Join at

Or

Search Vevox in the app store

ID: 178-027-878
Individual Projects: effective literature searching

Fiona Nichols – Engineering

October 2019
This session will help you

- Start thinking about how to approach your research
- Choose the right resources
- Get the best results
- Identify good quality information
- Understand why you must reference, using software if necessary
ALL stand up

• Who just uses Wikipedia and/or Google?
• Who also uses Google Scholar?
• What else do you use?
There’s lots of information out there..

How do you decide which information is the best for your project?
Who uses Google?
Search Electric vehicles

Fully Charged Vehicles Ltd - EV Cables To Recharge Your Car
https://www.fullychargedvehicles.com
Ad: Passionate about providing high-quality EV cables at a value for money price. We pride ourselves on our customer service. Your satisfaction is our future.

smart EQ fortwo & forfour - Emission-Free Urban Driving
https://www.smart.com/smart_eq_fortwo&forfour
Ad: smart EQ fortwo & forfour, Road-Tax Free & Fun To Drive. Book Your Test Drive. Images shown throughout are a general indication of the model and therefore some ...
Models: smart EQ fortwo, smart EQ forfour Cabrio, smart EQ fortwo Coupe, smart EQ forfour

Audi e-tron - 100% electric. 100% Audi
https://www.audi.co.uk/e-tron
Ad: The first-ever all-electric car from Audi. Find a Centre to order now. A new fully electric car from Audi which can be 80% charged in under 30 minutes.

Hyundai Electric Vehicles - Browse The Range Online
https://www.hyundai.co.uk/vehicles/electric
Ad: Fully Charged Vehicles Ltd - EV Cables To Recharge Your Car
Who uses Google Scholar?
What makes a good source?

- A Facebook Page?
- Someone’s Blog?
- A company website?
- A Newspaper Article?
- A magazine?
- A trade journal?
- A talk presented at a conference?
- A wikipedia page?
- A scholarly journal paper?
- An open source pre-print journal paper?

Credit: Prof Hugh Davis http://edshare.soton.ac.uk/19035/
Which of the examples from the previous slide make a good academic source?

- Go to vevox.app
- Enter the 9-digit Meeting ID – 178-027-878
- Click Join
What makes a good source?
What are the next steps?

• Use quality academic sources

• Search them well
A great resource!

LibGuides@Southampton
- library.soton.ac.uk

Your Subject Guide
- library.soton.ac.uk/engineering
Key Subject Resources

These are the key databases we recommend that you use, a more complete list is available from our Engineering Databases and Key Journals page. You may also find the listing of Science and Engineering Datasets useful. All electronic resources can be accessed off-campus through the Southampton Virtual Environment (SVE).

- **Compendex**
  A large and interdisciplinary engineering information database with coverage from 1969.

- **INSPEC**
  A leading database in the fields of physics, electronics and electrical engineering, computers and control, and information technology. It contains abstracts of articles from over 3000 journals, as well as conference proceedings, books, technical reports and dissertations. Coverage: 1960 to date.

- **Web of Science Core Collection**
  Provides references, and in many cases abstracts, for peer-reviewed scholarly journal articles in the sciences, social sciences, arts and humanities. Includes the Science Citation Index Expanded (1970-present), Social Sciences Citation Index (1970-present) and Arts & Humanities Citation Index (1975-present). Also provides citation data and references to books and conference papers. Click on the Full
SCHOLARLY Databases

Key engineering databases include:

• Compendex  ) Engineering
• INSPEC  ) Village
• Web of Science Core Collection

Specialist databases include:

• Transport (Civil Engineering)
• Medline (for Audiology, Acoustics & BioMed Information)

and more
Why databases?

Because they

• link to quality, up to date information from peer reviewed publications such as journal articles, conference papers & reports
• are usually well indexed enabling you to search in detail
• contain abstracts summarising the articles retrieved
• often link directly to the full text if it is available electronically
• includes journals we don’t buy
• reference citation not full text (often linking features)
SEARCHING Databases:
Get the best results

- Topic or subject searches
  - keywords or phrases
  - controlled indexing (thesaurus) terms
- Author & title searches
- Citation searching
  and more
SEARCH Terms

Thinking of ‘good’ terms to put in a search engine is a skill!

