Imperfect Tools: Google Scholar vs. Traditional Commercial Library Databases

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Like every other resource that a library might offer, Google Scholar has strengths and limitations. Instead of rejecting Google Scholar because it does not do everything that the library or librarians do, Google Scholar should be accepted or rejected based on how well it assists in a particular step in information seeking. That step traditionally has been assisted by indexing and abstracting resources. In some circumstances Google Scholar is a better tool than the indexing and abstracting resources; in other circumstances it is not. This article examines the strengths and weaknesses of Google Scholar compared to subscription indexing and abstracting databases. It critiques college and university libraries' continued use of subscription databases that fail to provide a clear advantage over Google Scholar.

When Google Scholar was introduced, it initially met with some praise and a fair amount of criticism from the library world. Both the praise and criticism generally were deserved. Unfortunately, early responses sometimes compared Google Scholar to the library as a whole or to an idealized vision of library databases' rather than to the real, imperfect indexing and abstracting databases offered through the library. Some of the faults that early commentators found in Google Scholar included lack of a controlled vocabulary, lack of authority control, incomplete or uneven coverage depending on discipline, and time lags between publication and appearance in the database. These same faults could be pointed out for Web of Science, a venerable subscription database. Another criticism of Google Scholar was that its definition of “scholarly” includes materials that have not undergone peer review, so it may lead users to this unvetted material. Again, this criticism also could be leveled against a subscription database. For example, book reviews, editorials and commentaries regularly appear in search results from Academic Search Premier, even when the search is limited to scholarly (peer reviewed) journals. Instead of comparing Google Scholar to the ideal resource, a fairer comparison would be to actual subscription databases.

Some evaluations have explored whether a subscription database produces better results than Google Scholar. When librarians conduct test searches using advanced search features in library databases, they get somewhat better results with the database than with Google Scholar. When college students conduct the searches, the advantage for the subscription database evaporates. The sources students find from Google Scholar are as good as or better than those found through the library’s databases. For these novice users, often subscription databases do not provide a clear advantage over Google Scholar.

Librarians may be able to use controlled vocabularies to produce more precise results from a database than from Google Scholar or to find special materials that could not be found through Google Scholar, but library patrons are not librarians. Simply having a controlled vocabulary or special materials is not good enough for a novice user. If users cannot figure out the controlled vocabulary or find the special materials, they cannot experience these supposed advantages. For there to be a clear advantage of a subscription database over Google Scholar, novice users should be able to complete their work more easily with the subscription database than they can with Google Scholar. Many subscription databases provide a clear advantage by simplifying access to special materials or by leveraging their controlled vocabularies. The interface designs that highlight subject terms next to results sets, such as those in EBSCOhost and Engineering Village, should be commended for their effort to guide novices to controlled vocabularies without interrupting users’ searches. Some databases and interfaces simplify users’ work in other ways. For example, Web of Knowledge provides citation assistance through EndNote Web, and full-text resources like JSTOR provide easy access to complete documents.