



# **Scoping Out How Librarians Support Continuing Education in the Health Sciences and Beyond**

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# Territorial Acknowledgement

Wəlastekwiyik (Maliseet)

Mi'kmaq

Passamaquoddy

# About Us...

**Jackie Phinney:** Instruction/Liaison Librarian, Dalhousie University

**Melissa Rothfus:** Scholarly Communications Librarian, Dalhousie University

**Melissa Helwig:** Instruction and Research Librarian, Dalhousie University

**Kristy Hancock:** Librarian Educator, Nova Scotia Health

**Katie McLean:** Librarian Educator, Nova Scotia Health



# Conflict of Interest:

None to declare



# Project Rationale



# Why Conduct This Project?

- All of us have supported health sciences faculty and/or clinicians in our librarian roles
- Providing targeted continuing education to these groups often occurs as part of our regular duties
- We have wondered if our outreach is in line with what other libraries are doing, or if there are other initiatives we could be doing to reach our faculty/clinician learners
- No published synthesis of the evidence on what libraries are doing to reach this learner group

**We decided to conduct a scoping review to examine the literature on continuing education initiatives at the library, for health sciences faculty and/or clinicians**

# What is in this for Non-Health Librarians?

- How libraries are engaging in continuing education with faculty and staff is important
  - Digital/digital literacy initiatives have become a focus on University & College Campuses
- Libraries already provide information literacy sessions for students and faculty[1]
  - Results from these sessions may inspire others on delivery and evaluation methods, topics of interest, and more
- Many librarians likely wonder if their outreach is in line with what other libraries are doing, or if there are other initiatives we could be doing to reach our diverse learners
- To learn more about the value of conducting synthesis on an education topic instead of creating a new primary study

# Scoping Review

“Scoping reviews, a type of knowledge synthesis, follow a systematic approach to map evidence on a topic and identify main concepts, theories, sources, and knowledge gaps”  
(Tricco et al., 2018)<sup>[2]</sup>

## **Arksey & O’Malley Framework (2005)**<sup>[3]</sup>

1. **Searching** the published literature
2. **Selecting** relevant studies
3. **Extracting** data from each included study
4. **Charting** the data (categorizing studies)
5. **Summarizing** the data
6. **Consulting** with knowledge users to interpret (optional)



# Scoping Review Standards: PRISMA-ScR

“The PRISMA-ScR is intended to provide guidance on the reporting of scoping reviews” (Tricco et al, 2018)<sup>[2]</sup>

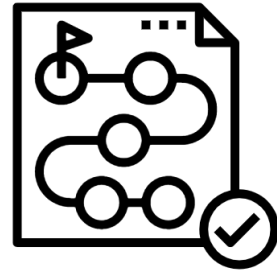
Comes as a comprehensive checklist to guide researchers on the proper reporting requirements of scoping reviews

Our review is being conducted in accordance with these standards

<b>Protocol &amp; Registration</b>	Indicate whether a review protocol exists...
<b>Eligibility Criteria</b>	Specify characteristics of the sources of evidence used as eligibility criteria...
<b>Information Sources</b>	Describe all information sources in the search...
<b>Search</b>	Present the full electronic search strategy for at least 1 database...
<b>Selection of Sources of Evidence</b>	State the process for selecting sources of evidence (i.e., screening and eligibility)...

Recreated sample of the Methods section of Tricco et al's PRISMA-ScR checklist [1]

# Methods



## Databases Searched: Feb 2020

- PubMed
- Embase (Elsevier)
- LISTA (Library and Information Science and Technology Abstracts) (EBSCO)
- LLIS (Library Literature and Information Science)(EBSCO)
- CINAHL (Cumulative Index of Nursing and Allied Health Literature)(EBSCO)
- ProQuest Dissertations and Theses (ProQuest)
- Google (to be done in the next search update)

# Our Search Strategy (PubMed):

**Librarians[Mesh] OR Library professional\*[tiab] OR Library and Information professional\*[tiab] OR Librarian\*[tiab] OR information specialist\*[tiab]**

