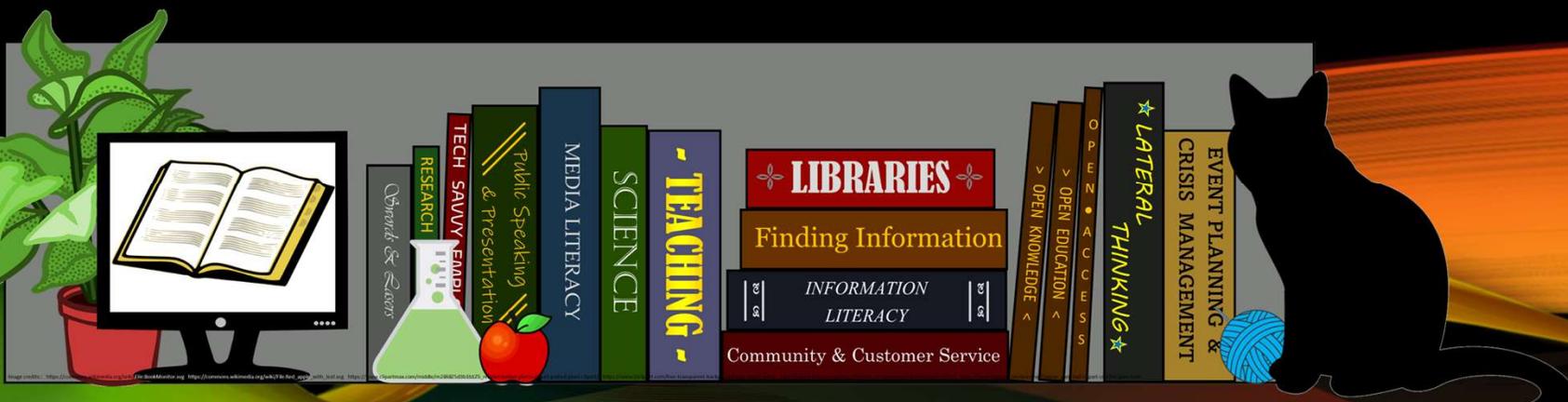QR Code

I Swear, It's Just Research!

Hiding bodies, launching things into space, forging swords, et cetera.

August 17, 2025. When Words Collide, Calgary, AB.

Cheryl D. Bain   theunrestrictedlibrarian.com

What am I here to talk about today?

- Why is research important?
- Using AI when doing research
- How to recognize an untrustworthy information source
- Sources for answering quick questions
- Online collections of free sources for in-depth research
  - Books, magazines, catalogues, etc. (Hathi Trust)
  - Educational resources (Open Educational Resources Commons)
- Other (almost) free resources
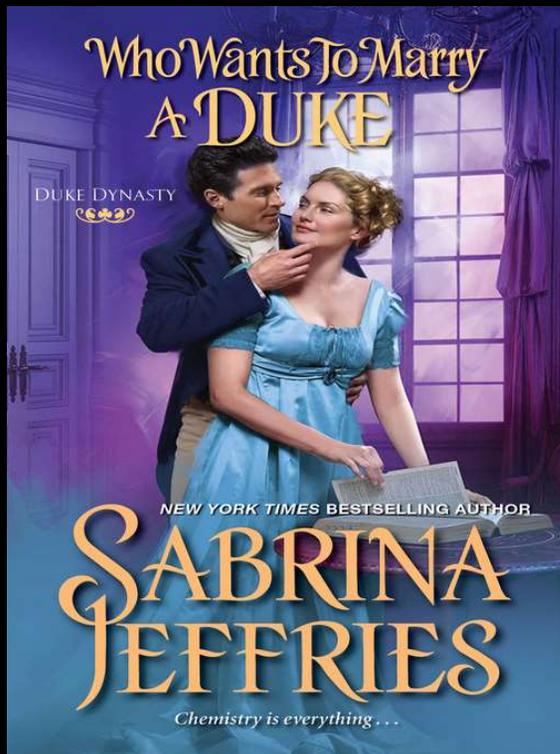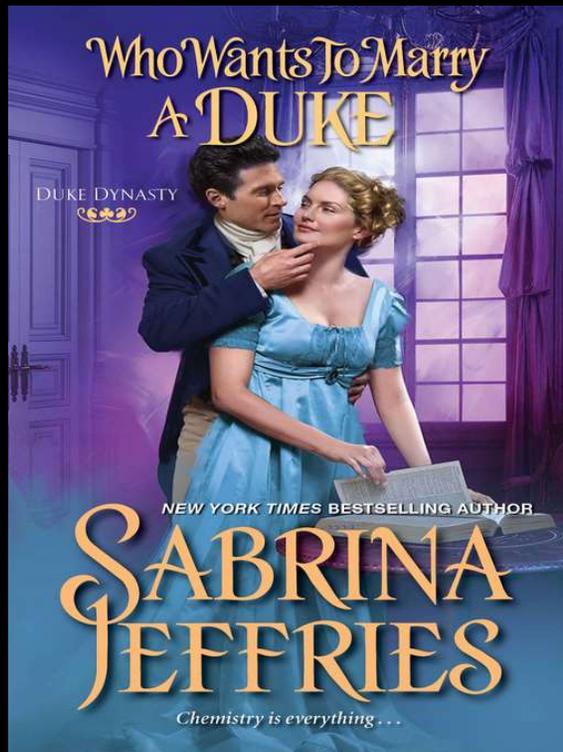
Download these slides

