

Diverse STEM Reading

A Layer Cake of Problems :-/

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Image from: www.readyseteat.com/



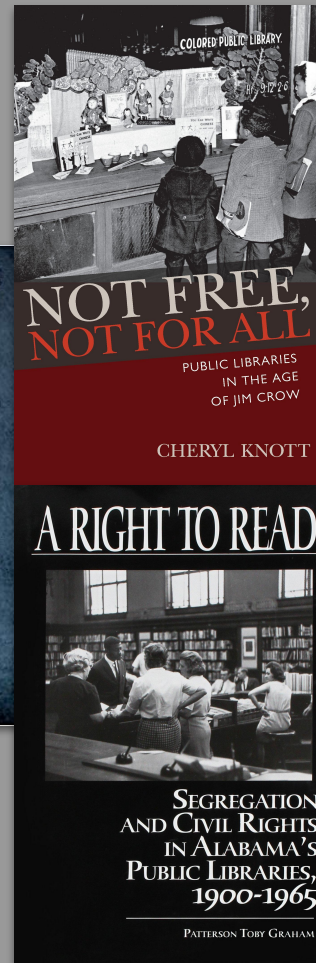
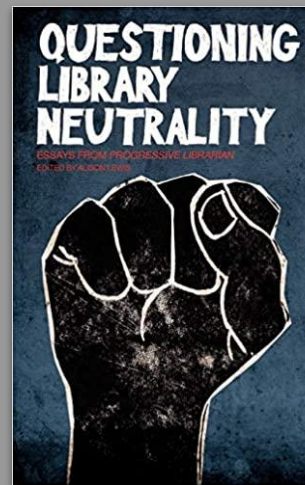
Before this site became Iowa State University, it was the ancestral lands and territory of the Baxoje, or Ioway Nation. The United States obtained the land from the Meskwaki and Sauk nations in the Treaty of 1842. We wish to recognize our obligations to this land and to the people who took care of it, as well as to the 17,000 Native people who live in Iowa today.

Privilege Acknowledgement

- We're two white women in a discipline (librarianship) that mainly consists of white women.
- We want to acknowledge our own privilege and also acknowledge that...

Librarianship has a history of not being progressive or proactive on issues of race, ethnicity, identity, culture, etc.

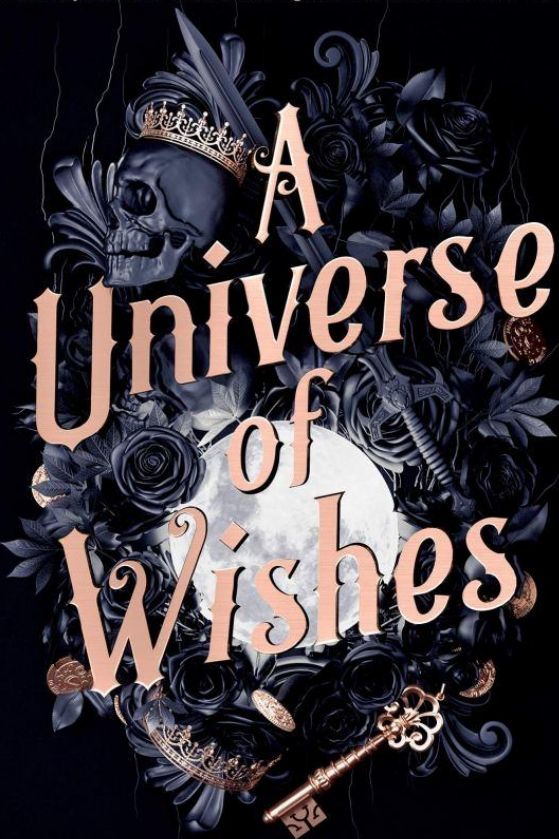
These problems persist today.



Why are we doing this?

- We co-teach a library research session for the Women in Science and Engineering course.
- We're both fans of how the **#OwnVoices** movement which has helped diversify YA fiction.
- We want to move from books on *how to diversify STEM* to books that **demonstrate** and **celebrate** diversity in STEM.

