

Demonstrating the Literature Search Process Through Innovative Role Play Instruction for Pharmacy Students



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Abstract

To demonstrate the search process for obtaining the literature students need for writing a proposal for a research project. The course instructor initiated the use of both role play and worksheets in a class for writing a research proposal. During the role play, the instructor assumed the role of a student consulting a librarian in order to gather appropriate literature; the second librarian used the classroom computer to assist the student conducting the search following the instruction. Upon locating a relevant study report, the librarian would discuss how to use the information to locate other resources, such as a randomized controlled trial. The worksheet required students to follow the role play and identify specific items in the search and provide feedback. Follow-up voluntary workshops were offered where the librarians provided individual instruction and searching assistance. The class of 90 students is in their third professional year at a state university. Most comments (73%) from the worksheet were positive; specific comments also will be summarized. In the previous year with a standard lecture presentation, 4 students attended the follow-up workshop. After the role-play, 24 students attended. Instructors perceived that the role play made search strategies and the thought process explicit as well as modeled collaboration skills. Role play appears to be an effective instructional strategy for demonstrating the literature search process. Additionally, the role play models collaboration between the students and librarian, and the students and their project advisors, to effectively retrieve relevant literature for writing their research proposals.

Background

- Professional students are required to write a proposal for a research project
- Proposals include a literature review section
- Students must retrieve relevant literature using library resources
- Despite librarian & instructor presentations, students continued to have trouble identifying and retrieving relevant literature
- Few students attended voluntary workshops

Purpose

- To describe a role play developed to demonstrate the literature search process to enable students to retrieve relevant literature for their research projects
- To report students' feedback on the role play

Methods

- A role play by the instructor and the librarians was presented during class
- Students were provided with a worksheet which outlined the steps and required students to answer questions related to the role play
- The worksheet also contained 2 questions for students to provide feedback about the role play

Development of Role Play

- Instructor consulted with librarians to develop role play
- The process included developing probing questions to locate specific information
- Search strategies utilized the Arizona Health Sciences Library's Evidence Based Medicine (EBM) Search Engine
- Role play questions followed the outline on the worksheet

Description of Role Play

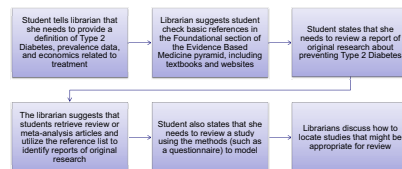
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Four Step Process for Identifying and Retrieving Appropriate Literature

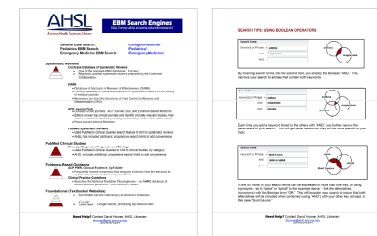
- Retrieve basic information, e.g. definition, incidence/prevalence & cost of treatment
- Retrieve reviews, including reference list
- Identify a report of clinical trial (primary literature) needed for literature review
- Identify a study using methods similar to the methods you are proposing to use

Step-by-Step Process

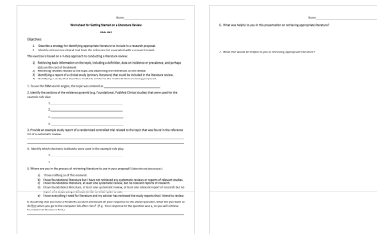
- Example used in role play: Project related to preventing Type 2 Diabetes utilizing exercise



Arizona Health Sciences Library's Evidence Based Medicine (EBM) Search Engine



Worksheet



Results

Figure 1. Table of Class of 2011 Demographics

Class total	90
Men	35
Women	55
Average Age	23
Bachelor's degree	42
From a community college	16
Underepresented ethnicity	34

What was helpful to you in this presentation on retrieving appropriate literature?

- "It was beneficial to see the 'thought process' in action"
- "Going through the step-by-step process was helpful"
- "Presentation showed me not only to look at the search results, but also to be able to look at the references and find key studies and articles"
- "It showed how easy it was to navigate the search engines"

What else would be helpful to you in retrieving appropriate literature?

- "Having example searches in writing online"
- "Having a place that has step-by-step instructions"
- "Actually knowing what info I need to get from the articles"
- "Knowing how to effectively search to maximize my time"
- "One-on-one time with librarians"

Observations

- Attendance at voluntary workshops increased from 4 to 24 students
- Instructor & librarians had previously assumed that students know how to:
 - Consult with a librarian
 - Use reference list at the end of a study report

Conclusions

- Role play effectively demonstrated how to consult with a librarian to identify relevant literature and how to use reference list
- Role play effectively demonstrated the thought process and action steps required to retrieve relevant literature

Recommendations

- Librarians will create an instructional guide for step-by-step literature searches
- Instructors will emphasize use of review articles and accompanying references
- Role play clearly demonstrates the process required to retrieve relevant literature
- Role play will be used again to help students learn how to retrieve literature