

12-4-2018

Searching as Strategic Exploration Building Block Activity

Bethany S. McGowan

Purdue University, bmcgowa@purdue.edu

Follow this and additional works at: https://docs.lib.purdue.edu/lib_fscm



Part of the [Information Literacy Commons](#)

McGowan, Bethany S., "Searching as Strategic Exploration Building Block Activity" (2018). *Libraries Faculty and Staff Creative Materials*. Paper 22.

https://docs.lib.purdue.edu/lib_fscm/22

This document has been made available through Purdue e-Pubs, a service of the Purdue University Libraries. Please contact epubs@purdue.edu for additional information.

Searching as Strategic Exploration: Building Block Activity

This hands-on activity will compliment a lecture on search building, which should include teaching the use of boolean operators, choosing keywords--natural language and controlled vocabulary, use of wildcards, and selecting appropriate databases.

Step 1: Provide students with a research question. A health sciences librarian will likely use the PICO method for research questions:

Does hand hygiene among health care workers reduce hospital-acquired infection?

Problem: hospital-acquired infection

Intervention: hand hygiene

Comparison: masks, no hand hygiene

Outcome: reduced infection

Emphasize the differences between natural language and controlled vocabulary for term selection, and how that will influence search strategies across different databases.

Natural Language: P = hospital-acquired infection; I = hand hygiene

Controlled Vocabulary: P = cross infection [MeSH], cross infection [CINAHL]; I = hand disinfection [MeSH], handwashing [CINAHL]

Step 2: Divide students into groups. Assuming the average size of a class is 60 students, 6 students per group is the recommendation. Groups of 3-6 are ideal for this assignment. (Allocate 3-5 minutes for this step)

Step 3: Working in groups, students should choose 1 or 2 relevant databases, then build a search strategy for each. Use the lego kit (see accompanying document) to piece together the search. (Allocate about 10-15 minutes for this step)

Step 4: Have groups enter their search strategies into their selected databases, and share the results with the class (Allocate 10-15 minutes for this step)

Step 5: Share and compare results. Discuss term selection, database selection, etc. (Allocate 5 minutes for this step)

Step 6: Q & A (Allocate 5 minutes for this step)

Directions for Activity Kit

Each set should include:

Parentheses: 5 Open Parenthesis and 5 Closed Parenthesis

Boolean Operators: 5 And, 3 Or, 1 Not

Wildcards: 3 *, 3 ?, 3 ", 3 "

Blanks: 20

Each group will receive one set, so multiply the above numbers by the maximum number of student groups you anticipate. For example, if you expect to have 10 groups of 6 you would need a total of 50 parentheses and 200 blanks.

Print on heavy stock paper, laminate, and provide dry erase markers. This will allow you to re-use your sets.

Keep your sets together--i.e. don't combine all your parentheses in one pile. This will allow for easier distribution.



NOT

A logic gate symbol for a NOT gate. It consists of a large rectangular box with the word "NOT" centered inside. A smaller rectangular box is attached to the top center of the main box, representing the output terminal.



OR

A logic gate symbol for an OR gate. It consists of a large rectangular box with the word "OR" centered inside. Two smaller rectangular boxes are attached to the top edge of the main box, representing the two input terminals.



AND

A logic gate symbol for an AND gate. It consists of a large rectangular box with the word "AND" centered inside. Three smaller rectangular boxes are attached to the right edge of the main box, representing the three output terminals.



