

Finding Source Materials

Why Use External Sources?

In everyday life, the things we say, the statements we make about a topic or issue are based on our understanding or knowledge of it, which forms our opinions. But in research writing, *the statements we make about a topic have to be based on observations, analysis, or established facts*, not just what we think or believe.

For example, consider the topic of immigration, specifically in South Korea. Many people would agree with the following statements:

- a) Immigration rates (the number of people moving into the country) are increasing in South Korea;
- b) This has had various effects on Korean society (some would say positive, some might say negative).

But how do we know such ideas to be facts, and not just *common beliefs* among people? To demonstrate that such statements are true, a writer would have to find and cite *a credible source of information* – e.g. an academic journal article on the subject, or statistical data provided by the government or another credible organization such as the UN – that says or indicates the same thing. Providing this type of evidence makes the writer's position stronger and gives credibility to his or her central ideas.

Identifying “Credible” Sources

Research writing, or any writing done for academic purposes, requires the use of credible information and data to support the central and supporting ideas of the composition. Credible sources (often referred to as “scholarly” materials when created by an academic expert or scholar) are sources that we can “trust” in terms of their truthfulness, accuracy, and objectivity. The challenge, however, is determining which sources are credible and which ones are not. The following are some general guidelines to keep in mind when selecting sources materials:

Sources Generally Accepted as Credible:

Academic Books, i.e.:

- Original works written by *experts or academic scholars* based on extensive research
- Generally containing in-text references to other sources of information
- Often published by an academic press or university press

Academic Articles, i.e.:

- Reports written by academic researchers focusing on (and analyzing) original research
- Generally containing in-text references to other sources of information
- Often published by professional, academic, or scientific journals
- Often “peer reviewed”, i.e. checked by other academic experts for quality

Government Publications:

- Official government websites (often with **.gov** in the domain name)
- Government reports and statistical information about a country and its population

Academic Publications:

- Academic Encyclopedias e.g.: Encyclopedia of Anthropology
- Academic website publications (often with **.edu** in the domain name), articles, reports, etc.

Publications & Reports from Internationally Recognized Organizations:

- Humanitarian organizations such as UNICEF, UNESCO, the World Health Organization (WHO), etc.
- Academic organizations such as NAFSA, the American Council on Education (ACE), etc.

NOTE: For this course the following sources are also acceptable:

- Academic social media (media produced and maintained by academic scholars or groups) including blogs, vlogs, forums, and websites
- Interviews with a professor
- Professional (news) interviews (articles or videos)
- Newspaper and Specialized-Magazine articles
- Science/social-science-focused documentaries
- Symposia such as TED Talks

Finding Credible Sources Online

The Invisible Web

What we can access through common search engines such as Google is only a fraction of the information that is available on the Web. This is because the Web has “layers” of information. At the top layers are sites and information that are easily accessed by anyone with an internet connection. The deeper layers (often referred to the “deep Web” or “invisible Web”) include information that is more difficult to access, such as academic material, government information, and information published by private institutions. This material is often stored in databases or in search directories which, while they may require more effort to find, can provide a great deal of credible information that can be used as part of your research.

Specialized Websites/Search Engines

Some websites are designed to provide researchers with free access to credible sources of information stored on the invisible Web. The following are some notable examples:

- **Google Scholar** (scholar.google.com/). This is a special extension of the Google search engine which focuses on scholarly material that can be used for academic research/writing purposes.
- **Academic Journals** (academicjournals.org/) This website provides links to peer-reviewed, open-access journals covering the arts and humanities, engineering, medical science, social sciences, biological sciences, physical sciences and agricultural sciences.
- **CQ Researcher** (library.cqpress.com/) This website provides articles focusing on current events and issues that can be used for academic research purposes

Academic Journal Databases

These are basically websites that publish academic articles. Some well-known databases include:

- **SAGE Journals**
- **ProQuest**
- **EBSCOhost**

NOTE: While these databases are excellent sources of “scholarly material” (i.e. material created by professors and academic researchers) they require a paid subscription or academic program enrollment to access the articles they provide.

- **DOAJ** (doaj.org/). The DOAJ (Directory of Open Access Journals) provides links to a comprehensive list of open-access scientific and scholarly journals in a number of fields.
- **F1000Research** (f1000research.com/) F1000Research publishes articles, posters and slides reporting basic scientific and clinical research in the fields of life sciences and medicine.
- **JURN** (jurn.org/) JURN provides academic researchers with access to free academic articles and books in the fields of arts and humanities, science, biomedicine, business and law.
- **OMICS International** (omicsonline.org/). OMICS International provides links to open-access publications in all aspects of science, engineering, management and technology.