**AND**

**Health Personnel[Mesh] OR Health Occupations[Mesh] OR Health profession\*[tiab] OR Health personnel[tiab] OR Nurses[Mesh] OR Nurse\*[tiab] OR Nursing[tiab] OR Radiation Technolog\*[tiab] OR Chiropract\*[tiab] OR Laboratory Technolog\*[tiab] OR Medical laboratory personnel[Mesh] OR Physiotherap\*[tiab] OR Physical therapists[Mesh] OR Dietetic\*[tiab] OR Nutritionist\*[tiab] OR Nutritionists[Mesh] OR Dietitian\*[tiab] OR Occupational therapists[Mesh] OR Occupational Therap\*[tiab] OR Denturists[Mesh] OR Denturist\*[tiab] OR Social workers[Mesh] OR Social Work\*[tiab] OR Counselors[Mesh] OR Counselling Therapist\*[tiab] OR Counsellor\*[tiab] OR Optometrists[Mesh] OR Optometr\*[tiab] OR Optician\*[tiab] OR Respiratory Therap\*[tiab] OR Dental[tiab] OR Dentists[Mesh] OR Dental hygienists[Mesh] OR Dentist[tiab] OR Dental Technicians[Mesh] OR Physicians[Mesh] OR Physician\*[tiab] OR Surgeons[Mesh] OR Surgeon\*[tiab] OR Doctor\*[tiab] OR Psychiatrist\*[tiab] OR Clinician\*[tiab] OR Midwif\*[tiab] OR midwives[tiab] OR Psychologist\*[tiab] OR Pharmacy[tiab] OR Pharmacists[Mesh] OR Pharmacist\*[tiab] OR Emergency Medical Technicians[Mesh] OR Paramedic\*[tiab] OR Emergency Medical Technician\*[tiab] OR "Speech-Language Pathology"[Mesh] OR speech language pathology\*[tiab] OR Audiologists[Mesh] OR audiologist\*[tiab] OR "Epidemiologists"[Mesh] OR epidemiologist\*[tiab]**

**AND**

**Education[Mesh] OR education[subheading] OR train\*[tiab] OR educat\*[tiab] OR workshop\*[tiab] OR class\*[tiab] OR course\*[tiab] OR curriculum[tiab] OR instruct\*[tiab] OR learn\*[tiab] OR program\*[tiab] OR teach\*[tiab] OR taught[tiab] OR webinar\*[tiab] OR faculty development\*[tiab] OR professional development\*[tiab] OR lunch and learn\*[tiab] OR journal club\*[tiab] OR information session\*[tiab] OR competencies[tiab] OR brown bag lunch\*[tiab]**

## Along with the Searches...

We are also performing **backwards and forwards searching**, using the papers (and their reference lists) that have already been included for final data extraction

# Selection Criteria

PICO	Inclusion Criteria	Exclusion Criteria
<b>Population</b>	<ul style="list-style-type: none"><li>• Hospital/Health/Biomedical Librarians OR</li><li>• Hospital/Health/Biomedical Libraries</li></ul> AND <ul style="list-style-type: none"><li>• Health sciences faculty OR</li><li>• Health sciences clinicians</li></ul>	<ul style="list-style-type: none"><li>• Non-health librarians OR</li><li>• Non-health libraries OR</li><li>• Students OR</li><li>• Residents taking curriculum-related sessions</li></ul>
<b>Intervention</b>	<ul style="list-style-type: none"><li>• Faculty development programs OR</li><li>• Lunch and learns, continuing professional development sessions, faculty development workshops (delivered via webinar or in-person), grand rounds or departmental meetings OR</li><li>• Librarian-led workshops at faculty conferences OR</li><li>• Accredited/non-accredited sessions.</li></ul>	
<b>Comparison</b>	None	
<b>Outcome</b>	None	

# Software used for Screening: Covidence

The screenshot shows the Covidence software interface. At the top, there is a navigation bar with a search bar containing "Scoping out how librarians support continuing educat...", a "Find a study" button, and a user profile for "Jackie Phinney ...". Below the navigation bar is a "Review Summary" section with buttons for "Settings", "PRISMA", and "Export".

