Welcome to this session on effective database strategies for ML research. Today we’re going to show you how to:

- Develop a search strategy to run effective literature searches
- Identify relevant databases for your subject
- Evaluate and analyse your results
We’re going to be using the MLA International Bibliography as an example today, as it’s one of the major resources for Modern Languages.

Bear in mind that there may be other databases more suited to your topic. How do you decide which database is right for you?
These are some of the important points to cover when selecting a resource:

Firstly, does it cover my subject?

Which sources are used e.g. which journals are indexed by this database?

Who compiles it and how frequently is it updated?

Which time period does it cover, and how many articles or items does it contain – is it large enough for my search?

Do I want a full-text resource? (This will limit your choices.)

Look at the About section of MLA which gives details of subject coverage, date ranges etc.

So, we’re going to use MLA as our example today. How do we go about getting ready to conduct search of the literature on your topic?
Developing good search techniques will be useful for preparing for extended essays, dissertations, lit reviews for DPhil etc.

First of all, it’s a good idea put your thoughts down on paper. You can note down keywords, write yourself an essay question or draw a spider diagram – whichever approach works for you. Then start to identify the most important concepts, perhaps highlighting or underlining them. Now think around your topic; are there other related words or concepts which you should consider? It’s also a good idea to think about how these concepts are expressed in your target language. Some languages might have one word for a concept where in English we have two or three, or a phrase...

Don’t worry if you don’t have a perfect concept in mind to start with – you can experiment with different ideas and modify your ideas as you go.

Let’s take a couple of minutes now to write down some ideas, then we can start adding some structure.
Now you have some ideas on paper, let’s look at the best way to structure them for database searching.

This chart is one way of building a structured search. Imagine we are researching ‘Medieval women writing poetry’. In Row 1 you can see we have identified 3 simple keywords: medieval, women and poetry. However, to make sure we are encompassing related terms and concepts, we need to expand on the keywords we use when searching. So, in Row 2 we’ve put our synonyms and related terms. Some of the terms might be synonyms or near synonyms, and others might be a broader version of your original term, e.g. literature as a broader term that encompasses poetry.

In Row 3, we’re putting our search terms together. You can see that we’ve added some punctuation – often called ‘wildcards’ – which help to make our search more effective. We are also using Boolean operators: AND and OR, to connect our terms. We’ll take a look at how to use these in a moment.
Search tips (1)

• **Truncation** *
  
  allows you to search on the stem of a word to retrieve variant endings:
  
  e.g. modern* gives modern, modernism and modernist

• **Wildcard** ? to replace a single letter and give variations:
  
  e.g. wom?n will find woman or women

• **Phrase searching** double quotes to retrieve an exact phrase
  
  e.g. “new world”

Truncation, usually using the * symbol, allows you to search with the stem of a word to retrieve variant endings.

The ? symbol can be used to replace a single letter in a word, or a single number in a date e.g. 160? retrieves any date from 1600 to 1609.

To search for an exact phrase, use quotation marks.

Library catalogues and other electronic resources such as bibliographic databases will use these or similar search conventions. It can vary so it’s a good idea to check the Help section of the resource you are using – (more on this later).
Search tips (2)

**Boolean operators**: AND, OR, NOT:

- **AND** retrieves all the words, allowing you to combine the concepts in your topic
  e.g. French AND nineteenth-century AND literature

- **OR** retrieves one or more of the words (useful for synonyms),
  e.g. plays OR drama

- **NOT** excludes a term *(check whether this works with your chosen database)*

We mentioned Boolean operators a moment ago as ways to connect your terms.

**AND** retrieves all the words
**OR** retrieves one or more of the words, which is useful for our synonyms
**NOT** can sometimes be used to exclude terms from a search (check with your database)

In SOLO for example, a ‘simple search’ using keywords will automatically use an AND operator i.e. it will combine your search terms together *(show live demo)*

Advanced Searches on SOLO or databases such as MLA provide a structure for Boolean searching (and also allow you to specify fields for each search term). You can also type Boolean operators into Simple Search as free text however. We’ll look at this in more detail in a moment.
So now to return to our chart.

