focusing of the topic
- The creation of a *thesis statement*, which becomes the backbone of your paper
- From the thesis statement, you can generate keywords
- Keywords are the most important parts of your thesis statement and are what you use to conduct searches when looking for resources (but we'll talk more about keywords and keyword searching later)

\* Make use of the proposal and focus question component to get advice from your teacher

**NEXT STEP: \*NOT\* Searching YET**

- That's right – we're not searching yet. Hold your horses! There's something you need to know.
- Many professors (and librarians) cringe when you use Google and other search engines and rely too heavily on websites for your research; do you know why?
- The reason for this is that the Internet is NOT moderated or quality-controlled, and there's a lot of GARBAGE and RUMOR and outright MISINFORMATION floating around.

## Books



- You will almost always be expected to use books when collecting information for your assignments. They are often the most reliable type of resource you can use. Because the contents of a book is very specific, it is often easier and quicker to use one to find out information than it is to find another type of resource. You will usually start by looking at textbooks as they contain a broad overview of subject content. This will often lead you to more specific titles to get a deeper level of understanding.

## Using the Internet for Research

- ...sometimes it's not so easy to tell if a website is appropriate for research or not, because remember: not everything is appropriate for research
- But there are ways to tell if a website is appropriate for research or not
- When using the Internet for research, use the following criteria to determine if a website is good for research or not – taking the time to evaluate websites will help you obtain GOOD resources

## The CRAAP Test

- The CRAAP test can help you to decide which ones you should take the time to read, and which ones you should discard. It has five stages, each of which allows you to assess certain things about a piece of research in order to decide whether you should use that resource or not:
- C (currency) – this tells you about the timeliness of the resources, so you should ask yourself: ☐ When was it published or posted online? ☐ Has it been revised or updated? ☐ Is what you are looking at the most up-to-date version? ☐ Does your topic require very current information?

- R (relevance) –this assesses the importance of the information for your needs: ☐ Does the information directly relate to your topic or answer your question? ☐ Who is the intended audience? ☐ Is it at an appropriate level? (i.e. not too simple or advanced for your needs) ☐ Would you feel comfortable using it as an academic resource?
- A (authority) –this tells you about the source of the information: ☐ Who is the author/publisher/source? ☐ What is their status? (Are they an academic? Researcher? Lecturer? Minister?) Are they qualified to write on that particular topic?
- A (accuracy) – these questions will allow you to assess how reliable, truthful and correct the content is: ☐ Where does the information come from? Is it backed up with evidence? ☐ Can you verify any of the information from another source? ☐ Does the language and tone seem unbiased and free from emotion? ☐ Are there spelling or grammatical errors?
- P (purpose) –this allows you to assess the reasons why the information exists: ☐ Is the information intended to inform, teach, sell, entertain or persuade? ☐ Does the author make their purpose clear? ☐ Is the information fact or opinion? ☐ Does the point of view appear objective?



### **Reliability of Internet Sources**

- Who is the author?
- What is the purpose of the site?
- Is there any obvious reason for bias?
- Is contact information provided?
- Can you verify the information?
- Is the information current?



**So...what are scholarly resources?**

- Written by experts
- Focus on a particular field, topic, or discipline
- Intended for others in that field or career
- “Proper” language, technical vocabulary
- No ads
- RESEARCH ORIENTED

*\* Journals are scholarly*



**POPULAR resources are the opposite**

- Written by journalists
- Usually cover broad topics, fields, issues, or disciplines
- Usually appeal to a wide audience
- Everyday language, slang, even profanity
- LOTS of ads

- NOT RESEARCH ORIENTED

\* *Magazines and newspapers are popular*

### Website

- How can you determine whether the information you've found is accurate and reliable? To know this, you need to establish the site's credibility.
- The first thing to look for is the site's publisher. You can usually find this by checking the domain name. Another easy way to determine a website's credibility is by looking at the suffix (e.g., *.edu = educational, .com = commercial, .gov = government, .org = non-profit*). These suffixes can help you determine the site's main purpose and intended audience. Commercial sites, for example, vary in their credibility, while education and governmental websites are nearly always authoritative resources. However, be cautious, as websites may obtain misleading suffixes.



