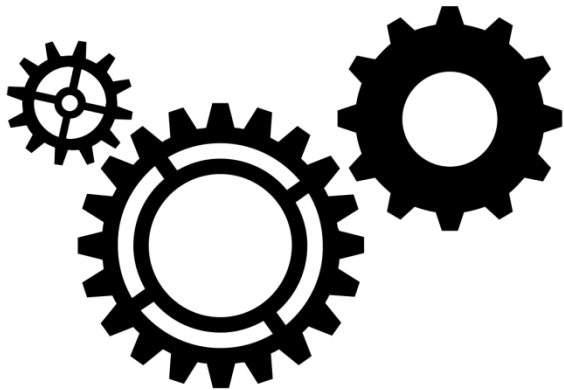
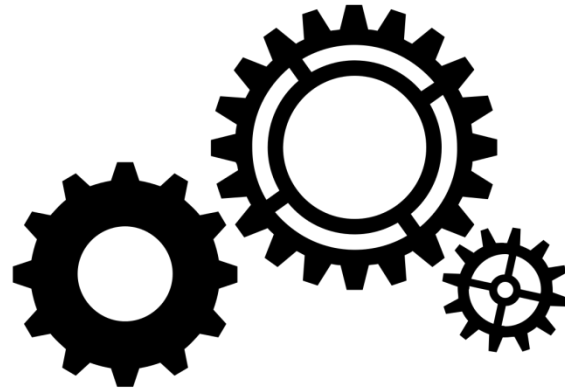


MSE 101W

Break the Google addiction!



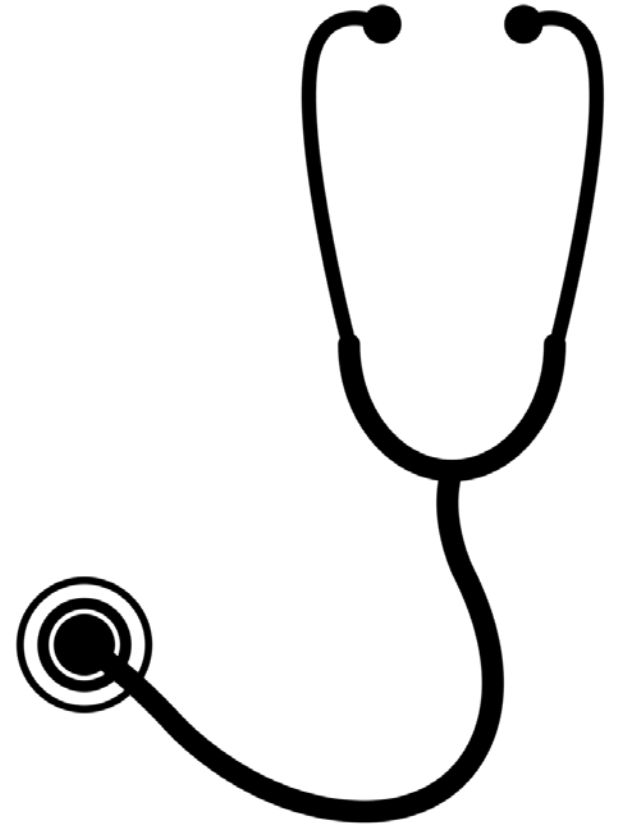
Holly Hendrigan <hah1@sfu.ca>
Applied Sciences Librarian,
SFU Surrey

Checking in

Have you had an SFU Library research session before?