A **WE NEED DIVERSE BOOKS** Anthology
Edited by New York Times Bestselling Author DHONIELLE CLAYTON



SAMIRA AHMED JENNI BALCH LIBBA BRAY DHONIELLE CLAYTON
ZORAIDA CORDOVA TESSA GRATTON KWAME MBALIA ANNA-MARIE McLEMORE
TOCHI ONYEBUCHI MARK OSHIRO NATALIE C. PARKER REBECCA ROANHORSE
V. E. SCHWAB TARA SIM NIC STONE

The Problem

The Problem

- As librarians one of our primary mechanisms for demonstrating value and enacting change is through obtaining and buying books.
- We can't obtain things that don't exist.

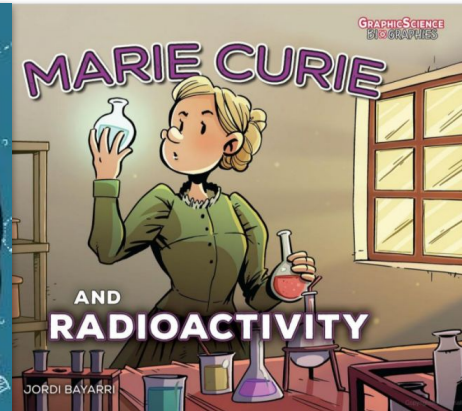
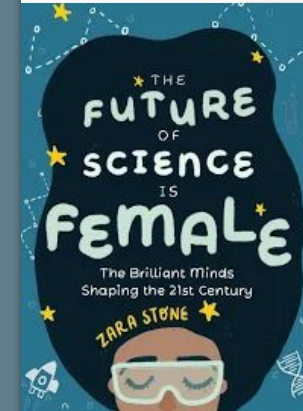
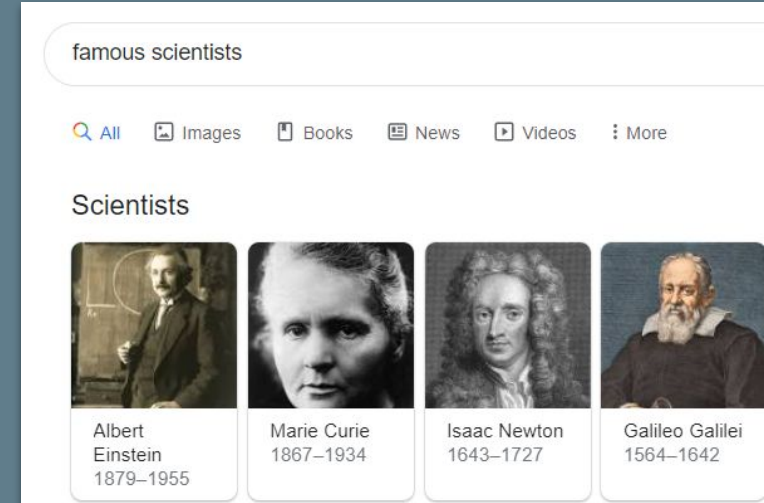


The Problem

The majority of books about scientists, engineers, mathematicians, doctors, and technologists are about **white men**.

Or are about *Marie Curie*.

Or are for children.



The STEM Layer

The STEM Layer

- Science, Technology, Engineering, and Math have known diversity, equity, and inclusion issues.
- The populations most affected differ by discipline.
- In general, women and BIPOC populations are under represented.

