Staying ‘up-to-date’ with the literature: tips and tricks

Jo Simons & Simon Esling
Te Tumu Herenga - Libraries and Learning Services
Discuss

- Introduce yourself to your neighbours
- What are you researching?
- Are you having any challenges with your literature searching?
Why is keeping up to date with the literature a challenge?
Survey - what are you interested in hearing about?

- Journal Alerts - Table of Contents
- Database Alerts - searches, authors, papers
- Building a good search - advanced searches
- Browser tools - Unpaywall, Kopernio
- Social Media as a literature source
- Grey literature - reports, conferences, theses
- Keeping track of what you read

https://tinyurl.com/yyj2rcbh
Journal Alerts - Table of Contents

- Individual journals
- JournalTOC http://www.journaltocs.ac.uk/
- Finding core journals
  - supervisors/collaborators
  - subject guides
  - oxford bibliographies
1. **Daily briefing: 10 great things about being an academic**
2. **Germany’s prestigious Max Planck Society conducts huge bullying survey**
3. **Biased data undermine an iconic weather record**
4. **Soviet Union’s collapse led to massive drop in carbon emissions**

**Nature**
ISSN (Print): 0028-0836 - ISSN (Online): 1476-4687

(Abstract Only)
(14 new articles)
Subject guides

Subject guides provide curated resources to support research in your discipline

www.library.auckland.ac.nz/guides

Book a consultation with a Research Services Adviser

For more assistance you can book a consultation with a Research Services Adviser from Libraries and Learning Services:

www.library.auckland.ac.nz/ask-us/
Building a good search - advanced searches
Research topic: Environmental impact of refuse dumps in Auckland
**Research topic:** Environmental impact of refuse dumps in Auckland

<table>
<thead>
<tr>
<th></th>
<th>Topic 1</th>
<th>Topic 2</th>
<th>Topic 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Keywords</strong></td>
<td>Environmental impact</td>
<td>refuse dumps</td>
<td>Auckland</td>
</tr>
<tr>
<td><strong>Synonyms</strong></td>
<td>Effect</td>
<td>rubbish dump</td>
<td>New Zealand</td>
</tr>
<tr>
<td></td>
<td>Influence</td>
<td>waste dump</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>waste tip</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>landfill</td>
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</tbody>
</table>
Where can I find synonyms?

- Use a thesaurus see: Dictionaries and encyclopedias and discipline-specific dictionaries in subject guides
- Scan keywords, titles and abstracts from journal articles
- View controlled vocabularies or subject headings in databases e.g. tags/umbrella terms assigned to articles by database curators*
  - MeSH (Links to an external site.) (Medical Subject Headings) - the controlled vocabulary thesaurus used for indexing articles for PubMed.

*Not all databases use subject headings.
Narrow your search

- **Add an additional search term**
  e.g. environmental impact landfill *waterways*

- **Include a population or a location**
  e.g. adolescents, Auckland

- **Phrases**
  e.g. “rubbish dump”

- **Boolean search combinations**
  e.g. AND, OR, NOT

- **Using database filters**
  e.g. year, document type (book, journal article, review, etc), author
Broaden your search

1. **Check your spelling**
2. **Truncation or wildcard**
e.g. environ* = environmental, environmentally, environs, environment...
3. **Using synonyms** and **Boolean operator OR**
e.g. rubbish dumps or landfill
4. **Using broader search terms** e.g. allergy instead of peanut allergy or **try a different population**
e.g. Australia rather than New Zealand
5. **Using subject headings** (or controlled vocabularies)
6. **Removing the least important concept**
e.g. Auckland rubbish dumps
7. **Try a different database**
Database Alerts - searches

Who has already built a search strategy they are happy with?

- EBSCO
- Scopus
- Library catalogue
- Discipline-specific databases - Engineering Village, compendex and GeoBASE
- GoogleScholar
McLean, Cameron A.  