(A) Yes

(B) No



The plan

- New market metaphor
- Information Literacy!
- Real time search mishaps!
- Possible strategy
 - Encyclopedias
 - Books
 - Articles
- Research Don'ts

Fill up your eco-friendly shopping bag with resources from many different vendors



Source: *Vancouver Sun*

Or, the Richmond Night Market



@richmondnightmarket/Instagram



“Google has had the largest influence on undergraduate research habits, so much so that it is the major impediment for them understanding library information structures and engaging with the scholarly literature in a meaningful way.” *(Bloom & Derup, "The SHU Research Logs: Student Online Search Behaviors Trans-scripted")*

Map: MSE 101W guide

Library

A-Z DIRECTORYSIGN INThis siteSFU.ca

FINDHELPBORROWFACILITIESABOUT

Library Search

Mechatronics resources


HomeBooks + articlesBackground informationCiting + writingAdditional resources

[Home](#) / [Help](#) / [Research assistance](#) / [Subject + course](#) / [Mechatronic Systems Engineering](#)

MSE 101W: Library research guide



On this page

- [Academic Encyclopedias](#)
- [Books](#)
- [Articles](#)
- [Search strategies & tips](#)
- [Popular vs. scholarly publications](#)
- [Mini literature review](#)
- [Citing sources](#)

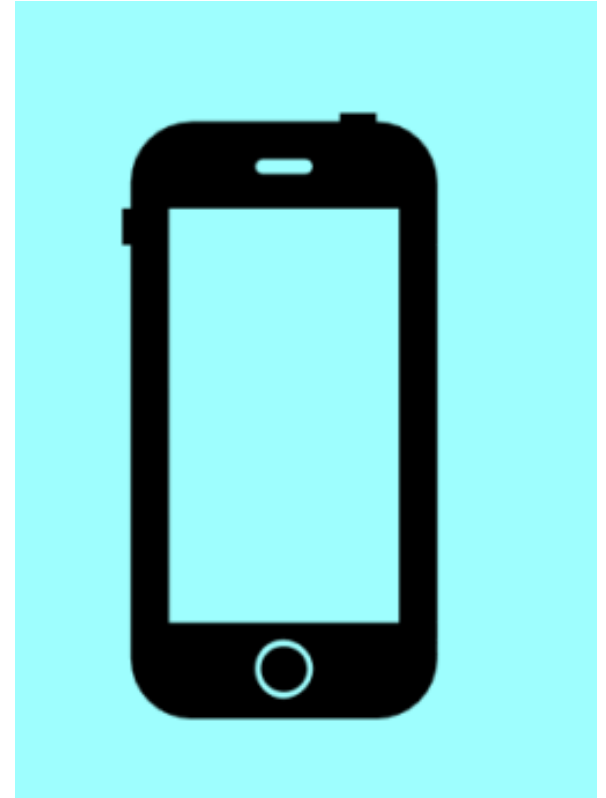


This web page is intended to help you with your MSE 101W assignments. Also refer to the research guides for [Mechatronics](#), [Computing Science](#) and [Engineering Science](#) for general information. Start early so you can get the information and assistance you need.

If you need help, please contact Holly Hendrigan, Liaison Librarian, Faculty of Applied Sciences at 778.782.8023 or holly_hendrigan@sfu.ca or [Ask a librarian](#).

Slides from the [Library Research Workshop](#)  and the session on [Academic Integrity + Citing Sources](#) .

Technology
+
Social / Environmental /
Ethical dimension





Scott Morrison taunted opposition MPs with a lump of coal in 2017

"Don't be afraid. Don't be scared. It won't hurt you. It's coal"

Robinson Meyer, *The Atlantic*, Jan 4, 2020

Australia is caught in a climate spiral. For the past few decades, the arid and affluent country of 25 million has padded out its economy—otherwise dominated by sandy beaches and a bustling service sector—by selling coal to the world. As the East Asian economies have grown, Australia has been all too happy to keep their lights on. ...

But now Australia is buckling under the conditions that its fossil fuels have helped bring about. Perhaps the two biggest kinds of climate calamity happening today have begun to afflict the continent.



The challenge:

How to research this topic for an academic paper

There is not shortage of information on this topic on the open web (ie, doing a Google search).

What is wrong with using Wikipedia, or reputable news sources such as BBC or CBC or The Guardian?