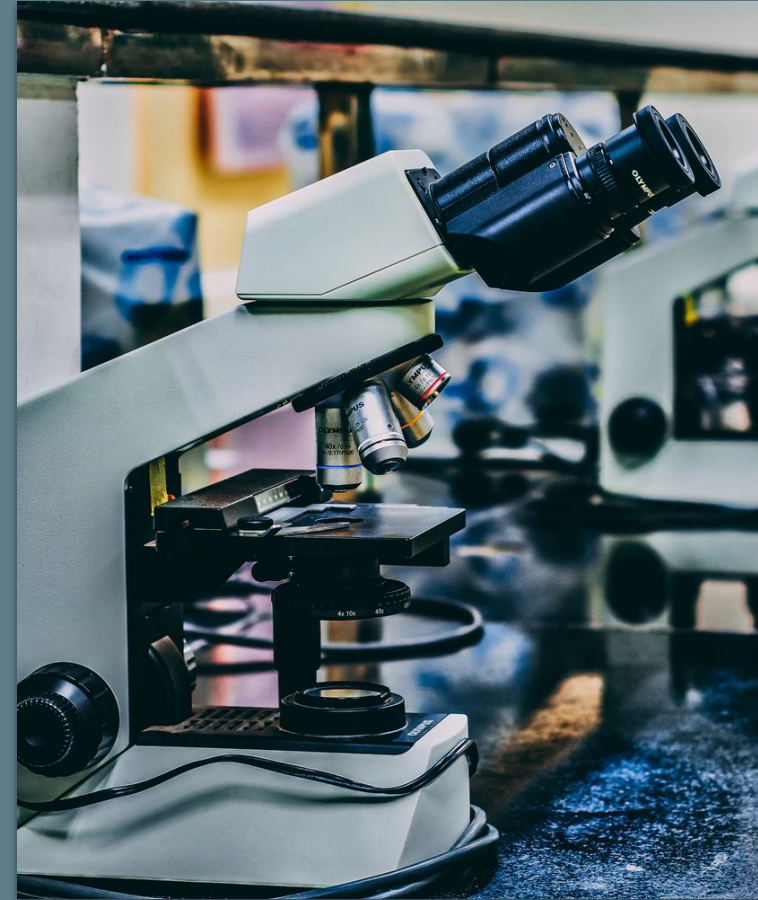


Chart 1

Employed scientists
and engineers by
ethnicity, and race.