Think about..

• Keywords
• Synonyms
• Alternative spellings
• Phrases
• Common abbreviations

Credit: Prof Hugh Davis  http://edshare.soton.ac.uk/19035/
SEARCH TIPS 1: The basics

Start simple – with a few keywords

– Then look at the results – do you need?:
  • fewer results – be more specific
  • more results - broaden your search
  • more manageable numbers – restrict by date or publication
– N.B. aim for about 50-150 results
SEARCH TIPS 2: keywords and concepts

Fuel cells for use in electric cars

VEVOX.app ID 178-027-878

• Identify the main concepts
• List alternative phrases and concepts
What terms and concepts would you use when searching for information on 'Fuel cells in electric cars'?
SEARCH TIPS 2: keywords and concepts

Fuel cells for use in electric cars

• Identify the main concepts
  – e.g. fuel cell, electric, cars

• List alternative phrases and keywords
  – Fuel cells > batteries
  – Electric > hybrid
  – Cars > automobile
SEARCH TIPS 3: refining your search

- Use Boolean operators to combine search terms
  - AND, OR, NOT

- Use truncation, stemming and wild cards
  - e.g. electron *
  - Symbols vary

- Use exact phrases
  - e.g. graphical user interface

- Enclose exact phrases in quotation marks in some cases
  - Enclose in quotes “black body radiation”
SEARCH TIPS : using AND and/or OR

- sweets OR candy
- sours OR jellies

use AND to combine
(sweets or candy) AND (sours or jelli*)

http://www.flickr.com/photos/dexter_mixwith/102314068/sizes/o/in/pool-76097337@N00/
SEARCHING: refining your search

• Re-run your new search with the revised concepts and keywords

• Or narrow your search using the Refine options on the search screen
Library Online Training

Search strategies
Allow approximately 16 minutes to complete this learning activity.
By the end of this activity you should be able to:

- explain what a search strategy is
- identify key concepts and key words in a search question
- use search tools and techniques, such as Boolean operators, phrase searching, and wildcards

Was this training useful to your studies?

Go to

- library.soton.ac.uk/online-skills
- Select ‘Search Strategies’
Advanced searching techniques include

• Author search
• Controlled vocabulary
• Search history
• Saving searches
Searching by author

• Useful for key authors in a field
• Follow database instructions for input format eg Richards D * (very important)
• For common names, limit by address or topic (Hint: ‘search’ for University of Southampton – change to address in index)
Citation Searching - WoS Core Collection & Scopus

Earlier articles

More recent articles

Key paper

Articles referenced in key paper

Articles referencing key paper
Advanced online training
library.soton.ac.uk/online-skills-advanced

Advanced online training: Improve your searching skills
Throughout this course we will show you how to use more advanced library resources and improve your searching skills to support your studies and research.

Advanced searching strategies - getting the best out of databases
Improve your database searching skills by using more advanced options such as thesaurus searching, citation searching, setting up alerts and saving searches.

**Subject Headings**
Subject Headings Searching uses a ‘controlled vocabulary’ also known as MeSH Headings (Medical Subject Headings) or Thesaurus Searching, these headings are applied consistently which means that once you have identified the correct thesaurus term you do not need to consider synonyms, different word endings or alternative spellings. Follow our Subject/Thesaurus searching tutorial.
SPECIALIST Online Resources

Technical information
http://library.soton.ac.uk/techinfo

- ESDU Data: provides essential design and analysis methods and guides, data and software tools to help solve complex engineering problems
- Standards
  - British Standards Online (BS / some ISO, IEC, etc.)
  - IEEEXplore
- NASA
Managing the material AND your time!

MARK, EXPORT, RECORD

• Use search histories to keep a record of the searches done:
  – i.e. the databases searched and which keywords and concepts used/combined
• Many databases have a ‘marked record’ facility or similar
• Add useful articles to a marked/selected records area to …
  – print out or e-mail to yourself a list of these articles
  – export to bibliographic software like EndNote, Bibtex or Mendeley
• Reference consistently and with the system recommended by your Department
• Download relevant material (ensuring you comply with copyright)
RECORD your searches

Why?