Answer: Because you're in university, and you have (mainly) use **academic sources**

Full explanation lies in the *ACRL Framework for Information Literacy*, which organizes information literacy into 6 knowledge domains, or "Frames."

Frame: Authority is constructed and contextual

Information resources reflect their **creators' expertise and credibility**, and are evaluated based on the information need and the **context** in which the information will be used. Authority is constructed in that various communities may recognize different types of authority. It is contextual in that the information need may help to determine the level of authority required.

Frame: Scholarship as Conversation

Communities of scholars, researchers, or professionals engage in **sustained discourse** with new insights and discoveries occurring over time as a result of varied perspectives and interpretations.

YOU are engaging in the conversation--with your community, who are academics

Which means you have to listen to them (and by listen, I mean read
and cite)



After academics bring you up to speed on the topic, it's your turn you speak up. Join the conversation.

What's your take?

Academic encyclopedias

- Alternative to “foraging”:
chaining strategy
- follow references from one article as a starting point
- often obtained through literature searches or colleagues



“Coal” articles

- *Encyclopedia of Industries*
 - *Encyclopedia of Energy*
 - *Encyclopedia of Climate Change*
 - *Environmental Science*
-
- Currency: be aware of but not main criteria for evaluation
 - Pay attention to **sources**
 - **Your citations=your community**

A Tale of Two Bibliographies: who is cited?

**“Mining, Coal: NAICS
2121”** in *Encyclopedia of
Industries*

“Coal” in *Climate Change: In
Context*


Chaining activity


Reference in bibliography:


Caldeira, Ken. "Climate Sensitivity Uncertainty and the Need for Energy Without CO₂ Emission." *Science* 299 (2003): 2052-2054.

- How do you access?
- Who has cited?

Google Scholar



"Climate Sensitivity Uncertainty and the Need for Energy Without CO2 Emiss"

 Articles

Any time

Since 2020

Since 2019


Since 2016

Custom range...

Sort by relevance

Sort by date

☒ include patents

Climate sensitivity uncertainty and the need for energy without CO2 emission
[K Caldeira](#), [AK Jain](#), MI Hoffert - Science, 2003 - science.sciencemag.org
The UN Framework Convention on Climate Change calls for "stabilization of greenhouse gas concentrations at a level that would prevent dangerous anthropogenic interference with the climate system." Even if we could determine a "safe" level of interference in the climate system, the sensitivity of global mean temperature to increasing atmospheric CO 2 is known perhaps only to a factor of three or less. Here we show how a factor of three uncertainty in climate sensitivity introduces even greater uncertainty in allowable increases in atmospheric ...
☆  Cited by 334 [Related articles](#) [All 16 versions](#) [Web of Science: 170](#)

Showing the best result for this search. [See all results](#)

Books / Library catalogue

- Allow you to continue defining and refining your topic
 - Provide historical context
 - Provides useful bibliographies
-
- Library catalogue records: provide subject headings

Top links

[Renew items / My library account](#)[Article databases](#)[Citation + style guides](#)[Group study rooms](#)[Course reserves](#)[A-Z journals list](#)[Ask a librarian](#)

Hours

[more →](#)

Bennett Library (Burnaby)
OPEN
until 11:45pm

Belzberg Library (Vancouver)
OPEN
until 10:00pm

Fraser Library (Surrey)
OPEN
until 9:00pm

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Search the Library

[Library Search](#)[Catalogue Search](#)

Features



STUDENT
LEARNING
COMMONS

Up your academic game this spring with the SLC

Brush up on your writing, learning and study skills, or English with the Student Learning Commons this spring!

[LEARN MORE →](#)

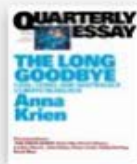
search **coal australia** in Library Search.

5 bizarre results and this book:

The long goodbye : coal, coral and Australia's climate deadlock

What misgivings do you have with citing this book?

But how can we use this book to find something better?