United States, 2017

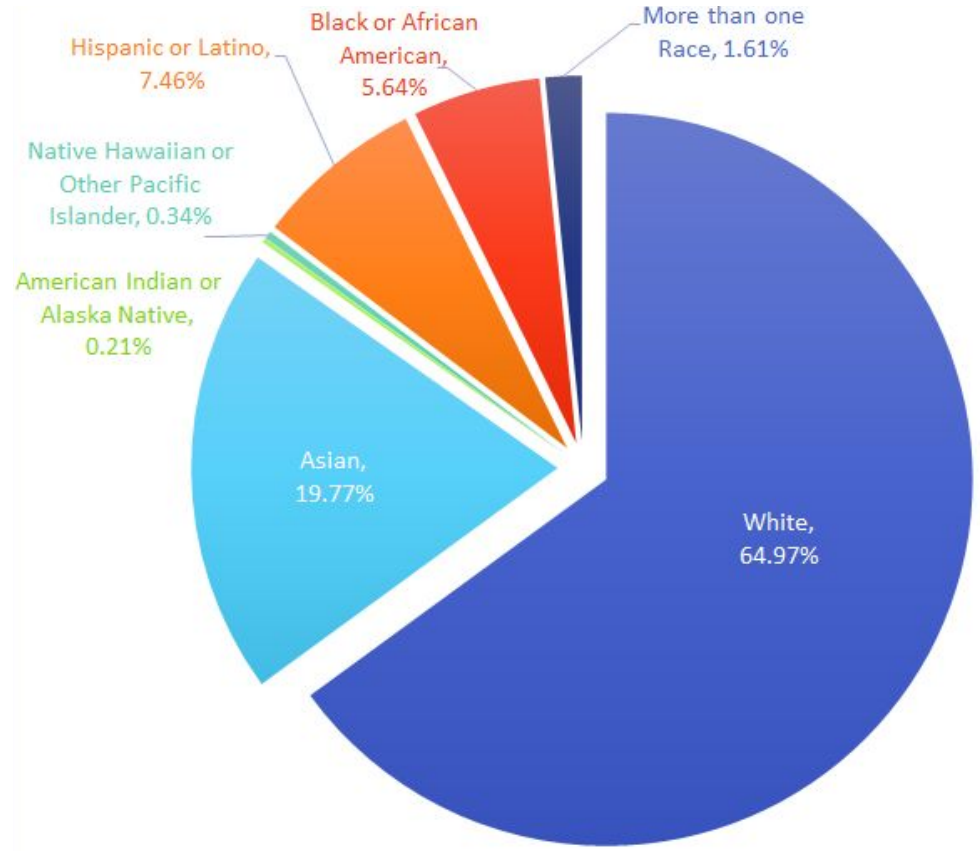
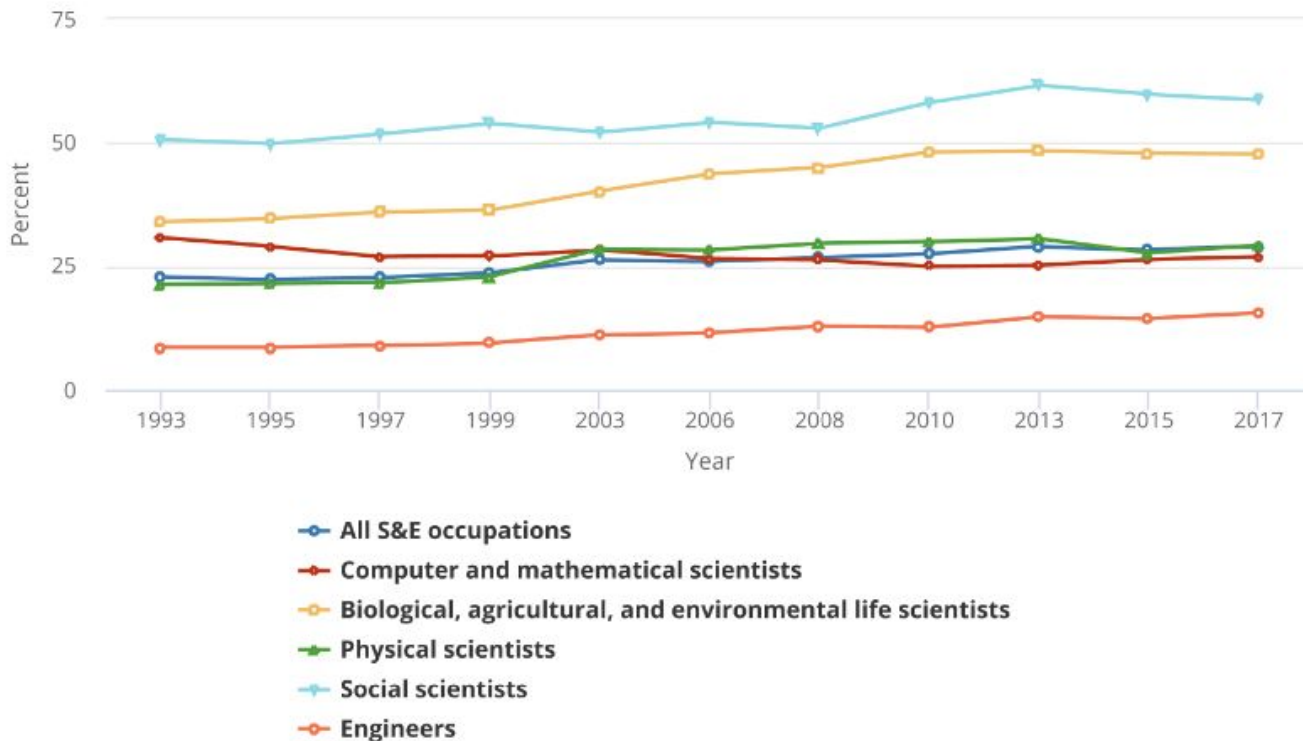


