Does this database fit true to size?
Teaching database selection by having students rate and review resources

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RESOURCES | TECHNOLOGY | EXPERTISE

Problem

Web-scale discovery systems make it quicker and easier to find library resources. However, some content is difficult or impossible to find without using specific resources, especially in business research.

Hypotheses
H1: Students will not use appropriate sources if they do not look in the right databases/resources.

H2: Having students start by evaluating the resource on the whole will be a good first step in evaluating individual sources.

Method

Setting
Upper-class business undergraduates were tasked with writing a 7-10 page group research paper on ethics and technology or computing.

Most students said they had not written a research paper in college.

I had two 45 minute visits, one in the middle of the semester and one a week before the due date.

Part of the first visit involved evaluating databases based on the professor's source requirements:
- 7 references
- 3 professional/trade or scholarly
- 2 from the ACM (Association for Computing Machinery) portal

Method
I analyzed the review worksheets each pair submitted for 2 sections (Fall 2016 and Spring 2017), and analyzed the bibliographies of the Fall 2016 section's final papers.

Below is an example of a finished review:

- ACM (Association for Computing Machinery)
  Source Types: scholarly/academic journal articles, magazine articles, ebooks, conferences.
  Result organization: By relevance.
  Limiters available: People, publication, conference, date.
  Ease of understanding source types: Somewhat
  Full text access? Yes, through a PDF link on the results and summary pages.
  Tip: When you enter the database, click on the Advanced Search link.
  Tip: It is difficult to refine by multiple items.

Bibliographic Citation Analysis

Trade 42%
Scholarly 25%
Popular 33%
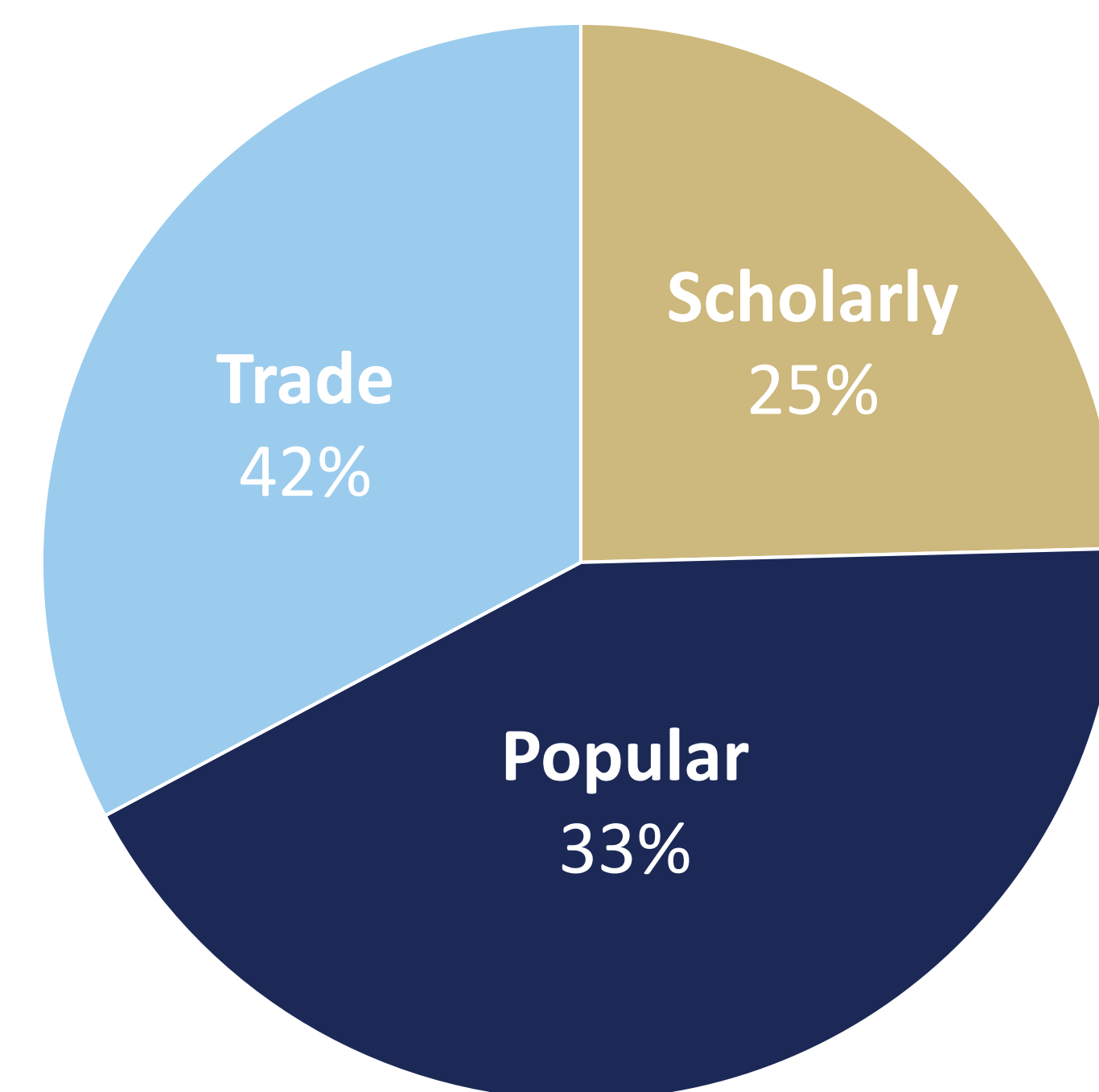
Breakdown of sources used in the 8 Fall 2016 papers

Sources Used
High reliance on popular sources
- In 3 papers, popular sources made up 50% or more of the bibliography

Varying types of scholarly sources
- About half of the scholarly sources were student or conferences papers

Citations
- Only 8% of citations were correct or almost correct (small punctuation errors)
- 3 papers had 0 correct citations

Discussion: Students struggled with...