The main content area is divided into four sections:

- Import references:** Shows "4682 total duplicates removed" and an "Import" button.
- Title and abstract screening:** Shows "2620 irrelevant" and "0 studies to screen". A "TEAM PROGRESS" bar is green. Statistics: 2882 DONE, 0 CONFLICTS, 0 ONE VOTE, 0 NO VOTES. A thumbs-up icon is shown with the text "Jackie, you have screened 1575 studies". An arrow points from the orange callout box to this thumbs-up icon.
- Full text review:** Shows "166 excluded" and "0 studies to screen". A "TEAM PROGRESS" bar is green. Statistics: 262 DONE, 0 CONFLICTS, 0 ONE VOTE, 0 NO VOTES. A thumbs-up icon is shown with the text "Jackie, you have screened 155 studies". An arrow points from the orange callout box to this thumbs-up icon.
- Extraction:** Shows "0 extracted" and "82 studies to extract".

2 Reviewers look at the same paper's **Title and Abstract ONLY**, then Include or Exclude it (disagreements are settled later)

2 Reviewers look at the same paper's **Full Text**, then Include or Exclude it (disagreements are settled later)

# Extracting Data

Used a spreadsheet to capture data points in the following areas:

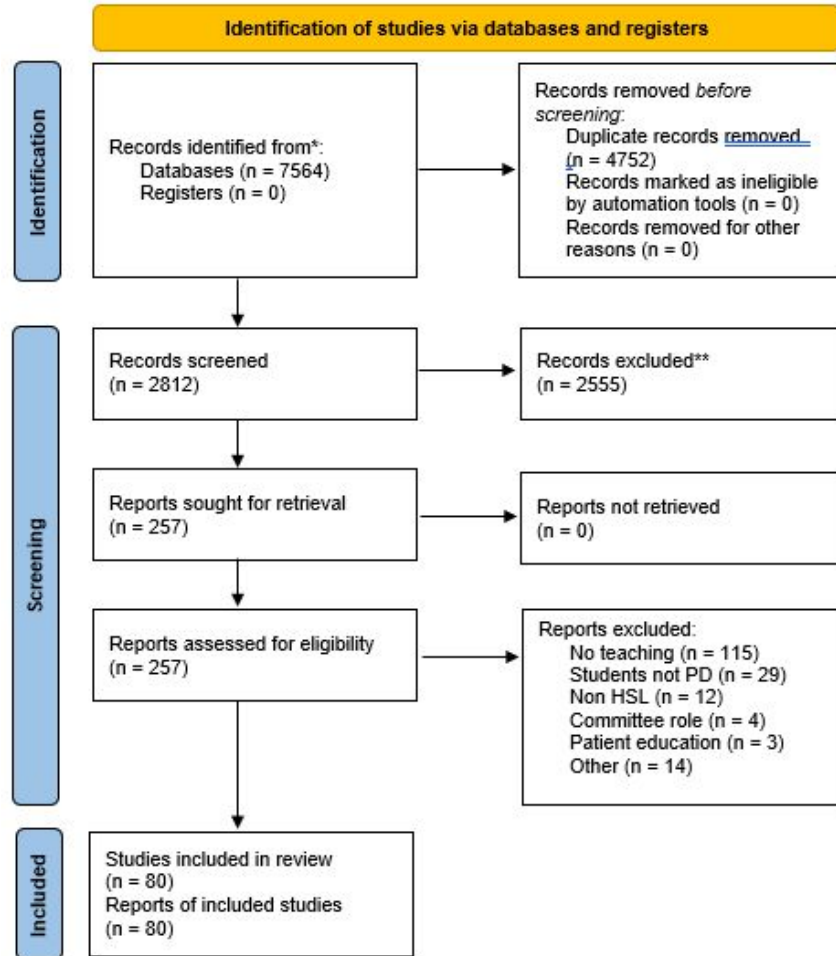
Publication Information	Session Details
Teaching Context	Evaluation Findings
Learner Population	Recommendations
Education Type	Other Details





