My scholar is smarter than your scholar -- Or is it?
A comparison of an information search using Google Scholar versus CUA's Metalib academic journal federated search application

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Introduction

This study seeks to answer the question: can Google Scholar be used as a standalone search engine to provide students with relevant literature, suitable for academic research?

Method

As a means for comparison, a search in Google Scholar was compared with the same search in the Metalib digital library gateway system of the Mullen Library at The Catholic University of America. The system is commonly known as ALADIN. It is an academic journal database managed and maintained by academic librarians at CUA.

The search results in Google Scholar were compared to those of ALADIN to determine whether Google Scholar provided enough academic information for use in a typical undergraduate research paper.

Search #1: ALADIN

After the initial required log in to ALADIN, the user was presented with a complex search interface that didn’t provide an obvious primary starting point.

Upon further inspection, the user found a link in the upper left hand corner of the database section that read, “Need a good place to start?” with two links below it.

The first link was Academic Search Premier. It opened up to a simple webpage, similar to the main Google site.

The keyword search was entered (see Table 1). The search was conducted on the entire database which holds items dating back to 1866. It returned 456 results with 20 results presented on the page. There were 11 peer-reviewed journals, 3 periodicals, and 1 newspaper. There were no duplicates.

Search #2: Google Scholar

To access Google Scholar the only step required was typing the URL into the browser. This brought up a simple search interface, similar to the main Google site.

In Google and Google Scholar, the Boolean operator AND is implicit, so the search terms were the same as those for ALADIN, without the AND operator.

Google Scholar returned thousands of results, as is typical for any Google-owned search engine. For comparison purposes, the first 20 results were used. Google Scholar does not publish the date ranges for its databases. A manual search found relevant items that pre-dated 1800.

Of the results, there were 10 peer-reviewed journals, 1 book, 3 conference proceedings, and 2 citations. There were no duplicates.

Discussion

Each search engine had advantages and disadvantages. There was no overlap of results between the two search engines.

The main advantage of Metalib’s ALADIN was that full text was readily available for all items. It also provided several articles that were non-academic, which might be useful, depending on a student’s needs.

The disadvantage, of course, is that one has to be a student at the university in order to use ALADIN.

The main advantage of Google Scholar was its very fast results retrieval. Perhaps more interesting though, the results from Google Scholar were noticeably more scientific, as indicated by publications and articles addressing the topic with statistical and quantitative methods. It also provided a book in its results that was freely available on Google Books.

The disadvantage of Google Scholar was in the poor information quality of the citations and the abstracts provided. In addition, only 6 of the 20 items provided free access to full text documents.

The fact that Google Scholar is free might arguably outweigh the robust full text availability in ALADIN for some searchers. However, without better citation and abstract data, Google Scholar falls short as a standalone academic search engine.

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