QR Code
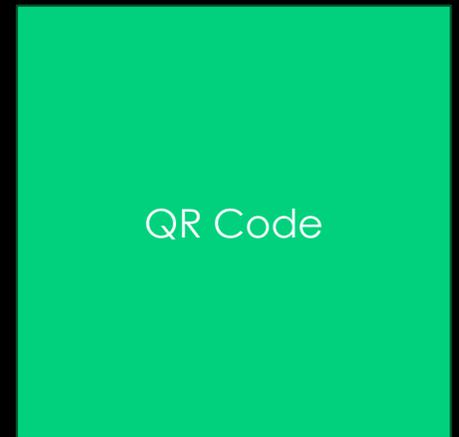
Why is research important?

Discussion (2 min max)

What can happen when you get the research wrong?

What can happen when you get the research wrong?

> For the next hour, he got to unpack boxes and leave her to examine each item to decide where it went. She wore a look of pure bliss as she moved from table to shelf, arranging and organizing and setting up equipment that had been broken down for the journey.
>
> There were names of ingredients he'd never heard of—aqua regia, nitrate of potash, muriatic acid, green vitriol, salt of wormwood, spirit of ether, and a dozen other mysterious compounds.

Chapter 6

Aqua regia is not something that you transport! You could transport the chemical ingredients, but it needs to be prepared shortly before use.

What can happen when you get the research wrong?

Ways Owen or Claire should have been killed by volcano and/or lava:

- At least three times…I got too distracted by the errors to keep track.

There were more errors that slipped by me…

- https://www.iflscience.com/theres-a-huge-scientific-problem-with-jurassic-world-fallen-kingdom-and-it-has-nothing-to-do-with-dinosaurs-48272

Image source: https://www.imdb.com/title/tt4881806/

How does text-based AI (like ChatGPT) decide how to answer your research questions?

What are the potential dangers to relying on AI answers?

Discussion (2 min max)

How does text-based AI generate responses?

- ChatGPT and similar text-based AI are *generative AI*
  - Input text is broken down into fragments of meaning (*tokens*)
  - The statistical relationships between these tokens is analyzed
  - Your text prompt (and possibly other data) is broken down into tokens
  - Then statistics happens, comparing the prompt tokens, and the tokens from its data sources.

  More information:

  https://news.mit.edu/2023/explained-generative-ai-1109
  https://www.nvidia.com/en-us/glossary/generative-ai/

Risks of AI generated responses

- AI does an excellent job recognizing the fact that there is a connection between concepts

- AI currently has difficulty recognizing:
    - Fact vs fiction
    - Fact vs satire
    - Fact vs humour
    - Fact vs misinformation, disinformation, lies, etc.
    - Patterns don't always mean connections exist

