# IB EXTENDED ESSAY LESSON #3 AN INTRODUCTION TO RESEARCH

### WHAT IS RESEARCH?

As research is one of the key skills associated with the extended essay, it is important that you understand some of the principles behind how you go about researching the topic. The amount of research you have done in the past will be varied, so the aim of this lesson is that by the end of it we are all on the same page.

The main points about research are the following:

- What places are there for finding resources?
- Within those spaces what might count as a resource?
- How reliable is the resource?

These three questions are the focus of this unit.

Remember that research will look different across the various subject areas. There are sources of information and interpretations of those sources. For instance, in literature, you will most likely be looking for interpretations, such as biographies and commentaries by literary critics, to supplement sources, which will be the text(s) you're investigating. In history, interpretations will include reports by observers and commentators, and those who write histories of certain events/phenomena/people, whereas sources will include documents, diaries, verbatim reports by people directly involved in your area of study. In the sciences, sources are the data used and the theory behind the data whereas interpretations might include applications of the research. Collectively these will be labelled as resources.

#### INTERNET

This is probably going to be used by everyone. It contains a massive amount of information but how do you decide what is good to use and how do you decide what is more problematic? Remember that anyone can put up anything of the Internet and it may or may not have been through any sort of review or editing process.

**Search engines** such as Google and Bing use the number of links to a web page, not reliability of the resource, as the way to determine where a resource appears within a search results list. The rule "the higher it is in the list the more reliable it is" is not a good rule. A simple Google search might be a start point, but also consider things such as using an advanced search within Google or a specific service such as Google Scholar.

Always think about the words you use as search terms. In some cases it might be useful to use a series of synonyms, because the key words which partly dictate the search were not decided on by you.

**Wikipedia articles** will often be placed near the top of a search results list. Rather than use Wikipedia as a resource (at best it will give you an overview, at worse it will give you incorrect information) use it as a way to find other information. If the Wikipedia entry has a bibliography this may give you further resources.

#### **SCHOOL AND PUBLIC LIBRARIES**

The sorts of resources your school library has will be very varied, but even if your school library doesn't include advanced materials, the library may offer access to online subscription databases that could help. Your local public library may also have resources and often has the facility to borrow from other public libraries. These are both important sources of information, but ones you will need to explore in your own time and with the help of a school librarian or a librarian from the public library. Remember librarians are experts in research not just keepers of books!

#### **LOCAL UNIVERSITIES**

University libraries contain specialized materials, more suitable for extended essay purposes, and it may be possible for you to use these library collections, though you must make enquiries beforehand. Don't just turn up at a local university. Your school librarian may be able to advise you as the school might have set up a link with a local university.

#### SOME EXAMPLES OF RESOURCES

- Print materials (books, periodicals, journals, reports, newspapers)
- Digitized content of print resources (usually through databases or internet searches)
- Websites of organizations, including government agencies, archives, NGOs, charities, research foundations, universities
- Images photographs, paintings, cartoons, etc.
- People
- Action research where we pursue action (for example, doing a job) and research using similar material at the same time
- Experiments

#### **HOW DO YOU DETERMINE RELIABILITY?**

How do you know if a source is any good? Here are a few thoughts of determining reliability.

The following sections present the list of desirable attributes for any source - along a series of questions you can use to determine the reliability of information presented on the internet or print resources.

#### (Source: IB Extended Essay Guide website)

#### Authority

- Is the author of the information identified?
- If the author has chosen to remain anonymous, why might this be? Is this significant in terms of your evaluation of the information presented?
- Is there enough information available to establish the author's credibility?
- Is the author affiliated to an academic institution or credible organization?
- Is the author qualified to write about the subject?

#### Audience appropriate

- Who is the intended audience?
- Does the information presented appropriately address the target audience?
- Is the information relevant to your area of research?

#### Validity and credibility

Does the information appear to be valid and well researched?

- Can it be supported by evidence?
- Can the information be verified through other sources?
- Is there a non-web equivalent of this material that could be used to verify the information?
- Does the URL (web address) give you any indication of the source of the information?

#### Accuracy

- Is there an indication as to who has responsibility for the accuracy of the information provided?
- Do you know if the information has been reviewed?
- Are there grammatical, spelling or typographical errors? If there are, what does this suggest about the source?
- Is there a bibliography?

#### **Objectivity**

- Is the information fact or opinion?
- Is the language used free of bias?
- Is the author's point of view objective or do they make it clear when they are expressing a personal opinion?
- Is it a personal website?
- Is the author affiliated with any institution or organization which might create a bias in the information?

#### **CURRENCY**

- Is the information kept up-to-date?
- Is there any indication of when the information was last updated?
- Are any links up to date and working?

Overall there is a lot of information available on how to research on the internet and one of the problems is how to decide on the reliability of the websites which discuss reliability!

#### Here is a little help:

- Reliable information can be found on the <u>Ergo</u> website, sponsored by the State Library of Victoria in Australia.
- A brief video presentation on how to use the internet for research: Reliable Research

# **Evaluating sources**

Get some practice in assessing sources found using the internet.

Below are some example topics based on the <a>IB</a> Example Extended Essay Titles</a>.

- Costume as a source for understanding the inner life of the character
- Improving nutrition for malnourished children in Indonesia
- Language and reality in the Mimamsa school of Indian philosophy
- Effects of sugar-free chewing gum on the pH of saliva in the mouth after a meal
- Exchange rates of the US dollar and the effect on the tourist industry in California
- Human hearing and data compression in music files

Alternatively, you could use cultural representation of gender, as a topic.

Choose any one of these sample topics. Use the internet to find what you think might be a reliable source of information for your study.

Now go through the desirable source attributes and see how well it scores. Record your findings, to include in your Journal reflections.

## TASK: REFLECTION: RESEARCH RESOURCES

Reflect on what you have learned during this lesson:

- List as many places as possible where you personally could find resources that you could use in academic research.
- For each of these resources, explain how reliable you think the resource might be.
- Record your notes from the detailed source assessment example you looked at in the Practice tab

Complete your reflections here in this Journal/Blog activity or just submit a link to any online shared document you created earlier.

(Note: This assignment is not graded - it will be reviewed by your supervisor during your writing process and for the viva voce.)