

Turning student assignments into publications: benefits for librarians and students

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Abstract

This article describes librarian involvement in a graduate student assignment to conduct rapid scoping reviews. Students had the option to submit a manuscript for publication. The librarian role through assignment conception to publication is detailed. The benefits for both students and the librarian are discussed.

Key words: *education, graduate; review literature as topic.*

Introduction

Introducing graduate students to evidence synthesis is a significant part of information literacy training in the Health: Science, Technology and Policy program at Carleton University, Ottawa, Canada. Evidence synthesis contextualizes and integrates evidence, usually in the form of research findings, into the larger body of knowledge for a specific topic in a transparent and reproducible fashion (1). Evidence syntheses include systematic reviews, scoping review, meta-analyses, rapid reviews among others (1, 2). As part of research training, graduate students are sometimes asked to develop a systematic review protocol or conduct a systematic review (3-6). Scoping reviews are a form of evidence synthesis used to map the evidence and key concepts in a given research area (7) as opposed to a systematic review which usually asks a clear and answerable question. A rapid review uses fewer search tools, may use a limited timeframe and/or geography, and requires less time to complete compared to a full review. Conducting rapid scoping reviews can also be a useful means of developing research skills for graduate students.

Research skills that are gained from conducting a systematic review include framing a question, identifying relevant work, assessing the quality of included studies, summarizing the evidence and interpreting the findings (8). Many of these skills are the same for conducting scoping reviews, with the notable exception of critical

appraisal. Writing for publication also provides the opportunity to develop writing and communication skills (9). Plus, the added benefit of writing up a study for publication can help students become familiar with the details of the publication process (10, 11).

During the winter 2021 semester I collaborated with faculty member Dr. Renate Ysseldyk on a student assignment that involved conducting an evidence synthesis for the class Biological and Social Fundamentals of Health. Dr. Ysseldyk approached me with the suggestion to have small groups conduct rapid scoping reviews with the option to publish the review after the assignment was completed. Her rationale was a TED talk entitled Don't Waste Student Work (12) – making student assignments valuable beyond the classroom. Dr. Ysseldyk offered authorship on any publications because of my involvement in the process. This article describes the involvement of a librarian in the process of turning student rapid scoping review assignments into publications.

Methods

Before the beginning of the semester I vetted topics to make sure the amount of literature was manageable and no reviews already existed on the topic. More than 1000 results was deemed too much literature, 500 results from a maximum of four databases was considered feasible. Many of the topics dealt with COVID-19 which allowed for a limited body of litera-

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ture. I made recommendations to Dr. Ysseldyk on how to narrow/broaden certain topics to make them feasible in a 4-month timeframe. Dr. Ysseldyk made a final decision about which topics to include in the syllabus and students ranked their preferred topics.

At the beginning of the semester each group of 4-5 students met with me to receive an overview of the scoping review process and get an initial search started. I discussed the feasibility of topics with each group. I checked the group searches during the semester and met with some of the groups about the data extraction phase as well.

At the end of the semester, those groups who wanted to publish were asked to identify a few journals for publication. The faculty member, the teaching assistant and I also made journal recommendations. In the summer, I spent time reviewing and editing manuscripts along with the faculty member and teaching assistant.

Results

The toolkit I have developed for researchers conducting scoping reviews can be viewed online. This includes presentations on scoping reviews, search techniques and an example project folder which includes forms and spreadsheets to help facilitate and organized the process of conducting a scoping review.

A list of vetted topics can be viewed online. Also, the discussion of how to narrow/broaden the topics is outlined, with the back and forth between the professor and myself.

Two out of the four groups opted to publish after the winter semester of 2021. The professor, teaching assistant and I met with both groups during the summer to discuss publication options. The students wrote draft publications and the three of us proofread and edited the publications. My focus was predominantly on the methods section. One of the groups from the 2022 winter semester is working toward a publication.

2021 topic published: Social Inequities Contributing to Gestational Diabetes in Indigenous Populations in Canada: A Scoping Review (13).

2021 topic being updated: Religion and Coping during the COVID-19 Pandemic.

2022 topic being pursued: Self-perceived Mental Health among New Mothers during the COVID-19 Pandemic.

Discussion

Balancing the need to make the projects feasible in a four-month time frame, so they could be presented and marked by the end of the semester, and ensuring that the review would be properly conducted, so they could be submitted for publication, was a challenge. Having a limited body of literature was key. This meant that the focus of the topics had to be suitably narrow yet have sufficient literature to conduct a review. Some student groups wanted to expand or narrow their topics. Explaining the review process and the PRIMSA-ScR reporting guidelines (14) helped students appreciate the need to have a focused topic with a bounded body of literature.

The groups who wanted to publish identified potential journals for publication. This helped students understand the nature, and cost, of publishing. Once a journal was selected, students had to condense the assignment content to meet the manuscript guidelines for the journal. This was both an opportunity and a challenge for the students, requiring them to select the most important elements to communicate in the manuscript.

Critical to the success was a solid relationship with the faculty member, established over the course of several years of teaching. Also essential was adequate time to review topics before the semester and conduct searches to ensure their feasibility for the assignment. Meeting students during the semester is a standard part of my role, but summer meetings and time to proofread and edit was required for this project as well.

This was a unique way, as a librarian, to participate in the classroom, but also to publish. For students this was an opportunity to put into practice their newly acquired evidence synthesis skills and to turn an assignment into a publication.

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