Google Tools for Scholars

Google offers great search tools for journal articles, books, and other scholarly communication.

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Google Book Search   books.google.com

Google Scholar   scholar.google.com

Google Videos   video.google.com

Google Images   images.google.com

Google Blogs   blogsearch.google.com

Google Maps   maps.google.com

Google Earth   earth.google.com - requires a download
                       (free version available)

Personal Tools - require Google account

Google Groups

Google Reader

Google Calendar

Google Documents

Google Labs, for products in development: labs.google.com

All Google products: www.google.com/intl/en/options

Google Book Search   books.google.com

From the Google Book Search "About" page:

How does Google Book Search work?

Try a search on Google Book Search or on Google.com. When we find a book whose content contains a match for your search terms, we'll link to it in your search results. Clicking on a book result, you'll be able to see everything from a few short excerpts to the entire book, depending on a few different factors.

What can you view?

Each book includes an 'About this book' page with basic bibliographic data like title, author, publication date, length and subject. You may also see additional information like key terms and phrases, references to the book from scholarly publications or other books, chapter titles and a list of related books.

Full view: If we've determined that a book is out of copyright, or the publisher or rights holder has given us permission, you'll be able to page through the entire book from start to finish, as many times as you like. If the book is in the public domain, you'll also be able download, save and print a PDF version to read at your own pace.

Limited preview: If a publisher or author has joined our Partner Program, you'll be able to see a few full pages from the book as a preview. You can conduct multiple searches within the book, or browse through the available pages (there's a limit to the amount of the book you can view online).

Snippet view: Clicking on the book result, you'll be taken to the 'About this book' page. If you choose to search within the book, for each search term we'll display up to three snippets of text from the book, showing your search term in context. You can enter additional searches to help you decide whether you've found the right book. As always in Book Search, you'll see links to places where you can buy or borrow the book.

No preview available: For books where we're unable to show you snippets, you'll see an 'About this book' page displaying bibliographic information about the book, plus links to help you find it in a bookstore or library.

From Google Book Search: An Introduction:

Why are there differences in what you can view?

Broadly speaking, there are three types of books in Google Book Search: public domain books, in-print books, and out-of-print books. When Google Book Search was being developed, the easiest place to start was with public domain books. In the U.S., public domain books include those books published before 1923.

After Google verifies that the book is in the public domain, they display the full text online. According to OCLC, public domain books only make up about 20 percent of books in the world. To include books that are still in copyright, Google developed the Google Books Partner Program to include books currently sold in bookstores. Copyright holders allow Google to display a "Limited Preview" so that you can browse a portion of the book. Still, books in copyright only make up about 5 percent of books, for the roughly 75 percent of books left there may be disputes over copyright rights or the book may be in the public domain but there is no documentation to prove it. For these books, Google Book Search developed the basic bibliographic view and the snippet view.

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Where do these books come from?
The books in Google Book Search come primarily from two sources: publishers and libraries.

Google Books Partner Program: An online book marketing program designed to help publishers and authors promote their books by showing you a limited number of pages as a preview.

Google Books Library Project: A project to include library collections in Google Book Search and make these books searchable and discoverable. Google Book Search shows useful information about the book, and in many cases, a few snippets – a few sentences to display your search term in context. When a book is out of copyright, you can view or download it in its entirety.

Library participants include Princeton, University of California, Harvard, University of Michigan, New York Public Library, Oxford University, Stanford.

What can I do once I've found a book I like?

Browse: Click the forward-facing arrow to browse available pages. If you're in one-page mode, simply scroll down to see all available pages. You can also view the book in full screen mode.

Search within the book: Click on additional search results to see other pages containing your original search term, or try a new search within the book.

Learn more: Book entries include reference pages with book reviews, web references, maps, and more.

Buy the book: Click on one of the links to online booksellers to go to directly to a page where you can buy the book.

Find it in a library: Many books have Library Links. Look for the "Find this book in a library" link to find a local library that has a copy.