University of Auckland, Liggins Institute, Auckland, New Zealand  

Author ID: 82361370900  

http://orcid.org/0000-0002-9836-3824  

Subject areas: Biochemistry, Genetics and Molecular Biology, Medicine, Agricultural and Biological Sciences, Veterinary  

Get citation alerts  

10 Documents  Cited by 1120 documents  44 co-authors  Author history  Topics
Stratigraphy and sedimentology of the Orakei maar lake sediment sequence (Auckland Volcanic Field, New Zealand)

Abstract

Global paleo-climate reconstructions are largely based on observations from the Northern Hemisphere despite increasing recognition of the importance of the Southern Hemisphere mid-latitudes for understanding the drivers of the global climate system. Unfortunately, the required complete and high-resolution terrestrial records from the Southern Hemisphere mid-latitudes are few. However, the maar lakes in the Auckland Volcanic Field (AVF), New Zealand, are crucial in this regard as they form outstanding depositional basins due to their small surface-to-depth ratio, restricted catchment, and absence of ice cover since their formation, hence ensuring continuous sedimentation with anoxic bottom water. Significantly, the estimated age of the AVF of ca. 250 ka may allow development of a continuous sediment record spanning the last two glacial cycles. The Orakei maar lake sediment sequence examined in this study spans the Last Glacial Cycle (ca. 126 ka to ca. 9.5 ka cal BP) from the phreatomagmatic eruption to the crater rim breach due to post-glacial sea-level rise. Two overlapping cores of >100 m sediment were retrieved and combined to develop a complete composite stratigraphy that is presently undergoing a wide range of multi-proxy analyses. © Author(s) 2019.

Indexed keywords

Engineering controlled terms: Catchments, Glacial geology, Lakes, Sea level, Stratigraphy, Volcanoes
The Catalogue

Access the Catalogue

To quickly access databases, go to the Libraries and Learning Services homepage and click on The Catalogue button.

Or bookmark: https://catalogue.library.auckland.ac.nz/
Browser tools

Unpaywall

https://unpaywall.org/

Kopernio

https://kopernio.com/
Unpaywall - browser extension

Access millions of research articles, instantly.

Unpaywall users read 52% of research papers for free. Here's how: when you browse to a paywalled paper, we check to see if there's a free copy in our database. If there is, you'll see a green tab on your screen... just click, and read!
Social Media as a literature source

Where are your research communities?

- Twitter
- Facebook
- LinkedIn
- ResearchGate

Image by Austin Chan via Unsplash.com
@EnvUoA @ScienceUoA PhD student Megan Tuck built reef island shaped sand castles in a wave flume and exposed them to SLR and storm waves. First paper now out in @geosociety Geology.
pubs.geoscienceworld.org/gsa/geology/ar...
Grey literature - reports, conferences, theses

Why do we care about grey literature?

Created by Gia Hai from Noun Project

Created by Luca Fruzza from Noun Project
Where do you find grey literature?

- Australia/New Zealand Reference Centre - local newspapers
- Government websites
- Thesis repositories
- NGO websites

Image by Daniel Cheung via Unsplash.com
OpenDOAR

http://v2.sherpa.ac.uk/opendoar/search.html
Keeping track of what you read

- Reference management tools
- Reading templates

Image by Samuel Zeller via Unsplash.com
Reference management tools

Things to consider:

- What is your supervisor using?
- What tools do your colleagues use or recommend?
- Will you be working from different computers or locations?
- Do you need to share citations with others (e.g. collaborators)?
- Do collaborators have access to the same tools?
- Will you have internet access?
- How easy is the tool to use?
- What support is available?
Discuss

- Are you using a reference management tool?
- Which one? Would you recommend it? Why?
Develop your own organisation systems

Articles

- Use folders to organise articles into themes
- Tag articles with keywords (in your reference management tool)
- Use consistent file naming for articles (e.g. author_date_title)
- Schedule time in your calendar to read articles and attached the article to the appointment.
Develop your own organisation systems

Notes

- Notes section in Reference Management systems
- Annotate pdfs (make sure you can easily extract this information)
- Add notes to a document covering different themes/topics/concepts
- Add notes to summary tables (see examples)
Reading/critical appraisal tools