Results

# PRISMA Diagram<sup>[4]</sup>



## A Snapshot of Our Major Data Points (so far):

- Study country
- Study design
- Range of publication years
- Populations
- Topics covered
- Education Details (Method/hands-on activities/IL Framework)
- Partnerships and motivation



# Study Country



Country	# of Studies
United States*	61
Canada	10
United Kingdom	5
Croatia	1
Sweden	1
Australia	1
Ireland	1
Mexico*	1

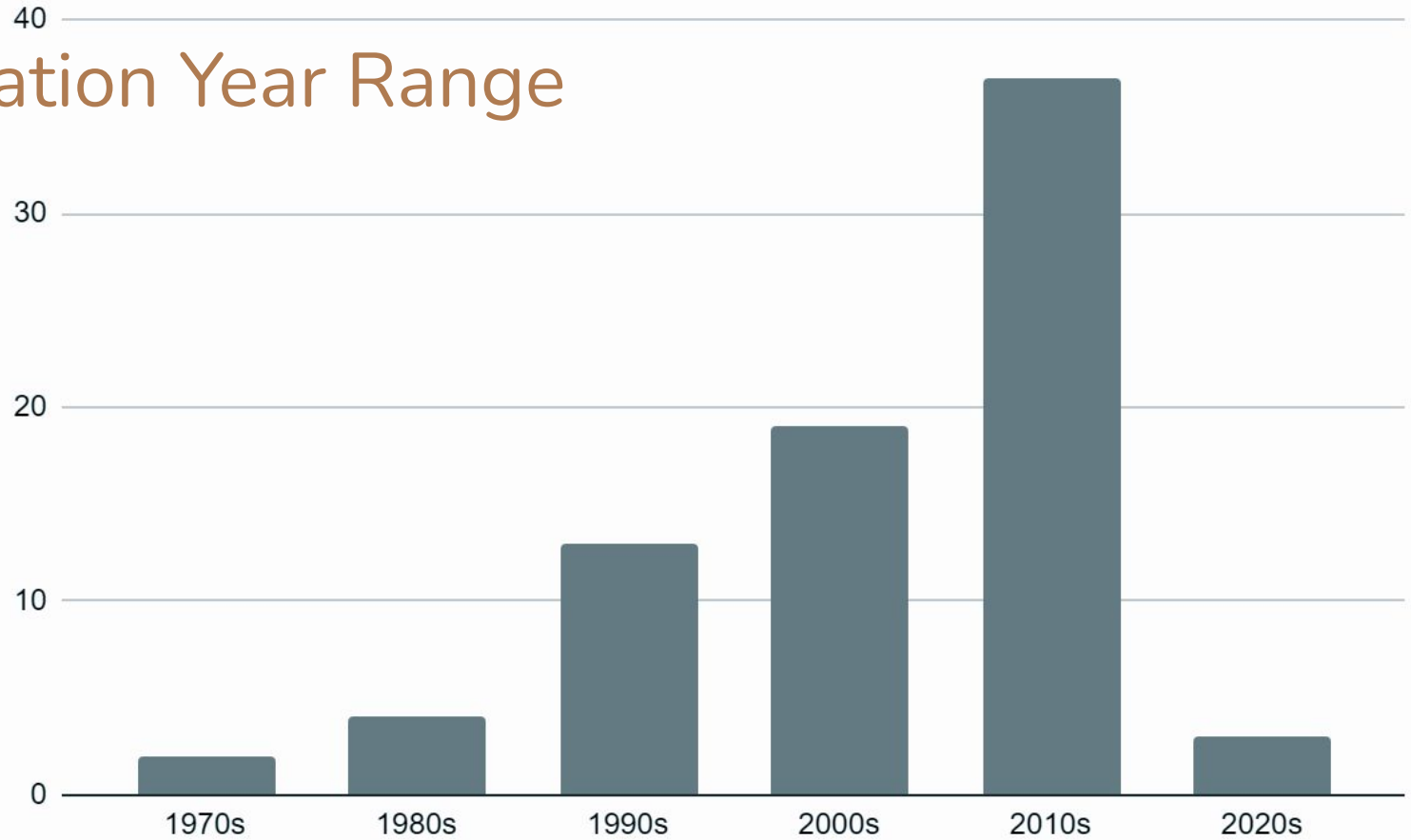
\*One study was conducted across the border in both Mexico and the U.S.