BOOK

The long goodbye : coal, coral and [Australia's](#) climate deadlock / Anna Krien ; correspondents, Anne Aly [and six others].

Anna Krien author Anne Aly contributor.

Carlton, Victoria : Black Inc 2017

[Online access](#) >

TOP

SEND TO

VIEW IT

DETAILS

LINKS

Send to



E-MAIL



PRINT



CITATION



PERMALINK



MENDELEY



ENDNOTE



EXPORT CITATION



EXPORT BIBTEX

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Sign in to get complete results and to request items [Sign in](#)

Full text available at: [Ebook Central Academic Complete](#) [↗](#)

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Public notes:

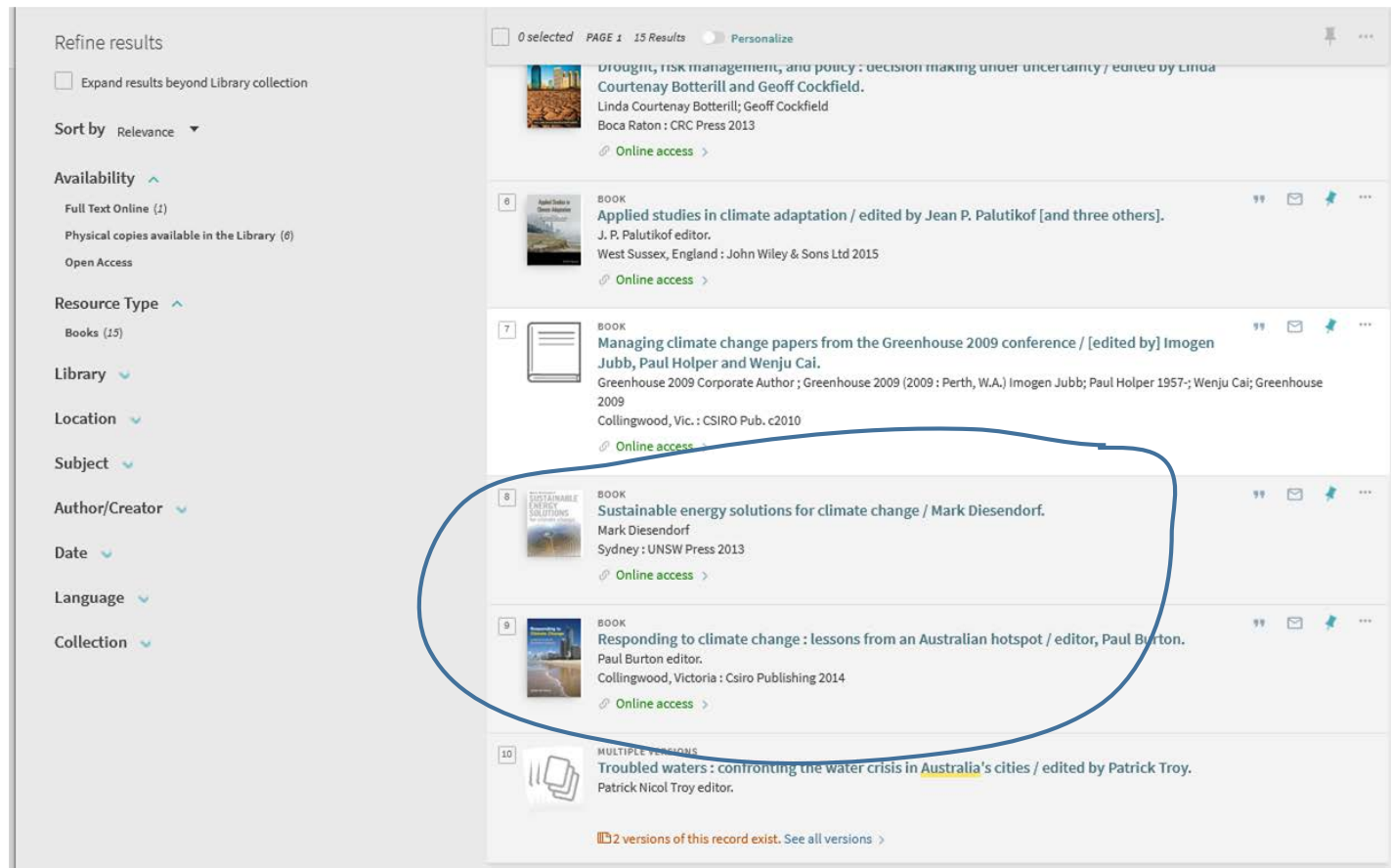
Full text - unlimited user access. Leased collection. Future access is not guaranteed.

