So What's Different about Dissertations & Final Year Projects?

For a lot of coursework you just need textbooks and eBooks which can easily be found on the Library Catalogue. However your dissertation or final year report is likely to have a specific topic which won't be covered by textbooks alone. You'll now need to find and use journal articles and other types of academic information such as theses, reports, patents and standards. This information is on the TU Dublin, City Campus Library website.

To find relevant information and links in your subject area start by using the TU Dublin Library Subject LibGuides on the library website. Click on your subject area e.g. Chemistry or Physics and look at the links to recommended academic resources such as e-dissertations, databases, eJournals, theses, science search engines and subject portals. You may also need to do a Literature Review; a summary and overview of the research on your topic to date. See Library Guide No. 9 for more details.
What Exactly are You Looking For?

It may seem obvious, but before you start searching you need to define your topic beforehand. This will save you time in the long-run.

a) Choose keywords to describe your topic. When choosing keywords, remember:

1. **synonyms and related terms**: rust/corrosion, fake/counterfeit
2. **American terms**: lift/elevator
3. **American spellings**: color/colour, tumor/tumour, centre/center
4. **different word endings and plurals**: fly/flies/flew/flown
5. **acronyms and abbreviations**: oLEds/PAH/NMR/GC-MS/PCR etc.

b) Think about the scope of your topic. For example:

1. **Language** - do you want English and/or foreign language materials?
2. **Date range** - do you want references to recent material or to older historical material?
3. **Document-type** - do you want journal articles, conference papers, datasets, etc?
4. **Location**: are you looking for international information or local research?
5. **Quality**: Remember some information resources are of better academic quality than others.

How to search – Planning your Search Strategy

a) Are you speaking the same language?

Your first step is to make sure that you are describing your topic in the same way as the database you’re using. How do you do that? Well, every database will assign keywords, sometimes known as **identifiers, descriptors** or **subject headings** to each item they put on the database. Often you can search lists of the words they use in the form of an **index** or even a **thesaurus** provided by the database. When you search using the database’s **own terms**, you get far better results.
b) **Truncation: dealing with different word endings:**

If you’re searching for a word that has many different endings such as chemical, chemistry, chemist, etc. you may wish to truncate it. By entering the first few letters of the word followed by a truncation symbol (such as chemi*) you will retrieve all the forms of that word.

c) **Wild cards: dealing with different spellings:**

Wild cards allow you to replace one or more letters in a word with a symbol (e.g. wom$n) to allow you to retrieve different versions of that word (woman and women). This is particularly useful for American spellings such as colour/color and organise/organize. Again, the wildcard symbols used will vary from database to database but usually appear as ? or $.

**Combining Search Terms**

Once you’ve decided on the words you’re going to search on, you need to think how you’re going to combine them together into a **search statement**.

a) **Phrase searching**

If you are looking for keywords next to each other - e.g. “light emitting diodes” it’s helpful to input them as a **phrase**. In most databases, entering terms in quotation marks (“phrase searching”) will retrieve those words only where they appear next to one another rather than scattered throughout the title or abstract.

b) **proximity searching**

Some databases allow you to search for words within a certain distance from one another. So "Electronic adj3 commerce" would retrieve records where "electronic" was between one and three words away from "commerce". **Example: Chocolate AND ("low fat" OR "fat ADJ3 free") NOT Cadbury**

This should find records on low fat or fat free chocolate or chocolates, not made by Cadbury’s

**Searching Databases - Refining your search**

Database searching is not an exact science and does involve some trial and error. Depending on what sort of project you’re working on you might want to find everything ever written on a topic (e.g. PhD level) or just 20-30 results for an undergraduate assignment. But what do you do if you get way too few, too many or totally irrelevant results?

a) **Too few?** If you get too few results, then try the following tactics:

- **Truncate** terms or use **wildcards** to increase your hits e.g. environ* organi?ation.
b) **Too many results?** If you get overwhelmed with results, try the following strategies:

- **Add more keywords using "AND":** this will narrow the topic down.
- **Check your spelling:** you may have misspelled a work or be using a US spelling on a UK database.
- **Use more specific keywords:** most databases have a Thesaurus and will suggest related keywords.
- **Exclude irrelevant items using "NOT":** exclude irrelevant results using the Boolean "NOT" operator.
- **Search only one field - e.g. title:** searching in just one place - like in the title, or the abstract - will narrow your search down.

