Master of Construction Management &
Master of Engineering Project Management

Library research skills and resources

Goals for today's session:

- Awareness of the services and resources available to you
- Identifying good information sources
- Effective searching for relevant information
- Overview of the tools/databases
- Effective information management & referencing

The Library website – useful pages:

- Referencing and APA
- Workshops
- Get items from other libraries (InterLibrary Loan) – ArticleReach

Information sources

Understand the context of your research. Review work previous done on your subject. Use credible and reliable sources!
Evaluate the information you find.

**Is it reliable (check the author/publisher), up-to-date and on topic?**

Peer-reviewed journal articles are essential for academic research. They provide:

- Authoritative
- High quality/robust methodology
- Indexed in specialist databases
- Up to date
- International comparison

**Search strategies**

Some problems when searching for information:

- Not finding enough information
- Getting too many results
- Finding information that is not on topic

**Develop a strategy**

- Identify keywords and concepts
- Use search techniques and database features
- Use Boolean operators
- Search appropriate subject databases
- Manage your results - keep a record of where you searched and the keywords

**Keywords and concepts**

- List keywords
- Find synonyms or similar terms for the same thing

**Example**

<table>
<thead>
<tr>
<th>Procurement</th>
<th>Construction</th>
<th>Project management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchasing</td>
<td>Building</td>
<td>Planning</td>
</tr>
<tr>
<td>Payments</td>
<td></td>
<td>Estimating</td>
</tr>
<tr>
<td>Costs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Truncation** – procure* for procure, procures, procurement

**Phrase search** - “project management” to ensure two or more words are searched together
Boolean searching – use connectors to join terms together

1. (Procure* OR purchas*) - search results contain all hits for procure* or purchas*
2. (construction OR building) – search results contain all hits with construction OR building
3. (“project management” OR planning) – search results contain all hits with “project management” or building

Put them together with AND to get hits with all three sets.

(Procure* OR purchas*) AND (construction OR building) AND (“project management” OR planning)

<table>
<thead>
<tr>
<th>AND</th>
<th>Use AND to search for articles that contain both your terms. Using AND narrows your search.</th>
</tr>
</thead>
<tbody>
<tr>
<td>OR</td>
<td>Use OR to look for articles that contain one or both search terms. Using OR broadens your search.</td>
</tr>
</tbody>
</table>

**Activity:** Note down some search terms you might use for the topic you are considering for your project.

**Searching:**

Try different databases and search engines to find the best tool. You may want to record your searches as you go.

<table>
<thead>
<tr>
<th>Database</th>
<th>Search</th>
<th>Number of results</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Library Search – scholarly articles from 2015</td>
<td>(Procure* OR purchas*) AND (construction OR building) AND (“project management” OR planning)</td>
<td>89,761</td>
<td>Information in Business Source Complete, Taylor &amp; Francis, Emerald Need to narrow search – date, keywords</td>
</tr>
<tr>
<td>Business Source Complete – Scholarly articles from 2015</td>
<td>(Procure* OR purchas*) AND (construction OR building) AND (“project management” OR planning)</td>
<td>319</td>
<td>Check keywords in thesaurus for more terms.</td>
</tr>
<tr>
<td>Scopus – articles from 2015</td>
<td>Using guided search: Procure* OR purchas* Construction OR building “project management” OR planning</td>
<td>842 Narrowed to 213</td>
<td>Check keywords. Focus research – add keywords e.g. cost …</td>
</tr>
</tbody>
</table>
Check the Library guide to see which databases might be useful:  
https://aut.ac.nz.libguides.com/engineering_masters

**Library Search**  
Try Library Search and narrow your results. This will give you an idea of which databases might be useful for your searches.

- Limit your results to **scholarly (peer reviewed) journals**.
- Download articles or select and email them to yourself.

**Google Scholar**  
Go to Google Scholar from the **Library website** to ensure you can access full text for free.

**Scopus**  
Scopus is an indexed database of peer-reviewed research. Use Scopus to find quality articles.

Do a search and use the ‘Refine’ features particularly ‘Keyword’.

**Business Source Complete**  
This database is good for a business perspective.

Check their thesaurus for terms.

**New Zealand Information**  
- BRANZ Find and BRANZ website
- Australia/New Zealand Reference Centre
- INNZ (Index New Zealand)

**Information not available from a Library database**  
Use ArticleReach https://library.aut.ac.nz/how-to-library/get-items-from-other-libraries
Or contact your Librarian Anna Matich anna.matich@aut.ac.nz
Manage your information

For a literature review it is helpful to keep a record of the good articles you want to use. This will provide a quick guide when you are writing.

Example

<table>
<thead>
<tr>
<th>Article</th>
<th>Database/location</th>
<th>Topic</th>
<th>Page no.</th>
</tr>
</thead>
</table>

How to prepare a literature review and reading grid [https://library.aut.ac.nz/doing-assignments/literature-reviews](https://library.aut.ac.nz/doing-assignments/literature-reviews) and [https://library.aut.ac.nz/doing-assignments/reports](https://library.aut.ac.nz/doing-assignments/reports).

You can also use a reference manage such as **EndNote** (attend a workshop).


Activity: Try some searches in Library Search or a specific database.

Questions?

*Help*

Contact if you would like to meet - Anna Matich anna.matich@aut.ac.nz