Details




Title	The long goodbye : coal, coral and Australia's climate deadlock / Anna Krien ; correspondents, Anne Aly [and six others].
Author	Anna Krien author > Anne Aly contributor. >
Subjects	Climatic changes -- Australia > Electronic books >
Description	Description based on online resource; title from PDF title page (ebrary, viewed July 12, 2017).
Related Titles	Series: Quarterly Essay ; Issue 66 >
Publisher	Carlton, Victoria : Black Inc
Creation Date	2017
Format	1 online resource (105 pages).
Language	English
Identifier	ISBN : 1-925435-73-3
Source	01SFUL_ALMA

Click on subject heading to get similar titles




- Limit to **books** as resource type



The screenshot shows a library search interface. On the left is a sidebar with filters: 'Refine results' (with an expand button), 'Sort by' (set to Relevance), 'Availability' (Full Text Online: 1, Physical copies: 6, Open Access), 'Resource Type' (Books: 25), 'Library', 'Location', 'Subject', 'Author/Creator', 'Date', 'Language', and 'Collection'. The main area displays search results. A blue circle highlights three entries:

- 8  **BOOK**
Sustainable energy solutions for climate change / Mark Diesendorf.
Mark Diesendorf
Sydney : UNSW Press 2013
[Online access >](#)
- 9  **BOOK**
Responding to climate change : lessons from an Australian hotspot / editor, Paul Burton.
Paul Burton editor.
Collingwood, Victoria : Csiro Publishing 2014
[Online access >](#)
- 10  **MULTIPLE VERSIONS**
Troubled waters : confronting the water crisis in Australia's cities / edited by Patrick Troy.
Patrick Nicol Troy editor.
[2 versions of this record exist. See all versions >](#)

Other visible results include:

- 0 selected PAGE 1 15 Results Personalize
-  **BOOK**
Drought, risk management, and policy : decision making under uncertainty / edited by Linda Courtenay Botterill and Geoff Cockfield.
Linda Courtenay Botterill; Geoff Cockfield
Boca Raton : CRC Press 2013
[Online access >](#)
- 6  **BOOK**
Applied studies in climate adaptation / edited by Jean P. Palutikof [and three others].
J. P. Palutikof editor.
West Sussex, England : John Wiley & Sons Ltd 2015
[Online access >](#)
- 7  **BOOK**
Managing climate change papers from the Greenhouse 2009 conference / [edited by] Imogen Jubb, Paul Holper and Wenju Cai.
Greenhouse 2009 Corporate Author ; Greenhouse 2009 (2009 : Perth, W.A.) Imogen Jubb; Paul Holper 1957-; Wenju Cai; Greenhouse 2009
Collingwood, Vic. : CSIRO Pub. c2010
[Online access >](#)