### Search Best Domains

- After explaining why some domains and some sources are more credible than others, it's time to show students an excellent shortcut to narrow their search to more credible sources. Typing the word "site" in the search box followed by a colon and a domain after the topic you're looking for accomplishes this.
- So you would type "World War II site:edu" (typing capital letters isn't necessary) to narrow your search to educational sources, and "World War II site:gov" to narrow your search to governmental sources, etc. The "site" command is one of the best advanced search techniques for finding the best and most credible information.





### **Evaluating Websites for Research**

- Authority--who created the web page? Are they experts? What are their credentials? Do they provide contact information?
- Accuracy--where did they get their information? Are the facts verifiable through another source? Do they list a bibliography of citations from where they obtained their information?
- Objectivity--does the site have biases? Is the information presented in such a way to allow the viewer to make his/her own judgment, or does the site try to persuade you to adopt its viewpoint? What is the purpose of the site? \*\*\*
- Currency--when was the site last updated? Are the facts on the site up-to-date? Is the information current?
- Coverage--how much of the topic does the resource cover? Does it attempt to cover all or most of the aspects, or is it vague?

### **Be More Specific**

- Students should use several credible sources if they are, for instance, writing a report about World War II. One way to do that is to use different sources for the causes of World War II, the effects of World War II, etc. Thus, searching for "causes of World War II" is preferable to simply searching "World War II".
- Here's another tip: students can use find easy-to-read information in .pdf and .htm files. They can use the "filetype" command just as they used the "site" command to find those sources. They can, for example, type "causes of world war II filetype:pdf".



### **Find Specific Facts:**

- The asterisk (\*) is another tool that helps students when using advanced search techniques to look for info on the Internet. If they're looking for a fact such as a date, they will quickly learn that Google will fill in the blank with information that replaces the asterisk. Thus, typing "Hitler invaded Poland on \*" will yield them the precise result.
- In addition, they can put quotes around a multi-word phrase if they want a specific search result. Typing the words "the Japanese bombed Pearl Harbor because" will yield only results with those specific words.

### **Seek Time-Specific Info**

- This tip is particularly important in Science because information is constantly changing. Students who are writing about gene therapy might want to focus on what has been accomplished in the last year. They can do that by hitting "Tools" in the [Google advanced search options](#) after they type in "gene therapy" and then clicking on "Any time." The drop-down list lets them select a recent time period.
- Similarly, students can also select "custom range" to find sources from specific time periods. They might, for example, want to know what World-War II scholars wrote about the war from 1970 to 1980.

The image shows the Google Advanced Search interface. At the top, it says "Google Advanced Search" with links for "Advanced Search Tips" and "About Google". Below this, there are several sections for filtering search results:

- Find results:** "with the words" (input field) and "with this exact string (including HTML)" (input field). A "Google Search" button is to the right.
- Layout:** "Return pages which look like" (input field) with an example "e.g. digg.com" and a "More info" link.
- Ads:** A dropdown menu set to "No ads, no Flash".
- Censorship:** "Choose the country" with a dropdown menu set to "Global (no censorship)".
- PageRank:** A dropdown menu set to "5 or higher" with a note: "select 'below 0' to show spam sites only".
- File size:** "Return pages with minimum of" (input field) "KB".
- RegEx:** "Match this regular expression" (input field) with a "More info" link.
- Payment:** "Subscribe to [Google Premium](#) to access subscription content".
- SafeSearch:** Radio buttons for "No filtering" (selected), "Filter using [SafeSearch](#)", and "Filter using [UnSafeSearch](#)".

### Use Other Search Engines

- Google Scholar
- State Library of NSW <https://www.sl.nsw.gov.au/>
- Northern beaches Library- connects all the libraries in the Northern Beaches area <https://www.northernbeaches.nsw.gov.au/library>



### During the Search

- Organization is very important –keeping your resources organized means you can lay hands on what you need in an efficient way
  - Where possible, email yourself copies of the things you print off
  - Where possible, save copies of the things you print off to a jump drive or a cloud service (like Google Drive)

### After the Searching's Done...

- You have the resources you need, either digitally or physically, if you've printed them out
- This is when underlining and/or highlighting come into play, as well as notes and sticky notes
- Documentation is also important, in order to avoid plagiarism –several of our databases (like Ebscohost) will generate citations for you



### Referencing

- Avoids plagiarism
- Demonstrates the range of sources consulted in your research
- Allows you to re-find the source of your information
- Allows someone else to also find the source of your information.