Using Other (and Non-Credible) Sources

The importance of credibility is often related to why you are using a particular source or the purpose of your research. For example, if you are *exploring* a topic to find general information, ideas, opinions or issues related to the topic, virtually any source can be used. However, when using a source to defend or support a thesis statement or central idea in a research paper, the credibility of the sources is very important.

Similarly, if the purpose of your research is *to analyze or compare various perspectives* on a topic (for example political opinions, religious beliefs, opinions on various social issues, etc.) then the examples you find can be used in your writing (i.e. as a basis for your analysis), even though the examples may not actually come from credible sources.

Figure 2.1 below provides an overview of the importance of source credibility in relation to research purposes.

Purpose of Research	Source Credibility		
	Very Important	Somewhat Important	Less Important
To learn general information about a topic; to see what others have said or written about a topic.			✓
To identify issues or other areas related to a topic thus adding to your perspective.			✓
To find examples and details that can be used to support your central idea.	✓		
To find data or factual details to add depth to your own understanding of a subject.		✓	
To find information or perspectives to add credibility to your work.	✓		
To answer specific questions related to factual details on a given subject.		✓	

Figure 2.1: Importance of Credibility based on Research Purposes

Evaluating the Credibility of a Source

Sometimes researchers have to decide for themselves whether or not a source can be considered as credible. To do this, several key factors need to be considered and evaluated. The following questions can be used as criteria for making that assessment.

1. Who is the author of the source? More importantly, is the author an expert on the subject you are researching? People with advanced academic degrees i.e. Master's or PhD are generally accepted as experts in their particular field. People with extensive professional experience in a field may also be considered as legitimate sources of information.

When reviewing a source, check for the author's name as well as any additional information about them, i.e. a biography or "About the author" section (often included at the end of books and articles). When just a name is provided, you will have to do some additional research to find out more about the author, the easiest option being Google or another search engine. The important point is to find out whether or not they qualify as an expert or a reliable source of information. If no name is given as the author of the work, your decision to use the information will have to be based on other factors such as the publisher of the website.

2. Is the source of information objective, or is it biased in some way? A "biased" source of information is one that:

- relies heavily on one point of view or opinion without considering or acknowledging different or opposing viewpoints;
- has been created for the purpose of promoting a specific product or organization (i.e. promotional advertisements disguised as articles);
- has been created for the purpose of advocating a particular idea (political, religious, etc.)

Credible sources of information are non-biased, and provide ideas and arguments that are based on facts and research, rather than opinions and ulterior motives.

3. When was the material written? The date of publication is also an important factor in determining the credibility (and validity) of a source. Changes and advancements in various fields mean that information related to those fields quickly becomes outdated. For example, an article on computer technology written in 2010 is probably outdated as computer technology changes very quickly. Similarly, statistical information related to any number of areas can change rapidly. Unless you are researching and/or comparing changes over time, it is important to find the most recent sources.

On the other hand, for some subject areas the date of publication is not really important. For example, an article or book analyzing the works of Shakespeare written in 1960 by a Professor of English Literature is probably still a credible source of information. As a researcher you will have to use your own judgement in such cases.

Locating the date of publication for webpages and online articles can sometimes be challenging. If the date is not given, you can check the "last updated" date of the webpage (usually given at the bottom of the page). Unfortunately this only gives the date of the page, not necessarily the

The Wikipedia "Problem"

Wikipedia has become the go-to source for quick information; and while it does provide a lot of useful information that can guide our research, most professors and academic programs will not accept Wikipedia articles as legitimate, i.e. credible sources of information to be used in research writing. This is because the nature of an online "wiki" allows contributions from non-experts which may be biased or based on opinion rather than fact.

However, most Wikipedia articles contain a list of references at the bottom of the page. These references often contain the titles of credible sources (sometimes with links to those sources) that can be located elsewhere and used in research writing projects.

date when the articles or information on the page were created, which may require more research.