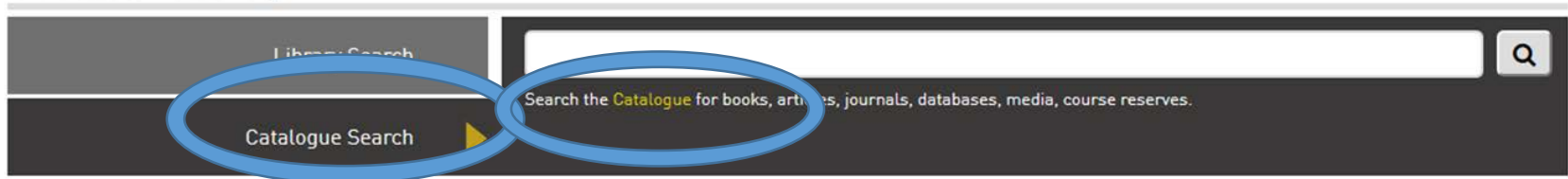
Pro-tip: “I just want to find a book!”

Do we own the book “Sustainable Fossil Fuels:
The Unusual Suspect in the Quest for Clean and
Enduring Energy?”

I don't want to read a review of the book or an article that contains
the same words

1. Library Homepage

Search the Library



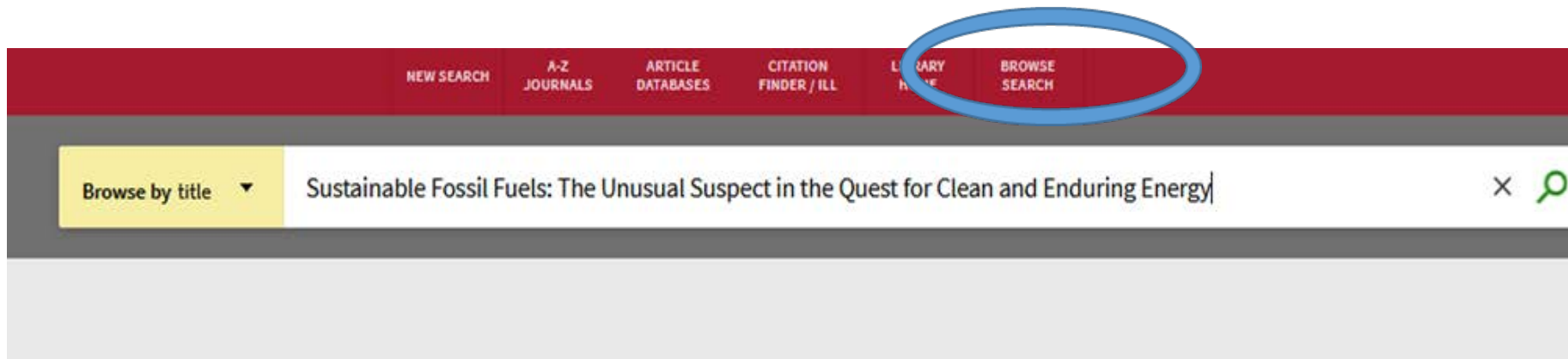
Library Search

Catalogue Search

Search the **Catalogue** for books, articles, journals, databases, media, course reserves.

The image shows a search bar with a magnifying glass icon. Below the search bar, the text "Search the Catalogue for books, articles, journals, databases, media, course reserves." is displayed. Two blue circles are drawn around the "Library Search" and "Catalogue Search" buttons.

2. Books/Media only



NEW SEARCH A-Z JOURNALS ARTICLE DATABASES CITATION FINDER / ILL LIBRARY HOME BROWSE SEARCH

Browse by title ▼ Sustainable Fossil Fuels: The Unusual Suspect in the Quest for Clean and Enduring Energy

The image shows a search bar with a magnifying glass icon. Below the search bar, the text "Sustainable Fossil Fuels: The Unusual Suspect in the Quest for Clean and Enduring Energy" is displayed. A blue circle is drawn around the "BROWSE SEARCH" button.

Journal articles

- Often, results of experiments
- Authors of journal articles are faculty members at universities
 - Magazine / newspaper articles: authors are professional writers
- Peer review process: multiple revisions
- Subject databases are an efficient way of searching journals on the same topic (eg, engineering, environmental science, psychology, business)

Composing a search string

- Problem 1: overuse of natural language
- Problem 2: overuse of search strings without Boolean operators

Database: Academic Search

Research Question:

what is the association between coal mining and the wildfires in Australia?