Chart 2

Women in science and engineering occupations.
United States,
1993–2017

Women in S&E occupations: 1993–2017



The Publishing Layer

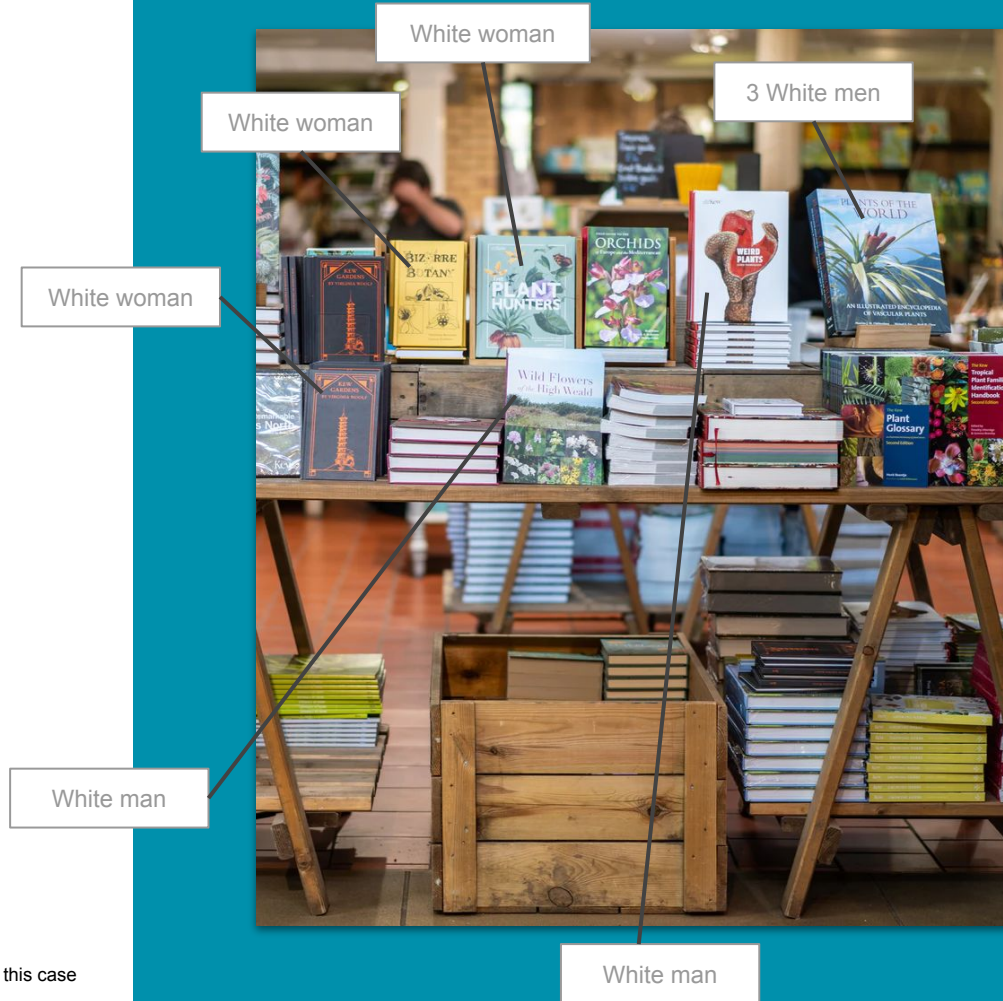
The Publishing Layer

- Publishing determines which voices and experiences are seen and heard by others.



The Publishing Layer

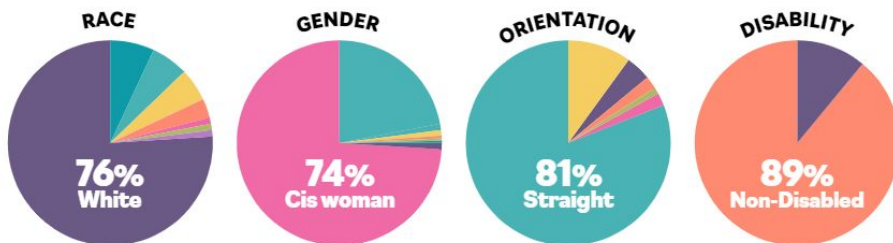
- Publishing determines which voices and experiences are seen and heard by others.
- It is both an *amplifier* and a *gatekeeper*.