c) **Irrelevant results?**

If your results are completely irrelevant, it may be that your subject area has another meaning. You will need to find a way of distinguishing your topic, from the one with the same name by using additional keywords. Again try the Thesaurus function on your database or one from the Library Reference section.

d) **Snowballing/Linkage Tools:** use one or two relevant journal articles as a basis for future searches:

1. Look at the list of References at the end of the article to see what related work the author has cited.
2. See what other authors have recently used your article since it was written by using the Cited By or Most Cited function
3. See the Related Records and Related References the database suggests around your journal article
4. Check what keywords the database used to classify your useful article, and re-use the same combination in another search

**Keep Track and Keep Records**

Keep a record of the databases you've searched, when you searched them, the search statements used, and the results found. This is important for two reasons:

- so you don't search the same database twice for the same thing and save time
- so you've got all the information you'll need for your Reference List (list of all the resources used)

A database will save your searches and send you alerts on new publications on your topic if you register with them. This is usually under the My Settings or My Alerts heading. Keep a list as you go along of all the journal articles and websites you use in an assignment in an MS Word document or use EndNote Basic or Mendeley.
Finding Full-text Documents and Journals

Unless you are searching one of the full-text databases such as Science Direct or IEEE Electronic Library your database search will only give you a list of references to journal articles with summaries or abstracts of the content. You will now need to find the documents themselves. All references will fall into one of two categories: either they’ll be held in the Library in hardcopy or electronic format or they won’t!

a) In the Library?

To find out if a journal is held in the Library, you will need to check the Library Catalogue and use Journal Title Search. Or use the eJournals listings on the library website. If you are looking for a journal article or conference paper, remember to search under the title of the journal or conference rather than the article title contained in the journal itself. Most journals are now in e-format. Need help with critically reading and getting the best out of journal articles? See Library Guide No. 10

b) Not in the Library?

If the journal article or book is not in TU Dublin Library you will need to visit another library or order the item on Inter Library Loan. A €6 fee applies for undergraduates. Alternatively a letter of introduction to use another library such as TCD or UCD can be obtained at the library desk.

Evaluating and Thinking about Resources (See also Library Guide No 6.)

It’s useful to think critically about material be it from books or the internet. Think about the 4Ws:

1. Who wrote it? What are the author qualifications and institute affiliations (if listed)?
2. Why did they write it? What’s the purpose of the material? Is it to inform, educate or sell?
3. When they write it? Is the website or information out of date or is it current research?
4. What did they write? How relevant is the content? Is it scholarly or academic? Does it show bias? Is it recommended by your supervisor? Would you add it to your Reference List?
5. All common sense really!

If you’re using a search engine such as Google Scholar or SearchALL to find information always use the Advanced Search function. Check the nature and purpose of any website you use – is it academic in nature or is it trying to promote a product, a concept or an idea? Is it a well-researched resource with references? Finally think ahead in terms of the time or cost involved in tracking down the full text information.
Reference Lists

With all the information you have now found on your topic, it is important to remember to keep a record of where you found it. You will be required to list the items you have consulted at the back of your assignment in what’s called a Reference List. The purpose of this is to show your supervisor the material you have read around your subject and to avoid plagiarism (copying without acknowledgement). TU Dublin schools and departments have their own citation style requirements such as Harvard or Numeric Systems so always check before you start using one.

A number of helpful manuals and guides to science assignment writing, literature reviews, avoiding plagiarism and referencing are available in TU Dublin Library at the 001.42 and 808 shelf numbers.

You may also like to use to try reference manager software such as:

- EndnoteBasic: http://www.dit.ie/library/search/librarya-z/endnote/
- Zotero: http://www.zotero.org
- Mendeley: http://www.mendeley.com
- Cite This for Me: http://www.citethisforme.com

Need Help?

Contact julie.defoubert@TUdublin.ie and ask for a short tutorial on getting started with any aspect of the material mentioned in this guide. Staff are happy to work through any research problems either one-to-one or in a small group.