• To clarify with supervisor you are ‘on the right track’
• Acting with Academic Integrity
  – acknowledging the work of others
  – enable others to trace your line of research
• Avoid Plagiarism
  “Evidence of plagiarism will result in a mark of 0%”
Engineering: Skills for Success

Assignment Planner

Just got an assignment? Not sure how to start? This Assignment Planner is a step-by-step guide to help you plan, organise and find the resources you need to complete your assignment. You can save your work and return to the planner at any time. Please provide feedback or let us know if you have any questions.

Citing and Referencing

Your department will recommend which citing and referencing style you should use.

Use the Citing and Referencing guide to find out how to reference resources and which referencing style you should be using. There is also guidance on the different types of reference management software available to help you choose the right tool for you.

http://library.soton.ac.uk/engineering/ - Skills for Success tab

Academic Skills Hub

The Academic Skills Hub is located on Level 2 in the Hartley Library, room 2045. The drop-in service provides face to face support to help you develop any area of study skills where you feel you need help.

Drop in Monday to Friday, 10:00 to 12:00 and 14:00 to 16:00, for guidance and advice about:

- Academic skills
- Critical thinking
- Academic integrity
- Information management
- Presentation skills
- Exam techniques
- Research skills
Building a reference

• Do you have all the necessary information?
  – Names of authors
  – Title of work
  – Title of journal/proceedings
  – Volume/issue number (if it’s a journal article)
  – Page range
  – Year of publication

• What sort of thing are you referencing?
  – Different rules for books, journal articles, etc

Using a reference management system will do this for you and make your life easier!
It’s important to reference when?

- you paraphrase or summarise the work of others
- you quote another person’s work
- you discuss or analyse the work of others
Paraphrasing and summarising

• Paraphrasing – reading and understanding another person’s work and then conveying the content and meaning in your own words

• Summarising – drawing out the key points or main arguments of the original text, significantly reducing its length
Hints and tips!

1. If you are using a different referencing style these references would look different

2. Check what is your supervisors preferred referencing style

3. Do not mix styles
More help can be found at …

Library Online Training http://library.soton.ac.uk/online-skills
Setting you on the road to success.
Academic Skills Hub

Information and guidance on:
- Academic integrity
- Exam preparation
- Presentation skills
- Academic writing
- Critical thinking
- Referencing

Drop in at the Hartley Library
No appointments necessary!
Open Mon-Fri
1000-1200 & 1400-1600

Go to: library.soton.ac.uk/sash
Recap Quiz

• VEVOX.app 178-027-878
• Why do we use journal articles?
• Which referencing styles are used in engineering?
Why do we use journal articles?

1. Keeps you up to date with research published in wider world
   - 0%

2. Good for general out of date information
   - 0%

3. Can be found easily using Google Scholar
   - 0%

4. Easy to cut and paste information
   - 0%
Which referencing styles are used in Engineering?

Vote for up to 2 choices

1. Oscola 0%
2. IEEEXplore 0%
3. APA 0%
4. Harvard 0%

(% = Percentage of Voters)
Workshops 8th – 10th October

Week 2

• Monday 7th @ 1600 hrs. 25/1009
• Monday 7th @ 1700 hrs 25/1009
• Tuesday 8th @ 9.00 a.m. 44/1061
• Tuesday 8th @ 1300 hrs 25/1009
• Thursday 10th @ 1500 hrs 25/1009
• Thursday 10th @ 1600 hrs 25/1009

SEE YOU THERE!
BEFORE the workshop ..

1. Listen to this online activity
http://library.soton.ac.uk/online-skills

BRING to the workshop

2. Identify your key words & concepts
3. Think about your search strategy

DON’T FORGET THE FEEDBACK!
Get Help…

- Email: libenqs@soton.ac.uk
- Go to your subject pages: library.soton.ac.uk/fee
- Ask at library help desks
- Live chat
Are you able to…

- find the best print and electronic resources including subject databases on the library website

- implement effective techniques for searching these resources

- know how to evaluate the information found

- Identify good quality information

- know why to reference, using software if necessary Identify subject resources and key Library services available on LibGuides@Southampton
YOUR QUESTIONS