Identifying Sources
- Struggled to identify the specific type of online article
- Some believed all sources in library databases were scholarly/academic

The State of Phishing Attacks
Communications of the ACM article

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Forbes
Simulated Phishing Attacks Yield 37 Percent Return On Investment
Forbes article

Evaluating Sources
- Did not seem to grasp the idea that not all sources are equal and some are better for certain needs
  - Op-Ed vs. Traditional hard news
  - Corporate sponsored content

Analytics company

Big Data Analytics
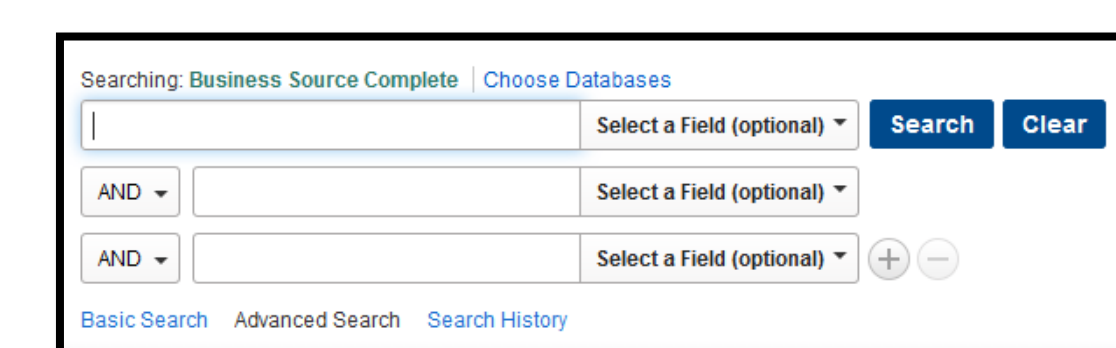Op-Ed

Formatting Citations
- Most used citation generators and did not check for errors
- Sources were cited inconsistently within papers
- Sources were often incorrectly identified

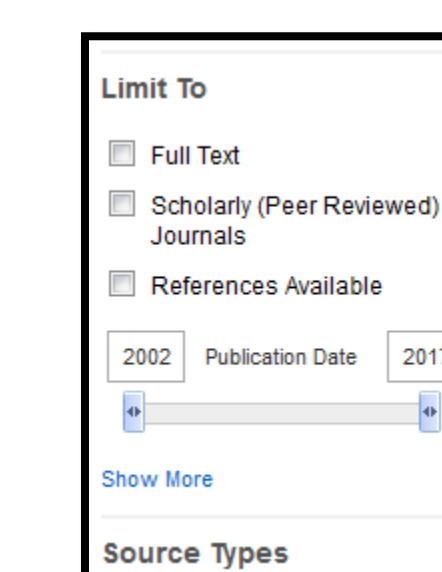AMERICAN PSYCHOLOGICAL ASSOCIATION
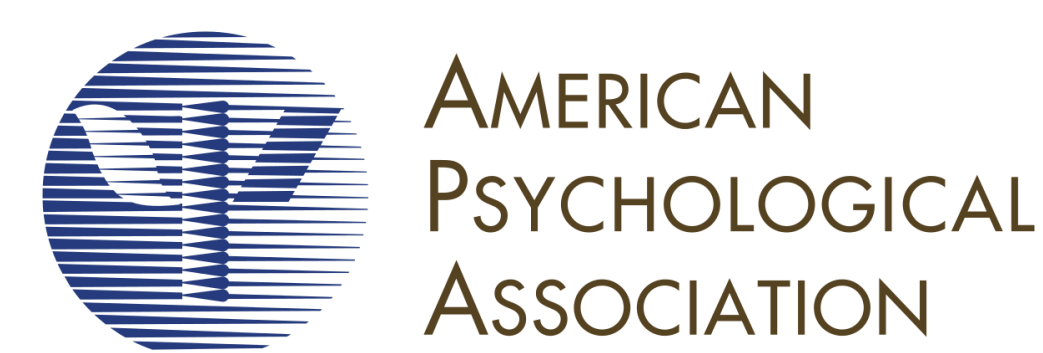
Advanced Database Use
Advanced search options were confusing
- Shows need for database instruction

Found refining cumbersome and unnatural
- Counter to assumption of ease at navigating because digital native

Limit To
Full Text
Scholarly (Peer Reviewed) Journals
References Available
Publication Date
Show More
Source Types

Changes for Spring 2017

I was given twice the amount of class time.

Lesson Adjustments
Took time in class to go over the database reviews, gently correcting mistakes.

Added more emphasis on identifying and evaluating individual sources
- Video on the information cycle
- Discussion of source type characteristics and uses – framed with "Format as a Process"
- Online interactive quiz practicing identifying and evaluating real sources

Recommendations and Conclusions

Recommendations
This activity might work better when the databases contain vastly different content, rather than mostly articles.

Reading the student's papers and bibliographies is a good way to improve instruction.

Conclusions
H1: While mostly true, the students did not seem to care about which resource they used, unless required to use a specific database or resource.

H2: My idea of focusing on the databases was predicated by the belief that it is the first step to finding good sources. But, if students can't evaluate sources within a good database, they still won't use appropriate sources.

In order for students to use appropriate sources, they need to be able to understand what sources are appropriate, and how to find, identify, and evaluate them. Designing a lesson that includes various activities aimed at each of these steps is likely to yield better results than focusing on one aspect.

Supplemental Materials

For references, the course LibGuide, and full lesson plans, visit the Virtual Conference site.