https://pixabay.com/photos/network-social-abstract-3535305/
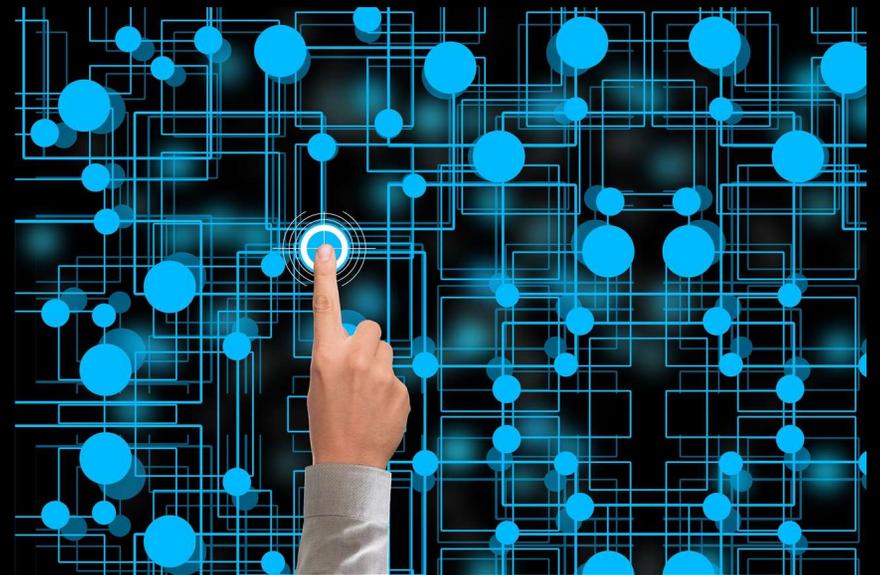
Patterns don't always mean there is a connection

- https://xkcd.com/539/
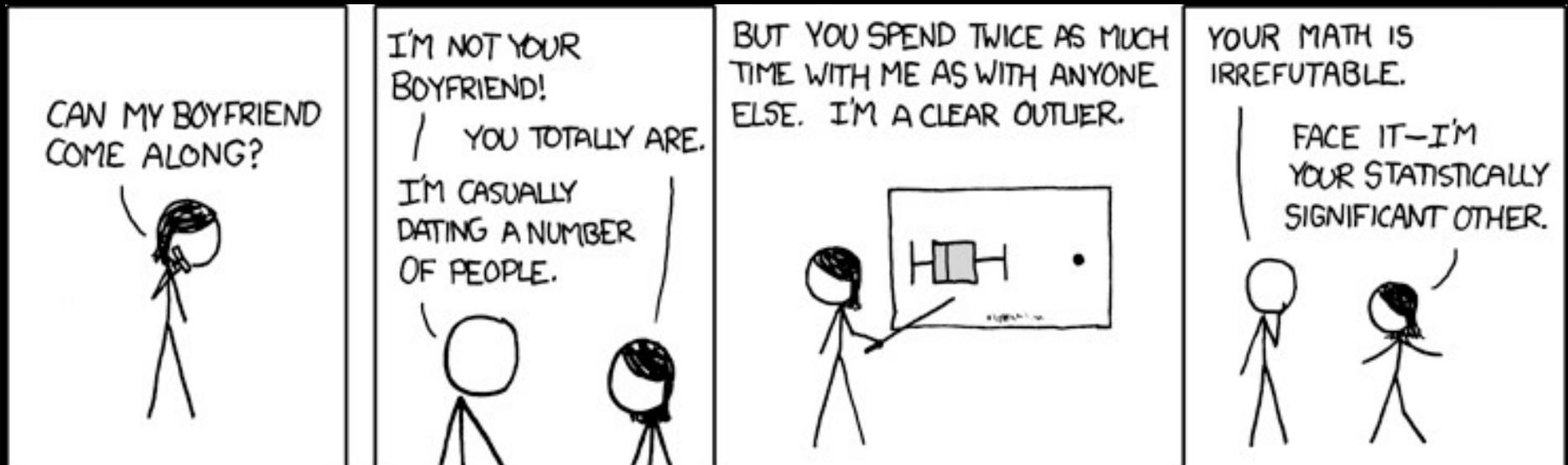
AI hallucinations

AI sometimes generates responses that aren't real.

Hi Chat GPT, can you talk to me about AI halucinations?

Absolutely — "AI hallucinations" are a big topic in AI right now, and they're both fascinating and a little unnerving.

What they are

An *AI hallucination* happens when a language model (like me) generates an output that is *confidently stated but factually wrong, logically inconsistent, or completely made up*. It's not "lying" in the human sense — there's no intent — but it's still a problem because the output can look convincing.

Example of an AI hallucination

https://www.cbc.ca/news/
canada/british-columbia/
lawyer-chatgpt-fake-
precedent-1.7126393

CBC Q **Search**

Top Stories **Local** **Climate** **World** **Canada** **Politics** **Indigenous**

British Columbia

B.C. lawyer reprimanded for citing fake cases invented by ChatGPT

Chong Ke ordered to pay costs for opposing counsel to discover precedent was AI 'hallucination'

Jason Proctor · CBC News · Posted: Feb 26, 2024 9:01 PM MST | Last Updated: February 26, 2024

Example of an AI hallucination

https://futurism.com/google-sge-false-ai-generated-info

As an information professional,
I recommend you approach using AI for research with extreme caution

How can you tell if a source is trustworthy?