Develop your own questions/template that work for your research. Some examples below:

- [Critical Appraisal Skills Programme (CASP) Checklists](https://casp-uk.net/casp-tools-checklists/)
- [How to read a scientific article](#)
- [Critical Appraisal of Scientific Articles: Part 1 of a Series on Evaluation of Scientific Publications](#)
- [How to read critically](In: Postgraduate Research in Business by Sarah Quinton & Teresa Smallbone (2011))
<table>
<thead>
<tr>
<th>Author and publication details: (including link)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author(s)' affiliation:</td>
</tr>
<tr>
<td>Funding and conflict of interest:</td>
</tr>
<tr>
<td>Keywords:</td>
</tr>
<tr>
<td>Summary of the work:</td>
</tr>
<tr>
<td>(A short statement of the author's viewpoint, a summary of the methodology/ theory, research findings or argument)</td>
</tr>
<tr>
<td>Relevance- how is this related to my research?</td>
</tr>
<tr>
<td>My comments/ opinion/ evaluation:</td>
</tr>
<tr>
<td>(Agree/ disagree, holes or limitations in this article/work/method, etc.)</td>
</tr>
<tr>
<td>Do any other author(s)/pieces of work have the same opinion as me?</td>
</tr>
<tr>
<td>What other questions has this reading stimulated?</td>
</tr>
<tr>
<td>Research gaps if identified by the author(s):</td>
</tr>
<tr>
<td>What is the one point I remember from reading this?</td>
</tr>
<tr>
<td>Corresponding author and email</td>
</tr>
</tbody>
</table>

Author: Jeevan Karki adapted from ‘reading notes record sheet’ of IAD, University of Edinburgh, retrieved from http://www.docs.hss.ed.ac.uk/iad/Student_resources/Reading/IAD_Reading_notes_record_sheet_CC_2018.pdf
## Example table 1

<table>
<thead>
<tr>
<th>Themes in research about PhD students</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humbug et al (2009)</td>
<td></td>
</tr>
<tr>
<td>Mewburn (2012)</td>
<td></td>
</tr>
<tr>
<td>Whatisname (2013)</td>
<td></td>
</tr>
</tbody>
</table>

### Themes/concepts

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Reasons for undertaking a higher degree</td>
<td>Argues that this varies by discipline</td>
<td>Argues that there is a clear gender division in the discipline enrolments - but older people less so</td>
<td>Doesn’t mention this – many people don’t actually. Is this a problem with the literature?</td>
</tr>
<tr>
<td>Completion rates</td>
<td>Shows that men drop out more than women in almost all disciplines.</td>
<td>Shows that older people who are enrolled part time are more persistent than those who enrol part time</td>
<td>Shows that attrition varies by institution and that the richer institutions lose less students</td>
</tr>
<tr>
<td>Social learning in PhD student communities</td>
<td>Doesn’t mention this</td>
<td>Shows examples of conversations to show that older people have more complex discussions about “meta” issues in PhD study than younger students</td>
<td>Suggests the community in richer institutions is better than that in poorer institutions.</td>
</tr>
<tr>
<td>Relationships with supervisor - how important is it?</td>
<td>Argues that the relationship with supervisor is a key determinant of success</td>
<td>Argues that older people deal with poor supervision better than younger people</td>
<td>Suggests that poorer institutions have a ‘younger supervisor profile’</td>
</tr>
</tbody>
</table>

Dr. Inger Mewburn (the Thesis Whisperer). [Using a matrix to organise your notes](#).
## Example table 2