Learn about the publisher: Click the publisher's logo to go to the publisher's website and find more books from that publisher.

Add a book to My Library: Create your own collections . Requires a Google account.

From Google Book Search "Help Center" page:

What about books in other languages?
Google Book Search aims to include books from all the world's languages and cultures. All of the prestigious libraries Google Book Search is working with have books in many different languages, and they aren't limiting their scanning to English-language books. Google Book Search is currently working with publishers from many countries around the world to include their books in the Partner Program, and there are already many foreign-language versions of Google Book Search.

Sample searches:

Adventures of Tom Sawyer
William F Buckley

Google Scholar   scholar.google.com

What is included in Google Scholar?
Google says that Scholar includes scholarly literature, including peer-reviewed papers, conference papers, theses, book chapters, preprints, abstracts, and technical reports from all broad areas of research:

> Biology, Life Sciences, and Environmental Science
> Business, Administration, Finance, and Economics
> Chemistry and Materials Science
> Engineering, Computer Science, and Mathematics
> Medicine, Pharmacology, and Veterinary Science
> Physics, Astronomy, and Planetary Science
> Social Sciences, Arts, and Humanities

Google Scholar may also include multiple versions of an article.

Where does Google get its content?
According to Google, it draws from "a wide variety of academic publishers, professional societies, preprint repositories and universities, as well as scholarly articles available across the web." A sample of publishers that are included in Google Scholar:

> American Physical Society (APS), arXiv, Association for Computing Machinery (ACM), Blackwell, Institute of Electrical and Electronics Engineers (IEEE), Institute of Physics, Nature Publishing Group, NASA, PubMed, Springer, Wiley Interscience

How does it work?
Google searches the web and uses an algorithm to determine if a web page or citation is "scholarly." Google also identifies material by extracting citations from articles. Google Scholar results are more narrow than Google Web results.

> A search for "educational assessment" in **Google Web** yields 343,000 web sites.
> A search for "educational assessment" in **Google Scholar** yields 23,000 documents.

What do I need to know to use Google Scholar?
➢ You should be knowledgeable about off-campus restrictions to some published materials and how you can access those materials by using the KSU proxy server or the KSU VPN.
➢ You should be familiar with the OLINKS linking service.

What's the difference between Google Scholar and a research database such as Biological Abstracts or PsycINFO?
This question is a challenge to answer because we know so little about what Google Scholar covers. It will help you identify hundreds or thousands of scholarly articles but may miss important studies.

A comparison (one librarian's perspective):

	Google Scholar	research databases
easy to use	✓✓✓	✓
deep coverage	✓	✓✓✓
search options	✓	✓✓✓
multidisciplinary search	✓✓	✓
uses subject terms		✓✓
tracking who cites whom	✓	✓
sorting results	✓	✓✓✓
exporting results	✓	✓✓
emailing, downloading results		✓

The Basic Search on Google Scholar

Use your knowledge of search strategies and Boolean operators to create an effective search.

Examples:

"educational assessment"   [in quotation marks to search as a phrase]
"college students" OR undergraduates   [use upper case OR for synonyms]

Topic: What are some ideas for using active learning strategies in the classroom?
Search: "active learning" classroom

Topic: What effect did the Exxon Valdez accident have on sea otters?
Search: "Exxon Valdez" otters

When you type in two words without quotation marks, Google assumes both terms are required, so there is no need to type the word "AND."

Sample Searches

1. Go to scholar.google.com

2. Type in: **"active learning"**   SEARCH

How many results?

3. Change the search to look for the keywords only in <u>titles</u>:

Go to Advanced Scholar Search.

Use the pull-down menu for "where my words occur."

Choose "in the title of the article"   SEARCH

4. Focus the results by adding another concept:
Type the word **classroom**   in the search box.   SEARCH

How many results?

5. On the results page, click on "Recent articles." (Notice the new pull-down menu next to the search box.)

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Viewing the Results (taken from the Google Scholar Help section)
Click on the main results. You may be led to the web site of a publisher, scholar, organization. You might see a fuller citation, an abstract, or possibly the full article or book chapter.

