Excuse Me, May I Interject? Using Current News Articles to Step into the Middle of a Scientific Conversation

Mindy Thuna

University of Toronto Mississauga Library Hazel McCallion Academic Learning Centre 3359 Mississauga Rd. Mississauga, ON L5L 1C6 Canada *mindy.thuna@utoronto.ca*

Biography

Mindy Thuna began working at the University of Toronto Mississauga Library in 2005 as the AstraZeneca Science Liaison librarian. Prior to librarianship, Mindy completed her BSc. in Palaeontology and her MSc. in Vertebrate Morphology and worked as an educator in a variety of eclectic locations.

Introduction

Science is an ongoing conversation – ideas get transmitted back and forth between scientists (or papers) and ultimately form a network of related papers on any given topic. This lab steps into the middle of a scientific conversation. Using a current news item, students delve into citation searching, determining the main focus of an article, and choosing relevant keywords, valuable skills that every student needs to write effective lab reports on any subject.

As a science librarian, I often walk a tightrope between trying to educate students on the vast array of possible resources to choose for their lab reports and keeping the information interesting and relevant to encourage understanding and long term applicability. This session is designed to walk that fine line. On one level, the goal of this presentation is to teach students certain fundamental research skills that are required for effectively locating relevant articles for their lab reports. However, in a larger context, they will also be learning about the bigger picture and how to apply some of the skills and knowledge they are learning in university to their everyday lives. By using real world examples, students learn how to pick out the 'clues' to help them step into the scientific literature through a starting point that they will encounter in a 'real world' context.

Activity Outline

Learning Outcomes

1. Locate the original scientific article mentioned within a newspaper report. This outcome requires an understanding of the parts of a citation as the student must be able to pick out the key pieces of relevant information from the report.

- 2. Outline the main focus of an article.
- 3. Identify keywords that capture the main focal points.
- 4. Choose related articles.
- 5. Evaluate the similarity (or lack thereof) of the search results.

Materials

- Assignment worksheets (For a sample worksheet, see Appendix A)
- Newspaper articles (For a sample article click here: <u>http://news.nationalgeographic.com/news/2005/06/0616_050616_nepalporter.html</u>)
- Marking guidelines (These will vary with each instructor)

Methodology

Each student has a worksheet that outlines the questions and tasks that they are to complete in the session. This worksheet is submitted at the end of the session. I have the students download the workshop and do the entire activity online. As finding the databases is not the purpose of the exercise, all of the databases are hyperlinked directly within the worksheet. The students also submit their worksheet online.

The questions and tasks are as follows:

- 1. Each student is given a news article that refers to an original scientific study.
- 2. Using the clues given in the article, the student must track down the original paper.
- 3. Once the students have tracked down the original paper, they need to summarize the main focus and choose three keywords that describe the study.
- 4. The students are given a list of four scientific databases. They choose one and, using the keywords they identified in Step 3, search for another article on the same topic.
- 5. The students are now required to locate a more recent article that cites the article chosen in step 4.
- 6. The final question for students requires them to determine if the results of their search in step 4 found the articles they looked at in step 2 and step 5 and to discuss why or why not this occurred.

Conclusions

The course that I used this exercise in was a second year course entitled *Communication in Biology*. This course was open to all students in the Life Sciences at the University of Toronto Mississauga, but this exercise is easily adaptable for students with or without science backgrounds in any year of their studies. I have focused on newspaper articles, but items from the radio, television, or the internet would also work.

Appendix A

Citation Searching Sample Worksheet

Step 1: Title of your news article.

Step 2: Find the original study referred to in your news article.

Each article contains enough clues to assist you in this task. Cite the reference to the original study using APA style. If you need assistance with APA style, go to http://www.wisc.edu/writing/Handbook/DocAPAReferences Journal.html for some examples.

Step 3: Choose a database.

Choose one database from the following list. Underline the database that you used.

<u>Web of Science</u> provides Web access to the Science Citation Index ExpandedTM database that covers all areas of science including biology.

<u>PubMed</u>, a service of the U.S. National Library of Medicine, includes over 16 million citations from MEDLINE and other life science journals.

Scopus indexes over 14,000 titles in the scientific, technical, medical and social science literature.

Step 4: Forward citing.

Using one of the three databases listed in Step 3, search for the original study from Step 2. Find and cite one more recent article that cites this study.

Step 5: Keywords.

In one sentence state the main focus of the original study. List 3 words or phrases that best describe this focus.

Step 6: Conduct a key word search.

Conduct a search in the same database you chose in Step 4 using the three keywords from Step 5. Choose one article on the SAME topic as the original study from your search results. Cite this article.

Step 7: Thought question.

Did either of your articles from Steps 2 or 4 show up in your search for step 6? In two sentences, explain why you think this happened.