Publishing Demographics

- Industry is very **White**, **female**, **straight**, and **Western**.
- 89% of the mainstream fiction books published in 2018 were written by white authors.*
- Publishing is an old industry and slow to change.

Industry Overall



[Diversity in Publishing 2019, Lee & Low Books.](#)



72%
Report no training in diversity and inclusion

[Global Voices for Workplace Equity in scholarly publishing 2018](#)

“So, even though more diverse books are being published now, it’s fair to assume that the large majority of them are still being acquired and edited by White people.”

— Lee and Low Books, *Diversity in Publishing 2019*

The Library Layer

Obstacles to change

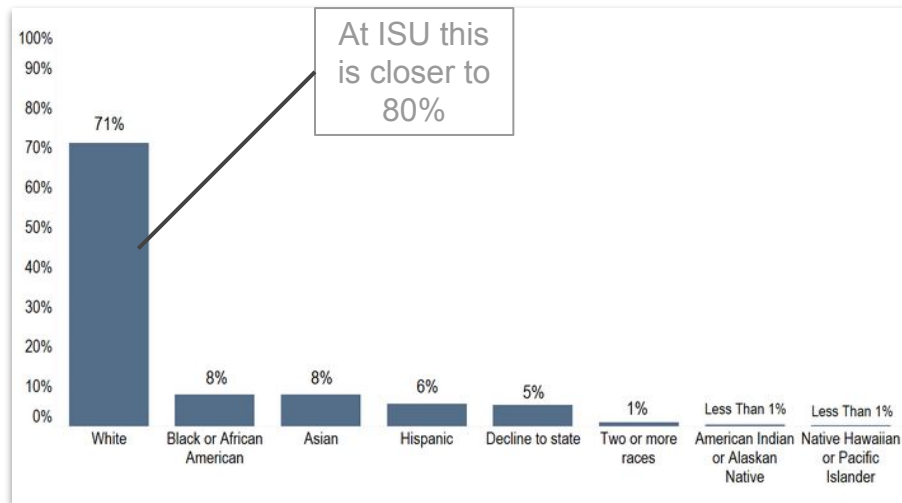
Library workers are **overwhelmingly** White.

Professional values include:

- “Neutrality”
- “The public good”

... which often means:

- Maintaining the status quo
- Denying problems exist



Race/ethnicity of library staff - [Inclusion, Diversity, and Equity: Members of the Association of Research Libraries](#)

Why is this so hard?

- Library catalogs focus on the work, not the author.
- Library Subject Classifications were made by and for a White cis male audience. Everyone else is omitted or is awkwardly added on.
- The companies that sell books to libraries do the same and do not support independent presses and self-published books.



To label or not label

Labeling materials “for diversity” can lead to:

- Tokenization and othering
- Further marginalization
- Outing and deadnaming
- Labels that are outdated or too granular

Not labeling “for diversity” can lead to:

- Missed buyers, readers, studies, and other opportunities.



“Labeling books by or about BIPOC is to declare them different because of who they are and that they are only interesting because of how they contrast with whiteness. Labeling does not celebrate diversity but instead centers whiteness as the norm and relegates BIPOC-ness to the abnormal, thereby reinforcing white supremacy.”