# Study Design

Design Type	# of Studies
Program Description	64
Quantitative Research Article	11
Qualitative Research Article	2
Mixed Methods Study	3



# Publication Year Range



Who?



# Topics Covered



**28** Total Codes, Top **5** Topics Covered:

Topic Covered	# of studies
Searching Methods/Tools	32
Evidence-Based Practice/Medicine	24
PubMed/Medline	23
Grey Literature/Websites	12
Other Databases	12



# Education Details

In-person	63
online	10
mix	7

No date limits were searched, so not all included studies would have had remote options.



Hands-on yes	49
Hands-on no	23
Not reported	8

IL Framework yes	7
IL Framework no	64
Not reported	9

# Partnerships & Motivation

Partnership reported	# of Studies
Yes	33
No	31
Not reported	16

## Example partnerships

- Faculty (e.g. from pharmacy, nursing, medicine)
- Clinicians (e.g. nurses, physicians, allied health)
- Health research organizations
- Departments of health
- Other librarians

Teaching motivation	# of Studies
Library initiated	35
Invited	11
Both*	4
Not reported	30

\*Some articles reported on multiple programs or studies



# Reflecting on the Data



# Gaps In the Literature

- Many papers were program descriptions and feedback ≠ assessment
- General lack of session details
- Little written about recommendations for future teaching or planning
- Lack of date limit was intended, but program descriptions that focused on the content above delivery methods led to a focus on dated material
- Not much discussion of skills librarians need to work on
- Many sessions were 'one shots' and hard to measure outcomes from

# Strengths in the Literature

- United States of America is a forerunner in this area
- It was very positive to see librarians writing about their experiences with delivering continuing education to clinicians
- Program descriptions gave a lot of detail on the lead up to the teaching encounter
- The included papers present a wide range of circumstances, situations, and content
- The partnerships reported were diverse, and mutual respect between health professionals and librarians was present in many papers

# Conclusions

- This review provides a snapshot of what librarians are doing to support this specialized group of learners, and what they could be doing more of
  - **Outside of health sciences librarianship:** It reminds us to think about how all academic librarians could support information literacy outside a pre-set curriculum; Establishing partnerships can be a great starting point
- Review demonstrates the library's capacity to support lifelong learning for all ages and skill levels as technology advances
- We recognize that delivery methods will continue to evolve, and we look forward to reviewing more studies in light of the Covid-19 pandemic and the shift to more online teaching

# References

1. Ducas, Ada et al. "Reinventing ourselves: New and emerging roles of academic librarians in Canadian research-intensive universities." *College and Research Libraries* vol 81, 1 (2020): 43-65. doi: 10.5860/crl.81.1.43
2. Tricco, Andrea C et al. "PRISMA Extension for Scoping Reviews (PRISMA-ScR): Checklist and Explanation." *Annals of internal medicine* vol. 169,7 (2018): 467-473. doi:10.7326/M18-0850
3. Arksey, Hilary & O'Malley, Lisa. "Scoping studies: towards a methodological framework." *International Journal of Social Research Methodology* vol 8,1(2005): 19-32. doi: 10.1080/1364557032000119616
4. Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. "The PRISMA 2020 statement: an updated guideline for reporting systematic reviews". *BMJ* 2021;372:n71. doi: 10.1136/bmj.n71

## Territorial Acknowledgement: Further Resources

We Are All Treaty People: <https://www.oise.utoronto.ca/abed101/we-are-all-treaty-people/>

Indigenous Canada:

<https://www.ualberta.ca/admissions-programs/online-courses/indigenous-canada/index.html>

# Thank you!

## Questions?

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