### Plagiarism

“The practice of taking someone else’s work or ideas and passing them off as one’s own.”

Oxford Dictionaries - <http://www.oxforddictionaries.com/definition/english/plagiarism?q=plagiarism>  
(accessed 04/02/14)



**What do I use?**

SUMMARISE

“Give a brief statement of the main points.”

#### PARAPHRASE

“Express the meaning of (something written or spoken) using different words.”

#### QUOTE

“Repeat or copy out (words from a text or speech written or spoken by another person).”

Oxford Dictionaries - <http://www.oxforddictionaries.com/definition/english/> (accessed 04/02/14)

#### Summary

- Summarising is when you give an overview of the author’s key ideas as a whole, or provide an overview of a topic.
- A summary is usually shorter than the original piece of writing. It might state the ideas of a paragraph in one simple sentence.
- A summary tells you about the whole passage.



#### For example:

Original:

Students frequently overuse direct quotation in taking notes, and as a result they overuse quotations in the final [research] paper. Probably only about 10% of your final manuscript should appear as directly quoted matter. Therefore, you should strive to limit the amount of exact transcribing of source materials while taking notes.

Summary:

Students should take just a few notes in direct quotation from sources to help minimize the amount of quoted material in a research paper (Lester 1976, 46-47).

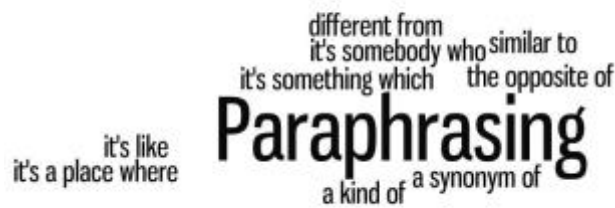
(Source: Lester, James D. Writing Research Papers. 2nd ed. (1976): 46-47  
<http://owl.english.purdue.edu/owl/resource/619/01/> )

### Paraphrasing

- This section will help you to get on top of paraphrasing by examining what, why and how to paraphrase.

What is paraphrasing?

- Paraphrasing is not producing a direct copy of another persons' ideas or work.
- Paraphrasing is re-writing another person's words so that the original meaning of their idea is maintained, but the structure and words you use are quite different to theirs.



### Another example of paraphrasing

Original:

- Students frequently overuse direct quotation in taking notes, and as a result they overuse quotations in the final [research] paper. Probably only about 10% of your final manuscript should appear as directly quoted matter. Therefore, you should strive to limit the amount of exact transcribing of source materials while taking notes.

Paraphrase:

- In research papers students often quote excessively, failing to keep quoted material down to a desirable level, or less than 10% of the paper. Since the problem usually originates during note taking, it is essential to minimize the material recorded verbatim.
- (Source: Lester, James D. Writing Research Papers. 2nd ed. (1976): 46-47  
<http://owl.english.purdue.edu/owl/resource/619/01/> )

### ACTIVITY 1

- *Read the original text below. Highlight the words that you think are specialised words or words that should not be changed when paraphrasing. Underline the words which should be changed.*

- The United States, Germany, Japan and other industrial powers are being transformed from industrial economies to knowledge and information based service economies, whilst manufacturing has been moving to low wage countries. In a knowledge and information based economy, knowledge and information are the key ingredients in creating wealth.
- (Source: Laudon & Laudon 2002, *Management information systems: managing the digital firm*, Prentice Hall, New Jersey.)

### Activity#1 Answers

#### ACTIVITY 1

The **United States, Germany, Japan** and other **industrial powers** are being **transformed** from industrial **economies to knowledge and information** based service economies, **whilst manufacturing has been moving to low wage** countries. In a knowledge and information based economy, knowledge and information are the **key ingredients in creating wealth**.