— Alexandria Brown, *How Labeling Books as “Diverse” Reinforces White Supremacy*

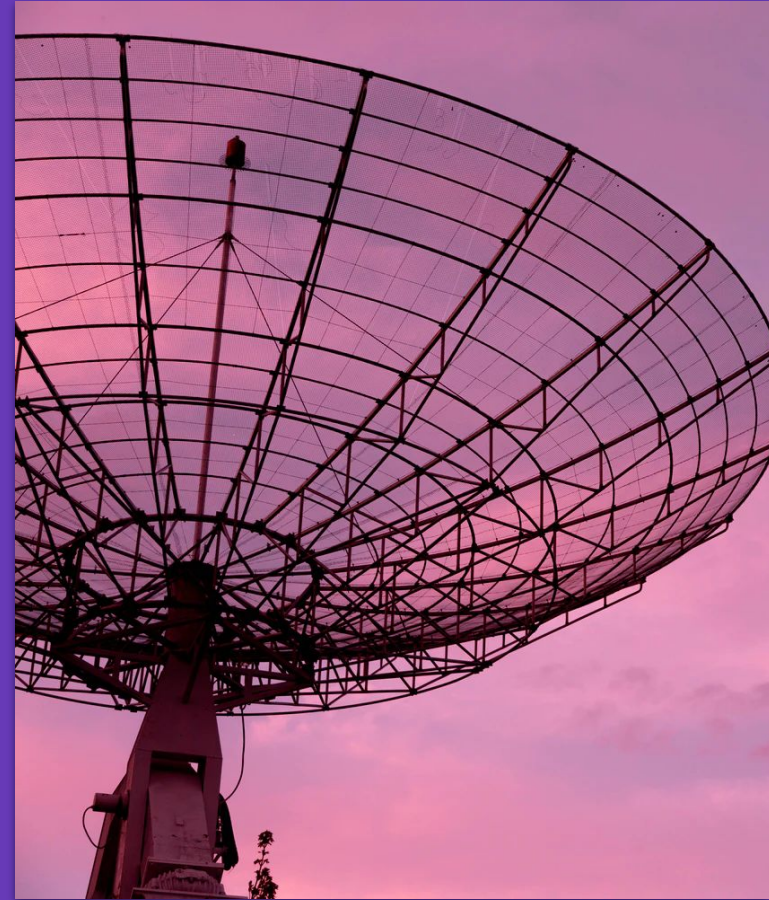
So. What Can We Do?

Search Techniques to Know

- AND, OR, and NOT to combine or reject terms
- Quotation marks for phrases
- Advanced Search can be your friend
- Subject headings (libraries use these, other search tools don't)

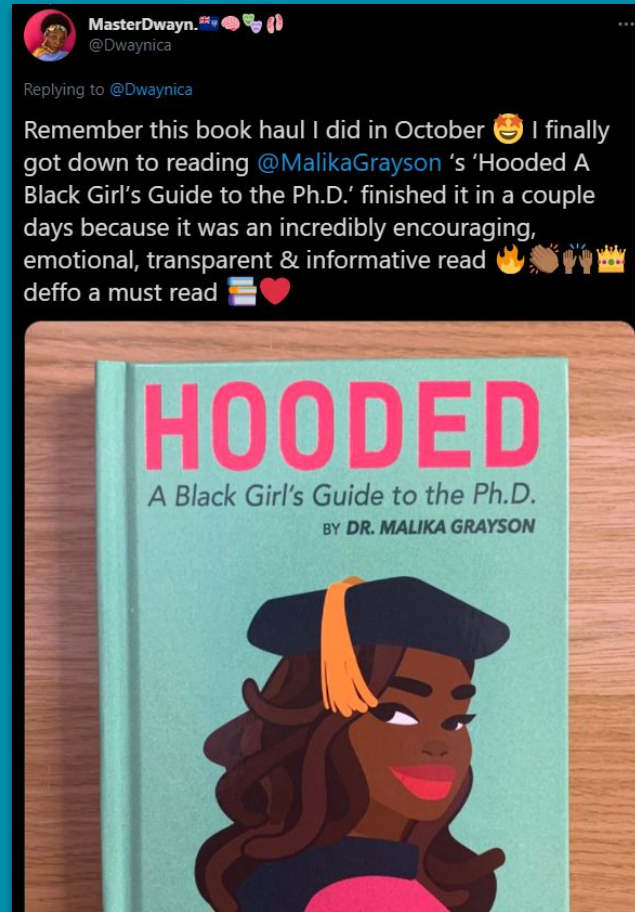
More details and instructions on:

<https://tinyurl.com/ISCOREcake>



Libraries Are Limited

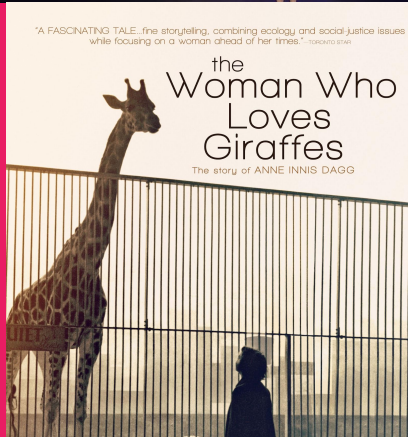
- *Self-publishing* and *independent publishers* have more variety and less gatekeeping but can be difficult to find.
- Explore beyond our library:
 - Google and Google Books
 - Amazon (esp for self-published)
 - WorldCat.org (libraries worldwide)
 - Twitter!
- Tell us what you find!
 - **Request a purchase!**



Go Beyond Books

There are plenty of *authentic sources* that can be incorporated into education and curriculums.

- Podcasts
- Online videos
- Documentaries
- Oral histories
- ~~Feature films~~



Logos from the [People Behind the Science](#) podcast, [Black in Neuro](#) website (used with permission), [Pride in STEM](#) website, the [Woman who Loves Giraffes](#) documentary, and screenshots from the videos: [I Am Not a Monster](#) and [What is imposter syndrome and how can you combat it?](#)

In Summary

- Diverse STEM books, and other materials can be difficult to locate.
- May not be (as) accessible to those with vision or hearing impairments.
- May take extra work to obtain or incorporate.
- **It's worth it.**
- **We'd like to help.**

For more information...

- Layer cake library guide:
<https://tinyurl.com/ISCOREcake>
- **You** can help shape what goes into the library's collection:
 - Talk to a librarian!
 - Request a purchase!
- Get in touch:
Megan O'Donnell - mno@iastate.edu
Erin Thomas - elt@iastate.edu

The screenshot shows the Iowa State University University Library website. The header is red with the text 'IOWA STATE UNIVERSITY' and 'University Library'. Below the header is a navigation bar with links: 'RESEARCH & COLLECTIONS', 'BORROWING', 'HELP & SERVICES', and 'OFF-CAMPUS ACCESS'. The main content area features a red banner with the title 'Diverse STEM Reading: a Layer Cake of Problems'. Below the banner is a sub-header 'Diverse STEM Reading: a Layer Cake of Problems' and a paragraph of text. To the left of the main text is a sidebar with a red header 'Home' and a list of links: 'What's the problem?', 'How did we get here?', 'What you can do', and 'Why cake?'. Below these links are four dark grey buttons: 'Audio', 'Books', 'Things of the Internet', and 'Tips for finding stuff'. The main text area contains the heading 'Diverse STEM reading: What's the problem?' followed by a paragraph of text.

IOWA STATE UNIVERSITY
University Library

RESEARCH & COLLECTIONS BORROWING HELP & SERVICES OFF-CAMPUS ACCESS

Diverse STEM Reading: a Layer Cake of Problems

Discover some of the diverse STEM books, documentaries, podcasts, and other items available from the ISU L of these materials. This guide was made to accompany a 2021 ISCORE presentation.

Diverse STEM reading: What's the problem?

As librarians we are frequently asked "How do I find books by trans scientists?" or "How do I research what it's like to be a black engineer while there is increasing interest in these types of works they remain o find, recommend, and purchase. This is frustrating for educators and librarians, but especially for readers who want to see diverse experier cultures reflected in media and education.

The truth is that not all experiences are captured in "literature." Margri populations face barriers - in education, in careers, in publishing - limi number of formal accounts of their lives in "academic media". Songs, blogs, documentaries, self-published memoirs, etc. are all valid forms personal expression and experience, so why are they not valued and in STEM? In this session, we'll discuss systemic participation and incl barriers marginalized groups face and ways we can fight this pattern i classroom, the library, and beyond.

This presentation will be of value to educators hoping to diversify and "reading" lists and students researching these topics.

Home

- What's the problem?
- How did we get here?
- What you can do
- Why cake?

Audio

Books

Things of the Internet

Video

Tips for finding stuff