Discussion (2 min max)

Is your source CRAAP(P)?

Non-Writers	Writers
Currency	Currency
Relevance	Relevance
Authority	Authority
Accuracy	Accuracy
Purpose	Purpose
	Plot

The CRAAP test – questions to ask

Current	How recently was the information created or published?
Relevant	Is the information related to your topic? Is it at the level of detail that you need?
Authority	Who created the material, and do they know what they are talking about?
Accurate	Does the creator seem biased? Did they make any obvious errors?
Purpose	Why was this created?

Currency

How recently was the information created or published?

- Different topic become out-of-date at different speeds
  - Weather reports vs. 1918 population of Canada
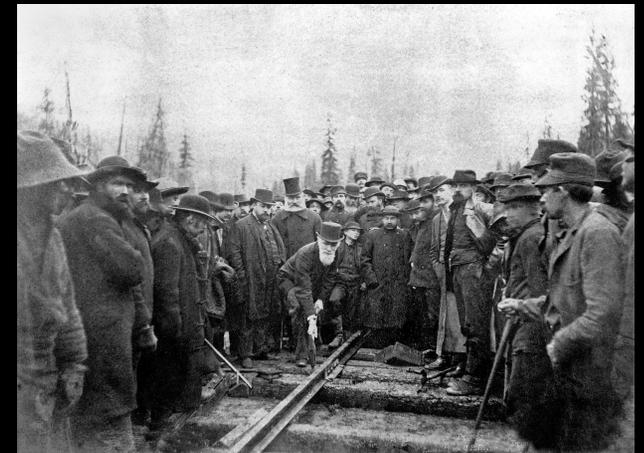
Currency

As a Writer:

- Do you need to know both what was current knowledge *during the story* and what we currently know?
  - We call it "World War I," but would my character?
  - Medical terms especially will shift

Relevance

- Is the information related to your topic?

Relevance

- Is it at the level of detail that you need?
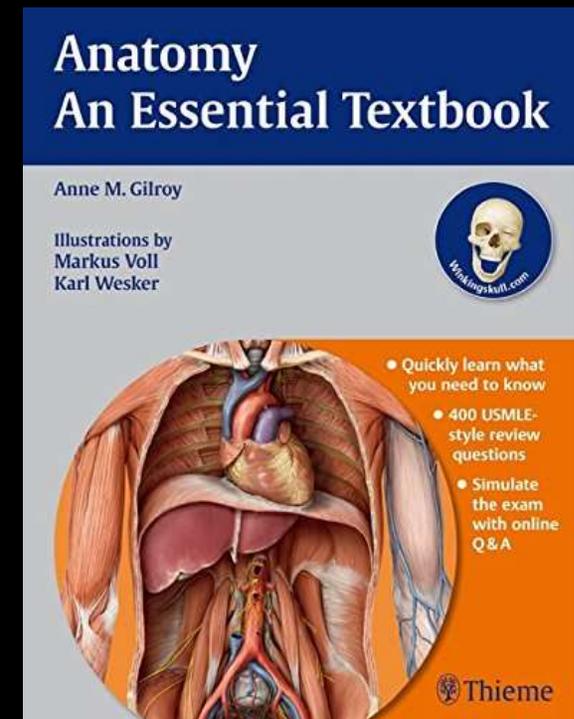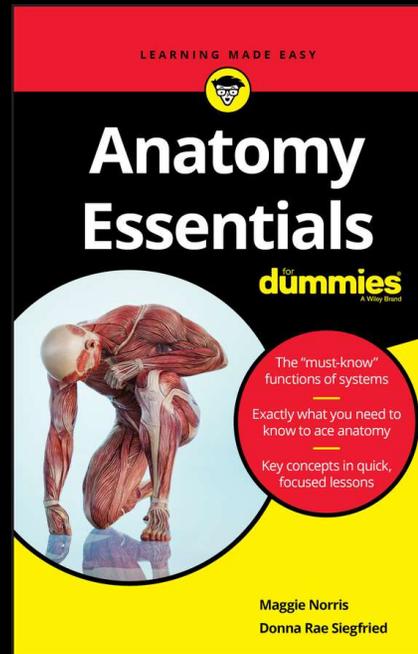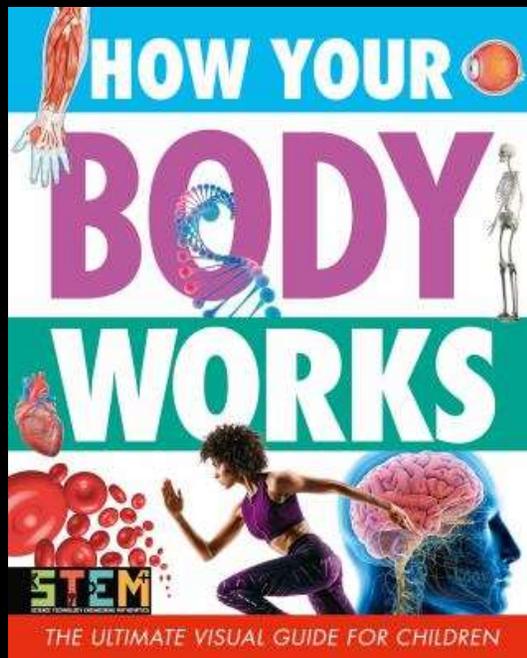
Relevance