### Activity 2

Find the words in Paraphrase 2 that replace the key words in the original text **highlighted in blue below**.

#### Paraphrase 2

The United States, Germany, Japan and **other industrial powers** are being **transformed** from industrial economies to knowledge and information based service economies, **whilst manufacturing has been moving to low wage countries**. In a knowledge and information based economy, knowledge and information are the **key ingredients** in creating wealth.

### Activity#2

- other industrial powers =
- transformed =
- whilst =
- has been moving =
- low wage countries =
- key ingredients =

### Activity#2 Answers

other industrial powers	=	economies such as
transformed	=	dramatic change
whilst	=	as
has been moving	=	shifts to
low wage countries	=	countries where wages are low
key ingredients	=	focus on

### Paraphrasing is NOT...

When paraphrasing make sure you do not just swap a few words or sentences here and there. The whole structure of the passage you are paraphrasing needs to change.

Hence, paraphrasing is not...

- Just changing words from the original
- Keeping identical sentence structure
- Transferring ideas sentence per sentence.

### Why paraphrase? Why not just use direct quotations?

- Why not just use direct quotations? Paraphrasing is more difficult, so why bother to do it?
- Research has demonstrated that students overuse quotations in their research papers. Learning to paraphrase will demonstrate that you have absorbed the ideas of others, but have also thought carefully about what they mean.
- “Students frequently overuse direct quotation in taking notes, and as a result they overuse quotations in the final [research] paper. Probably only about 10% of your final manuscript should appear as directly quoted matter. Therefore, you should strive to limit the amount of exact transcribing of source materials while taking notes.”

(Source: Lester, James D. Writing Research Papers. 2nd ed. (1976): 46-47 in <http://owl.english.purdue.edu/owl/resource/619/01/> )

### Ellipsis

- Ellipsis is the use of three dots in a quotation to show that you have left out a section. You use ellipsis when you only want to include part of the quotation in your essay or assignment.

Original:



- At some companies, empowerment means encouraging employee ideas while managers retain final authority for decisions; at others it means giving front-line workers almost complete power to make decisions and exercise initiative and imagination.

Quoting using ellipsis:

“At some companies, empowerment means ... giving front-line workers almost complete power to make decisions and exercise initiative and imagination” (Daft 1999, 256).

- (Source: [http://libguides.library.curtin.edu.au/data/files7/202792/Chicago\\_Author-Date\\_16th\\_ed\\_.pdf](http://libguides.library.curtin.edu.au/data/files7/202792/Chicago_Author-Date_16th_ed_.pdf))
- Leaving out those words should not dramatically change the meaning of the statement. Original quotation:

“Perth has many attractions for tourists and travellers. Tourists and travellers can visit a number of sites including the Bell Tower, King’s Park, Cottesloe Beach and several fine nature reserves” (McGuinness, 45).

- Quotation using ellipsis:

“Perth has many attractions for tourists and travellers ... including the Bell Tower, King’s Park, Cottesloe Beach and several fine nature reserves” (McGuinness, 45).



### **Inserting your own words into quotations: When?**

- You can also insert your own words in square brackets into a quotation when you need to add extra information that the reader needs in order to understand that quotation properly.
- For example:
- “The budget has been greatly affected by the floods [of 2011]” (McGuinness, 15).

### **Valuable verbs!**

Try not to always introduce your quotes with the words "He said/stated" or "She said/stated". Use the content of the quotation to pick a verb that will introduce the sentence in a more fitting and memorable way.

**Other verbs to choose from:**

claimed/claims	asserted/asserts
suggested/suggests	contended/contends
argued/argues	agreed/agrees
proposed/proposes	cautioned/cautions
examined/examines	disclosed/discloses
revealed/reveals	questioned/questions

And there are many more!