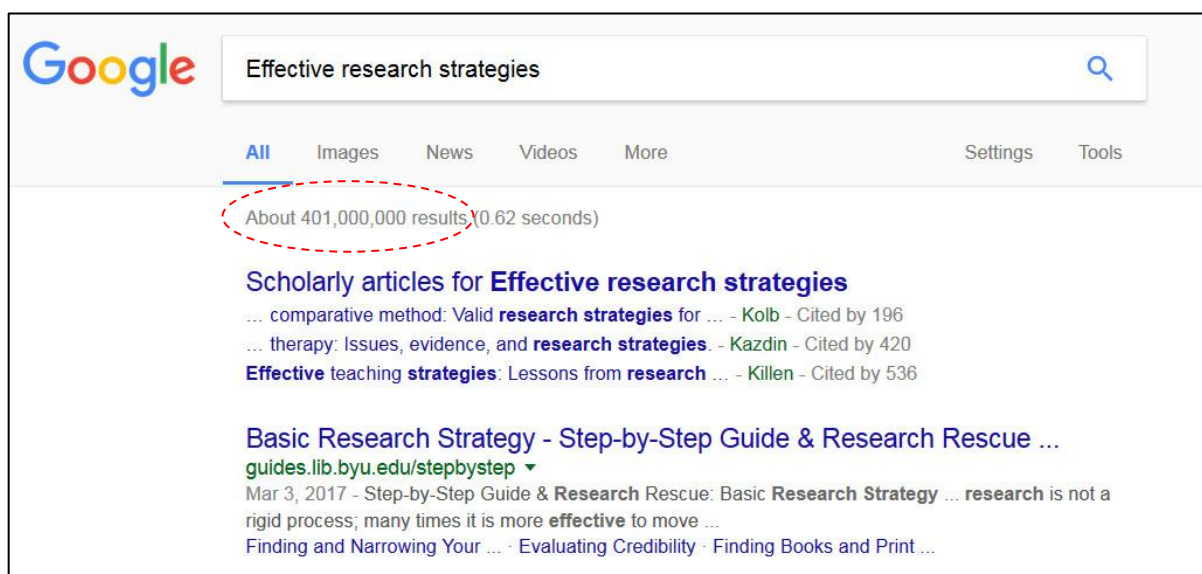
4. Does the material contain “additional documentation”? Academic books and articles generally contain “proof of research”, i.e. in-text referencing and citation and a list of sources used for research (often labeled “references” or “works cited”), usually located at the end of the paper. These things show that the writer based their article and thesis on research, not just their own ideas or opinions, which adds to the article’s overall credibility.

NOTE: Unfortunately, additional documentation does not guarantee the credibility of a source, since an author can select only sources that support his or her claims and ignore opposing viewpoints (thereby creating a biased argument). In many cases the author, purpose, and date of the article are more important considerations.

Basic Online Search Strategies

Most people are familiar with search engines and how they are used. At the most basic level, search engines require just a key word or two, with which they can locate literally millions, of pages and documents containing those key words. Unfortunately, just because a webpage or document contains the key words in your query does not mean it is useful or even remotely related to the topic being researched. The trick is to refine your search in such a way as to limit the number of results and locate the specific type of information you are looking for.

Figure 2.2: General Google Search Results



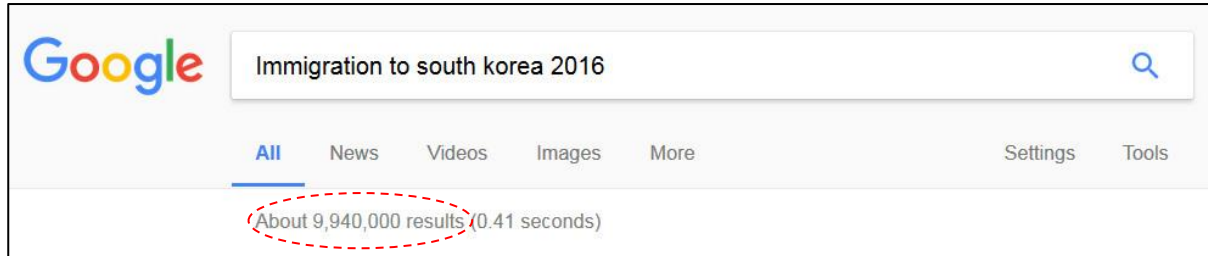
Narrowing the Search Parameters: Using Key Words

Imagine you were conducting research on immigration. Typing the word *immigration* into the Google search engine will turn up approximately 242,000,000 results. Typing *immigration to South Korea* cuts this number down to 11,700,000 results – still a large number, but significantly smaller, and consisting of sources related to that specific topic. We can narrow this further by adding other key words. Keep in mind, however, that web-searches require time and patience. It may take numerous search adjustments and hours of skimming through titles and documents before you find the information you need.

Specifying a timeframe (i.e. year or period):

Focusing on a specific year or period of time can reduce the number of search results. For example, adding *2016* to the search on immigration to South Korea reduces the results to 9,940,000 related documents and webpages.