Writers

- How in-depth do you need to understand the topic to avoid critical research fails?

- Would being vague about something affect your target audience's enjoyment?

Image by Kardono Kardono from Pixabay

Authority

"On the Internet, nobody knows you're a dog."

Authority

- Who wrote it? (Individual or organization)
  - "About" page on a website or in a book
  - YouTube has an "about" section if you click on the channel information
  - Use the "triple dots" in Google search results
- What qualifications do they have?
- Just because someone is an authority in one area, doesn't make them an authority in all areas!

Authority

Writers

- Would my character trust and/or agree with this source?
  - Yes, you can intentionally get things wrong! You need to choose when!

Image by Lukas Bieri from Pixabay

Side quest!
Google "Triple dots"

Side quest!
Google "Triple dots"

Accuracy

- What is the tone of the information?
  - Does the creator seem biased?
  - Does it rely more on opinion than fact, more on emotion than logic.
  - Does it contain extensive flattery of people who agree with them, and personal attacks against those who disagree
- Do other sources agree with what you are reading?
- Look out for basic factual errors and/or grammar and spelling errors!

Image by Clker-Free-Vector-Images from Pixabay

Accuracy

Writers

- Was this believed to be accurate in the time I am setting my story?

- Would my character believe it is accurate for other reasons?

Image by Lukas Bieri from Pixabay

Image by Clker-Free-Vector-Images from Pixabay
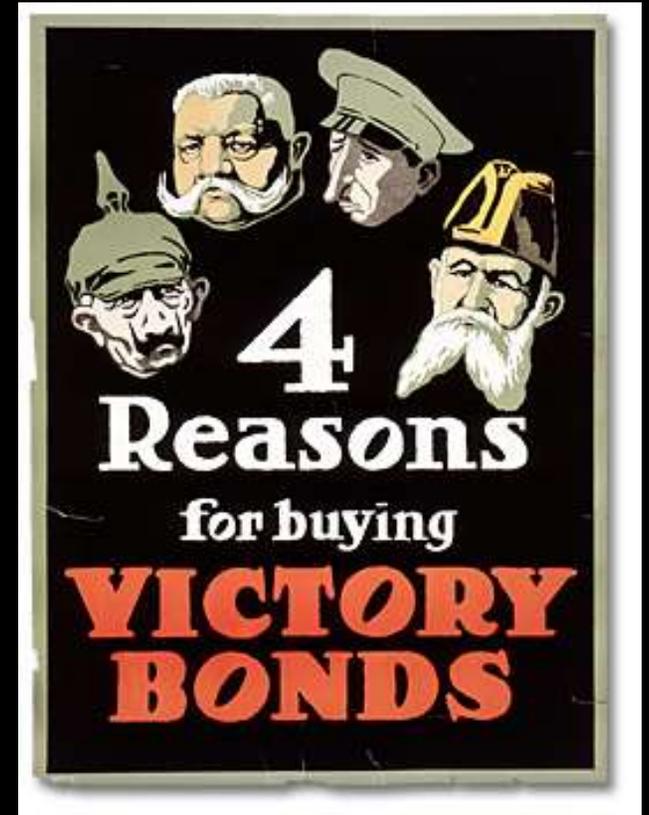
Purpose

Why was this created?
- To teach?
- To entertain?
- To sell something?
- To further an agenda the creator has?
- A combination?

Purpose

Writers

- If you are bringing some specific information into your world, how would your character interact with it?