There are many different ways to make connections between your idea and the ideas of others. These include:

- stating the view of another, by using words like 'According to...'
  - Talking about the view of another when there is a bit of confusion about that view: 'Smith's claim seems...'
  - Agreeing with the view of another by saying 'As (the author) says...'
  - Disagreeing with the view of another. To do this you can use words like 'In contrast to...'
  - Drawing a conclusion using the work of another. Here you mention their work: 'From Carlson's conclusion...' and then add 'it can be argued...'
  - Point out assumptions by beginning sentences like this: 'The assumption on which this depends...'
  - And finally, to state your own position by saying things like: 'The perspective presented here is...'
- (note: You must always put the year of publication in brackets next to the author's name)



## Footnotes

- When using footnotes the numbers are consecutive through the course of the paper—you don't use the same footnote number for several quotations from the same source.
- Each reference gets a new, sequential number. If the same item (source) appears several times in your footnotes, you can abbreviate the reference in the second, third, fourth (etc.) appearance, but be sure to give the page number each time. [Note: nearly all word processing

programs will create footnotes for you easily and painlessly. In many versions of Microsoft Word, you use your "Insert" or "References" Menu and locate "Footnote"; follow the dialogue boxes to create automatically numbered footnotes, easy as pie!]

Here is an example of what footnotes (or endnotes) look like, if you had used two sources in this paragraph:

**Sample student paper prose** [which would be double-spaced, of course]:

Blah blah blah, blah, blah blah, and Swain notes, "Blah blah blah."<sup>1</sup> Gaar disagrees, arguing, "Blah, blah blah."<sup>2</sup> Both authors agree that there are three main issues, but Swain thinks number two is most important.<sup>3</sup> Gaar, on the other hand, thinks that blah blah blah.<sup>4</sup> It is possible that neither author is correct, although Swain raises an interesting point, saying, "Blah, blah, blah."<sup>5</sup>

(imagine that these footnotes are at the bottom of the page):

<sup>1</sup> Joseph P. Swain, *The Broadway Musical: A Critical and Musical Survey* (New York: Oxford University Press, 1990), 136. [**<--- the first time you quote or paraphrase from this book**]

<sup>2</sup> Gillian G. Gaar, *She's a Rebel: The History of Women in Rock & Roll* (Seattle: Seal Press, 1992), 101-2.

<sup>3</sup> Swain, *Broadway Musical*, 153. [**<--- the second time you cite Swain's book**]

<sup>4</sup> Gaar, *She's a Rebel*, 106. [**<--- the second time you cite Gaar's book**]

<sup>5</sup> Swain, *Broadway Musical*, 187. [**<--- the third time you cite Swain's book**]

- To avoid cluttering the page, you should use footnotes sparingly and only to provide helpful additions or citations. As previously noted, this information may be considered supplementary, which is why it's best to place it away from the main portion of your writing.
- When creating your footnotes, always keep reader convenience in mind and remember that the footnotes are there to convey helpful information. If your footnotes are excessive or unnecessary, readers are likely to become annoyed and may even be distracted from the main points of your writing.
- [https://www.scribendi.com/advice/what\\_are\\_footnotes.en.html](https://www.scribendi.com/advice/what_are_footnotes.en.html)



FAQs

Question 2: Do you reference an image?

Q2a. Do you reference an image?

A2a. YES – You should always reference any images you include in your assignments or presentations.

Q2b. How?

A2bi. Reference according to your referencing style. There are a number of ways to reference an image.

For example:



Figure 1: John Smith, 1999, Ordered Chaos, watercolour, 75mmx75mm.<sup>1</sup>

A2bii. Reference according to your referencing style. When you change the appearance of the original image, you need to reference it in this way. For example:



Figure 1: Adapted from John Smith, 1999, Ordered Chaos, watercolour, 75mmx75mm.<sup>1</sup>

[Note: the above examples use Chicago style and have been created for this program – details are fictitious]

## Bibliography

- [https://www.scribendi.com/advice/how\\_to\\_create\\_a\\_bibliography\\_using\\_word.en.html](https://www.scribendi.com/advice/how_to_create_a_bibliography_using_word.en.html)
- <https://study.com/academy/lesson/what-is-a-footnote-examples-styles-quiz.html#lesson>
- <http://studyskills.curtin.edu.au/better-referencing/>
- <https://www.wabisabilearning.com/blog/10-steps-teaching-online-research-skills>
- <https://www.scholastic.com/teachers/articles/teaching-content/6-online-research-skills-your-students-need/>
- <https://slideplayer.com/slide/6372971/>