Natural language vs controlled vocabulary

Search A: "What is the association between coal and the wildfires in Australia? "

Note: Your initial search query did not yield any results. However, using SmartText Searching, results were found based on your keywords.

Results: garbage

Instead

- Try: coal AND australia AND wildfires
 - Boolean operator AND narrows search to include documents with that include both concepts

FAIL

Try: coal AND australia AND climate change

Activity 2: Search

How would you approach this topic?

- Which places you looked
 - Circle the best one
- Terms you used
 - Circle the best terms

Research activity: How to approach this topic?

Canada's 5G network: Should Canada award the contract to Huawei?



What else is on the MSE 101 guide?

- Resources for search strategies
- Evaluating sources
- Formatting your literature review
- Citing: links to IEEE and APA guides

On this page

[Academic Encyclopedias](#)

[Books](#)

[Articles](#)

[Search strategies & tips](#)

[Evaluating resources](#)

[Mini literature review](#)

[Citing sources](#)



References

Association of College & Research Librarians. (2015, February 9). *Framework for Information Literacy for Higher Education*. Association of College & Research Libraries (ACRL).

<http://www.ala.org/acrl/standards/ilframework>

Bloom, B., & Deyrup, M. M. (2015). The SHU Research Logs: Student Online Search Behaviors Trans-scripted. *The Journal of Academic Librarianship*, 41(5), 593–601.

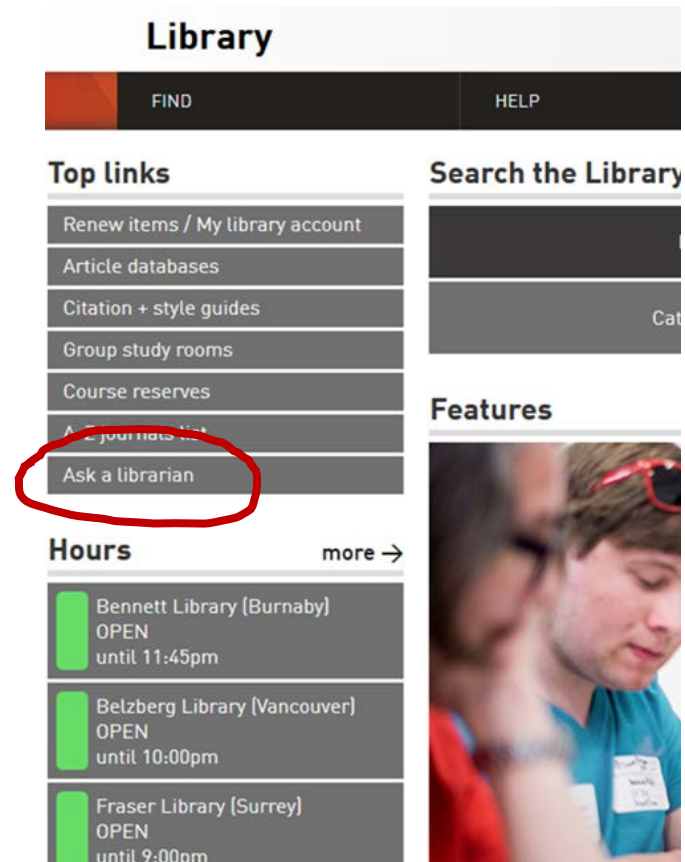
<https://doi.org/10.1016/j.acalib.2015.07.002>

Meyer, R. (2020, January 4). *Australia Will Lose to Climate Change*. The Atlantic

<https://www.theatlantic.com/science/archive/2020/01/australia-caught-climate-spiral/604423/>

Getting help

- Book a consultation with me (hah1@sfu.ca)
- In-person at the reference desk
- Telephone
- Email
- IM
- Text message





What are your questions?