- Eg: would they pick up on propaganda? Would they react negatively to it?

https://www.archives.gov.on.ca/en/explore/online/posters/index.aspx

Plot

Writers only

- Is getting this correct critical to the plot, or am I just being a perfectionist?
- How likely is it that someone will notice and care that it is incorrect?
- Do you want your readers to lose sleep?

Source: https://xkcd.com/386/

Plot

Writers only

- Is getting this correct critical to the plot, or am I just being a perfectionist?

- How likely is it that someone will notice and care that it is incorrect?

- Do you want your readers to lose sleep?

ARE YOU COMING TO BED?

I CAN'T. THIS IS IMPORTANT.

WHAT?

SOMEONE IS WRONG

in this book!

Source: https://xkcd.com/386/

More about evaluating info sources

- University of Alberta
  https://pressbooks.openeducationalberta.ca/libraryskills200/chapter/evaluating-resources/

- University of Calgary
  https://libguides.ucalgary.ca/c.php?g=630437&p=4404569

- Central Michigan University
  https://libguides.cmich.edu/web_research/craap

Sources for answering
quick questions
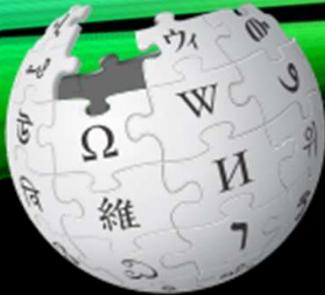
Should you use Wikipedia?

"the average science entry in Wikipedia contained around four inaccuracies; Britannica, about three"

Nature **438**, 900–901(2005). https://doi.org/10.1038/438900a

"...when the stakes are low (you need a piece of information to settle a bet with your roommate, or you want to get a basic sense of what something means before starting more in-depth research), you may get what you need from Wikipedia."

Harvard University Library https://usingsources.fas.harvard.edu/what's-wrong-wikipedia

Image: https://en.wikipedia.org/wiki/Wikipedia_logo#

Online encyclopedia: simple Wikipedia

Wikipedia entry too complicated?

- https://simple.wikipedia.org/wiki/Main_Page
    "…makes Simple English articles a good way to understand difficult articles from the ordinary English Wikipedia. If someone cannot understand an idea in complex English, they can read the Simple English article."

    https://simple.wikipedia.org/wiki/Wikipedia:About#Simple_English

Image: https://en.wikipedia.org/wiki/Wikipedia_logo#

Online collections of free sources
for in-depth research:

Books, magazines, catalogues, etc.

Books, catalogues, magazines! Oh, my!
Hathi Trust

- https://www.hathitrust.org/
- 18 million+ digitized books, magazines, etc.
- "Reading access to the fullest extent allowable by U.S. and international copyright law"
  - Mostly stuff originally published 95+ years ago
- Global in scope
  - Several Canadian institutions (including the University of Calgary and the University of Alberta) are contributors

HathiTrust

https://www.hathitrust.org/about/mission-history/
https://www.hathitrust.org/about/
https://www.hathitrust.org/member-libraries/member-list/

Who would be most interested?

- Historical fiction or fantasy writers
  - Want to write something like *Pride and Prejudice and Zombies*? All the novels here are probably public domain – adapt away!
- Science Fiction writers with time-travel plot lines
- Anyone wanting ***detailed*** descriptions & drawings of plants and animals
- People wanting to get into the heads of individuals with older viewpoints

Image: https://www.hathitrust.org/

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- Anyone wanting **_detailed_** descriptions & drawings of plants and animals
- People wanting to get into the heads of individuals with older viewpoints
- Tech-savvy ghosts wishing to read things published during their lives

Image: https://www.hathitrust.org/

Sears, Roebuck and Company. (1918) [Catalog].
Philadelphia: Sears, Roebuck and Company.
https://hdl.handle.net/2027/uiuo.ark:/13960/t75t81s47