At the foot of the chart we can see our search terms have been put together with Boolean operators and wildcards to make the most effective search. We’ve used brackets/parentheses to keep each concept separate. We could now copy and paste that search string into SOLO to find books in Oxford on our topic, or into a bibliographic database to find journal articles and other materials.

Using the ideas you noted down a few moments ago about your research question, let’s take 5-10 minutes to fill in this blank chart with your own keywords.
Our search example:

(medieval OR “middle ages”) AND (wom?n OR femin* OR female OR gender) AND (poetry OR writing OR verse OR lyric OR literature)

To refine further:

AND (France OR French OR Francophone)

So, now we all have our search terms. Using our example to start with, what happens when we try this search in MLA?

We get over 5,000 results, which is far too many! What do we do now? There are two choices. We can return to our search, and refine it further. For example, we might be particularly interested in medieval women in Europe, or a specific country. We could add that in to our search. Let’s try this.

So we can see that this narrows our search down considerably, but still 1,693 results are still too many...

Another option for refining your search is to use the left-hand menu filters. For example, refining by date range if you only want to read the latest scholarship on this topic, or choosing only journal articles. Let’s take a closer look.
Another useful way to check for relevant keywords or terms for your topic is the “one good record” method. This is where you choose a relevant looking record from your results list.

When we click on the title, we see the full record including the subject headings. The highlighted ones are those that we had included in our search. Looking at the record in detail gives us an idea of how we can be more specific about a search. For example, we now know that ‘poetry’ can be searched as a literary genre, and that the Medieval period can also be specified. They are also using the term ‘female discourse’, which we might want to adopt in our search.

Just be aware that if you are interested in pre-1981 scholarship, the records won’t necessarily be as detailed as this.

So, how to put this advanced search into practice using terms from the MLA Thesaurus?
Using the advanced search, if we are more specific about which fields we want to search using the drop-down boxes, a ‘Look up’ link will appear which lets us choose terms from the MLA controlled vocabulary. Use the guide at the link shown for more help about the kinds of terms included in each field.

This method will help to focus our search more accurately.

Explore the different look up links on the MLA database yourself.

Get help at http://proquest.libguides.com/mla/fields
Evaluation
In order to assess how effective the search was, ask yourself:

- Did I get all the information I expected and need?
- Is there any information I missed?
- Is there any information I did not expect and need to exclude?
- Should I revise my search terms?
- Should I use a different database?
- Have I got enough?

Searching is an iterative process, so be prepared to change your search terms as you learn from the results.

Now you’ve started searching and are probably getting lots of interesting results – or not!

How do you evaluate your findings?

When you are assessing how effective a search was, ask yourself some of the questions above.

Don’t be afraid if you don’t get great results the first time round. Searching is an iterative process, so don’t worry if you have to modify your search terms if you have too few or too many results, or if the results you get don’t look that relevant in the beginning.

To find different databases for your research, look at the databases for your subject on the A-Z listing, or the LibGuide for your subject, or contact your subject librarian for advice.
So we’ve now covered some of the important things to think about when beginning to research a topic, and we’ve explored the MLA database a little. However, there is always more to learn so don’t be afraid of setting aside some time to look at the database Help sections or the MLA LibGuide.

When you explore further afield make sure you are critical when it comes to choosing a source. What does it cover? Is it up to date? How is the content curated? Being aware of what you are searching will make you more effective and able to analyse your results.
Finally...

Whether you’re taking notes or looking at your results from a database search, don’t assume you’ll remember where you read something! Get into good practice with note-taking and record-keeping, for example by emailing citations to yourself (show how to do this on MLA) or saving them to a USB stick.

You can also use reference management software if you wish – there are advantages as it allows you to manage citation styles very easily. There are courses available at IT services and via the iSkills programme, as well as a LibGuide with lots of information on the different options and how to use them. [http://libguides.bodleian.ox.ac.uk/reference-management](http://libguides.bodleian.ox.ac.uk/reference-management)

Very importantly – always back up your work! Use a USB stick or save your work to Google Drive, Dropbox or other cloud storage. You can also investigate back-up options offered by the IT Services. This will save you from a crisis if your laptop stops working at that crucial moment.