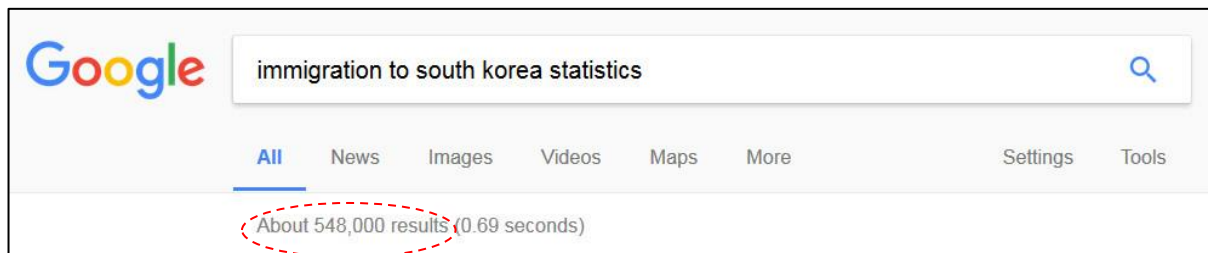
Figure 2.3: Focused Search Results 1



Specifying the type of information:

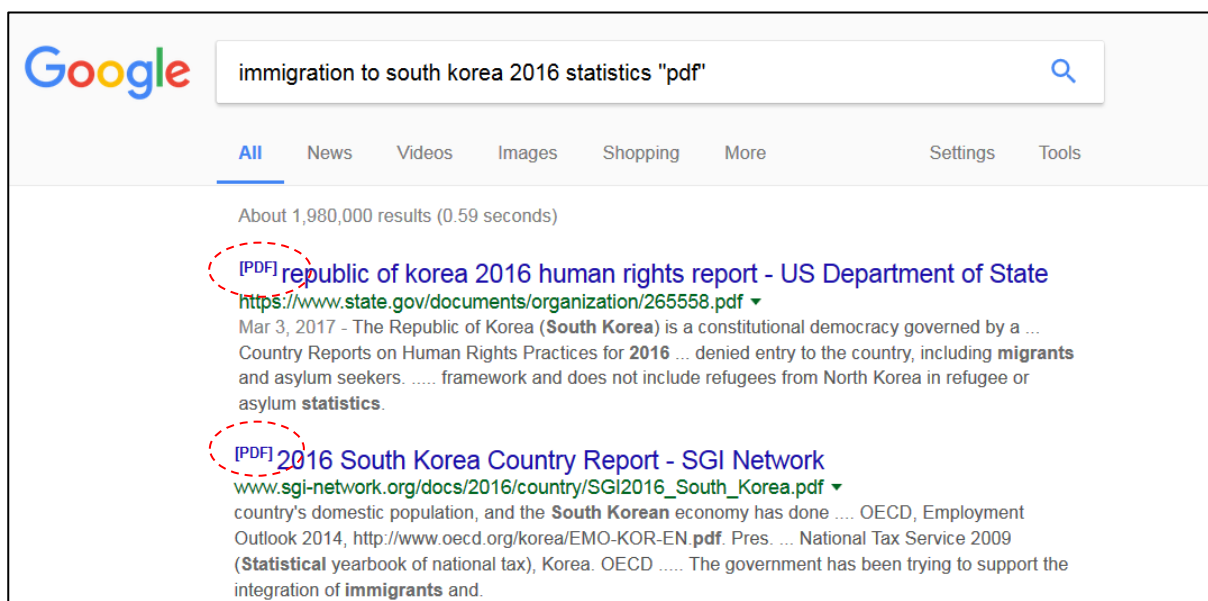
Different types of information will be needed for your research depending on the specific points you want to make or emphasize in your essay. For example, if you needed statistical information about immigration in South Korea (e.g. numbers; demographic details, etc.), you could include *statistics* in your search terms – this will again help narrow the search results to documents and webpages containing that specific type of information.

Figure 2.4: Focused Search Results 2



Specifying the type of document:

Indicating the type of document you are looking for (webpage, article, book, pdf file, etc.) can further narrow your search parameters and reduce the number of search results you get. For example typing in "pdf" at the end of your search entry will help you locate files formatted as pdf documents (reports and journal articles are often formatted this way).



Creating & Storing Files

When it comes to information found online, especially on websites, it is a good idea to save the information as a digital file which can then be stored separately on your computer and printed if necessary (this is useful when searching for and selecting key information, as it can be underlined and highlighted on the page and given additional notes if necessary). Academic articles can often be saved as pdf files; but some sources (online articles or sections of articles appearing on webpages) can be reformatted – pasted on to a separate Microsoft Word document for instance.

When reformatting and storing information found online remember to collect and save all important source information such as:

- The title of the work
- The date of publication
- The name of the author or authors
- The name of the webpage on which it was found
- The URL i.e. web address
- The date of retrieval i.e. *when you found it*

This information will be required for your citations and reference list (see Section 3).

You could also include a brief summary of the article or summary notes for different sections in the text to help you locate particular pieces of information.

NOTE: When saving an electronic file remember to give it a name that is easily identifiable in terms of focus or content. This will help you save a great deal of time when you need to locate a particular article. You should also create a folder specifically for your research assignment to keep all relevant information in one location on your computer.