Sowerby, G. B. (1841). The conchological illustrations.
London: Sowerby
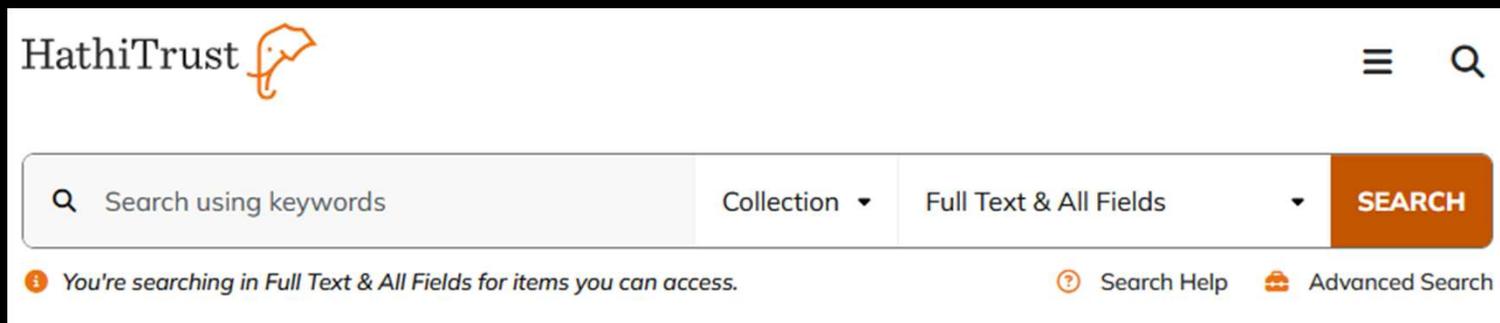
https://hdl.handle.net/2027/mdp.39015061993237

Searching HathiTrust

https://www.hathitrust.org/

See my review: https://theunrestrictedlibrarian.com/hathi-trust-a-review-tips/

Other Open sources for books, catalogues, & magazines

- Project Gutenberg https://www.gutenberg.org/
  - ~70,000 books
  - Focused on older books that are no longer under copyright (generally published over 95 years ago)
  - Heavy focus on novels & short stories
- Directory of Open Access Books (https://www.doabooks.org/) and Online Library of Open Access Books (https://www.oapen.org/)
  - Two services offered by the same organization – slightly different search results
  - Academic, peer reviewed.
  - Global scope.
  - Primarily focused on books published after ~1950

Online collections of free sources
for educational content:

Modern textbooks, lecture slides, etc.

Textbooks, lectures, etc.: Open Educational Resources Commons

- https://oercommons.org/
- Over 50,000 resources
- Mostly published in the last 20 years
- Many resources associated with taxpayer funded places (eg: public school boards, publicly-funded post-secondary education)
- Huge range in technical levels (K → post-graduate)

Who would be most interested?

- Most fiction genres, edutainment content creators
- People who learn better from resources designed for teaching/learning
- Parents looking for help & alternate learning resources for kids struggling to learn something

Who would be most interested?

- Most fiction genres, edutainment content creators
- People who learn better from resources designed for teaching/learning
- Parents looking for help & alternate learning resources for kids struggling to learn something
- Aspiring supervillains kicked out of post-secondary education for...ethically dubious conduct

Image: https://oercommons.org/

48

Searching

https://oercommons.org/

Searching

Searching

Searching

Searching

Searching

Searching

Searching OER COMMONS — OPEN EDUCATIONAL RESOURCES

- Note: it does not search the entire full text of the resource – the search tool seems to only look through the same stuff you see in the item record. Search related terms!

Textbooks, lectures, etc.
Other Open Education databases

Canadian

- Open Education Alberta https://pressbooks.openeducationalberta.ca/catalog/
- BC Open Campus https://collection.bccampus.ca/search/
- eCampus Ontario https://openlibrary.ecampusontario.ca/

International

- Merlot https://www.merlot.org/merlot/index.htm

American (Many have Canadian and other content)

- Libre Texts https://commons.libretexts.org/catalog
- Open Textbook Library https://open.umn.edu/opentextbooks
- Open Stax https://openstax.org/subjects

Confused about what you found?

Recruiting your army
of high-quality minions &
henchpersons for
rapid global domination!

Image by Clker-Free-Vector-Images from Pixabay

Recruiting your army of experts

- Talk to people around you!
- Join a combat-sport club (fencing, karate, etc.)
- Attend Alumni events! Convince you partner to take you to their alumni events!

Image by Gerd Altmann from Pixabay

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Other (almost) free resources

Usually free if you have a library card

Interlibrary Loans (ILL)

- Request physical items from other libraries be shipped to your library.
- Works for "known items" – it exists, but your library doesn't have it.
  - Ask your librarian to help you track it down
- Usually successful, however, the library you request from may refuse to send the item.

Image by LillyCantabile from Pixabay

Do you have alumni access to $$$$ resources?

- Many post-secondary libraries now give some access to online resources to Alumni! Check it out!

Image by Mohamed Hassan from Pixabay

Alberta library resources

Free to all Albertans with a library card!