<table>
<thead>
<tr>
<th>Article</th>
<th>Key findings / arguments</th>
<th>Supporting Evidence / Sample characteristics / Methods</th>
<th>Strengths / Limitations</th>
<th>Significance / implications</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Research Question:</strong> How does team social cohesion / integration impact team performance?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Harrison et al. (2002) *Academy of Management Journal*, Vol. 45, No. 5, 1029-1045 | • team social integration was a strong predictor of team performance  
• social integration developed through frequent collaboration | • Tracked 144 university student teams in the business faculty over 9-14 week projects. Median team size was 4. | • Useful study if considering new teams.  
• Only studied team performance over the short time frame of a semester project, new issues may arise for longstanding teams.  
• Results for student teams may not carry over to workplace teams [because ...] | • Social cohesion important but teams need to collaborate frequently to develop. |
| Sethi et al. (2002) *Harvard Business Review*, August 2002, 16-17 | • Found that too much social cohesion among team members can reduce innovativeness because team members worry more about maintaining relationships instead of having the robust debates needed for innovation | • Studied new product development teams consisting of members from diverse functional areas such as marketing, manufacturing, product development, sales, purchasing, finance.  
• Teams had from 2 – 11 functional areas represented. | • Only surveyed the managers of the teams “after-the-event” so all the potential problems of report bias might apply and managers’ views might differ from team members’ views. | • One of few studies which don’t just look at newly formed teams and so one of few studies which identifies the limitations of social cohesion when it gets too high. |
| Uzzi and Spiro (2005) *American Journal of Sociology*, Volume 111 Number 2 (September 2005): 447-504 | • New teams and teams with no new members had less box office success than teams with a mixture of “old hands” and “new blood”. | • Studied a large number of Broadway Musical teams. | • Clear measure of team success: how well musical performed at box office.  
• All teams with a mixture of old and new members arose naturally, so doesn’t answer question of how a well-established team will respond if “forced” by management to change some personnel. | • Supports findings of other research that some social cohesion is important but that too much is counter-productive.  
• Suggests some turnover of team members is needed to keep teams performing at their best. |

Example table 3

<table>
<thead>
<tr>
<th>Source: Authors, title, journal, link, etc...</th>
<th>Theme/concept/keywords:</th>
<th>Current treatments targeting eNOS function e.g. L-arginine</th>
<th>Meanings: Physiology/biology Relation to field</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schulman et al; L-Arginine therapy in acute myocardial infarction. JAMA</td>
<td>Year</td>
<td>Purpose (Aim or research question)</td>
<td>Methods</td>
</tr>
<tr>
<td></td>
<td>2006</td>
<td>Does addition of L-arginine reduce vascular stiffness over 6 months in patients after myocardial infarctions?</td>
<td>Randomised, controlled trial, double blind, n = 153</td>
</tr>
<tr>
<td>Wilson et al; L-arginine supplementation in peripheral arterial disease, Circulation 116:188-195</td>
<td>2007</td>
<td>In PAD patients, determine whether supplementation with L-arginine enhances vascular reactivity and functional capacity.</td>
<td>Randomised, placebo controlled N = 133 Oral L-arg (3 g/d) for 6 months</td>
</tr>
</tbody>
</table>

https://flexiblelearning.auckland.ac.nz/biomed-lit-review/4_1.html#3_1
Write notes under themes/concepts

Theme or question: What are the current treatments targeting eNOS function?

Example of a current treatment: L-arginine


- **Aims/Purpose** - Study investigated whether addition of L-arginine reduces vascular stiffness over 6-months in patients after myocardial infarction.
- **Method** - Randomised controlled trial, double blind, n=153
- **Findings**
  - (1) No improvement in vascular stiffness and (2) possibly increased mortality.
- **Meaning**
  - (1) Lack of dose response, L-arginine levels normal to start with → supplementation may only be useful in those with deficiency.
  - (2) L-arginine possibly harmful due to increase in ROS or increased NOX expression.


- **Aims/Purpose** - Looked at PAD patients and determined whether supplementation with L-argin enhanced vascular reactivity and functional capacity.
- **Method** - Randomised, placebo controlled, n=133, oral L-arg (3 g/d) for 6 months.
- **Findings**
  - Vascular reactivity not improved with long term L-arg supplementation.
  - L-arg less effective than placebo - endothelial function and exercise.
- **Meaning**
  - Long term admin. L-arg → tolerance? Sim. to prolonged adrenalin of NO donors.
  - Short term - useful, but long term possibly harmful
    - Biology → ADMA?