- Borrow from Alberta Public Libraries
https://melibraries.ca/help.php

- Borrow from Alberta post-secondary libraries
https://thealbertalibrary.ca/services/tal-card-template/
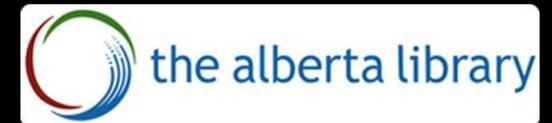
Alberta Legal Information sources: mostly free to Albertans

- https://lawlibrary.ab.ca/services/services-to-the-public/
Note: there are similar services in other Provinces & Countries

Writing soundtracks

National Jukebox

- https://www.loc.gov/collections/national-jukebox/about-this-collection/

- Public Domain Recordings from the US (mostly pre-1925)

Radiooooo.com

- "Musical Time Machine"

- Search by decade and country

- I don't know the copyright status of the music on this page! Listen, but proceed with caution if you are a podcaster
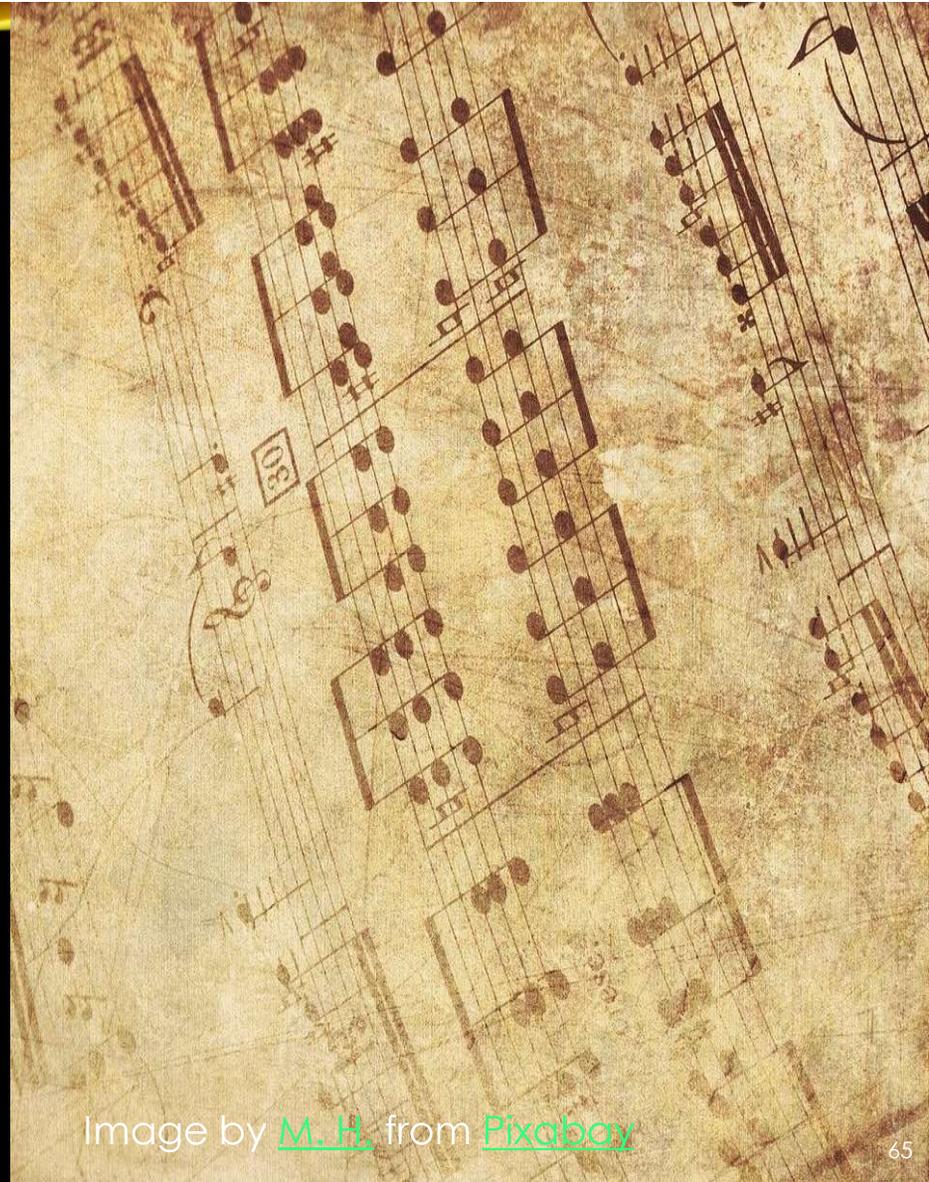
Image by M. H. from Pixabay

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