What does the Related Articles link do?
Google tries to automatically determine which articles in our index are most closely related to your results. You can see a list of these articles by clicking the "Related Articles" link that appears next to many results. The list of related articles is ranked primarily by how similar these articles are to the original result, but also takes into account the relevance of each paper. Finding sets of related papers and books is often a great way for novices to get acquainted with a topic. However, we've found that even experts can sometimes be surprised to discover related work in their area of expertise.

Why are there author names on the left hand side of my results page?
We automatically suggest authors related to your query – just click on an author's name and you'll see their papers. Finding authors who publish on the topics you're interested in is often a great way to get better acquainted with a field and discover related work you may not have found otherwise.

Sometimes there are links: "Cited by x." What does this mean?
This means that other Google resources (web sites, articles, book chapters, reports, etc.) have cited the article. **There is no correlation between the number of times the article was cited in other scholarly journals and the Google citation number.** The *Social Sciences Citation Index*, *Science Citation Index, and Arts & Humanities Citation Index* (also known as *Web of Science*) would be better sources for this.

Finding the full-text of the document if it is not available on Google Scholar

Have a Kent State computer connection to see the greatest number of options for obtaining full text. Use the proxy server or the new (recommended) VPN service.

Look for options for "Find it with OLINKS" or "OhioLINK OLINKS"
- OLINKS is a linking service provided by OhioLINK. It will lead you to the full text of any article that is in OhioLINK collections, including the Electronic Journal Center, JSTOR, and others.
- OLINKS will also show you if a book is available at your library or any other OhioLINK library.

If there is no "OLINKS" option, try "Library Search," which may take you to Kent State's own library catalog.

If you still cannot find a link to full text, search for the journal title in Kent State's "E-Journal Finder" (to look for an online version) or in KentLINK (to look for a print version).

When in doubt, ask a librarian!
    Reference desk, first floor Main Library; 330-672-3150; IMaKSULibrarian (IM screen name)

Exporting Google Scholar Results
You can export from Google Scholar to several different bibliographic management services.

1. Go to Google Scholar
2. Click on the Scholar Preferences link to the right of the Scholar search box.
3. Scroll to the bottom of the Scholar Preferences page, and in the 'Bibliography Manager' section, click the radio button next to 'Show link to import citations into' and choose the citation manager format you prefer: RefWorks is one option.
4. Click the "Save Preferences" button. That's it!

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Next time you do a Scholar search, you'll see a link next to each search result that says 'Import into RefWorks' (or whichever format you specified). Clicking on the link will open a file pre-formatted for your bibliography manager.

NOTE: This method allows exporting of only ONE citation at a time.

Librarians Monica Anderson and Katie Newman from Univ. of Illinois Urbana Champaign offer directions for importing multiple citations from Google Scholar in to RefWorks by using Zotero (Firefox browser required): http://www.library.uiuc.edu/refworks/import_instructions.htm#GoogleScholar (See the "second way.")

Other Searches

by author
Enter the author's name in quotations: "d knuth". To increase the number of results, use initials rather than the full first name. If you're finding too many papers that mention the author, you can use the "author:" operator to search for specific authors. For example, you can try [author:knuth], [author:"d knuth"], or [author:"donald e knuth"].

by title
Put the paper's title in quotations: "A History of the China Sea." Google Scholar will automatically find the paper as well as other papers which mention it.

finding recent research on a particular topic
Just click on "Recent articles" on the right side of any results page, and your results will be re-sorted to help you find newer research more quickly. The new ordering considers factors like the prominence of the author's and journal's previous papers, as well as the full text of each article and how often it has been cited.

date restrict   (This option is only available on the Advanced Scholar Search page.)
Date-restricted searches can be effective when you're looking for the latest developments in a given area. You can enter a range of years along with your keywords. Bear in mind, however, that some web sources don't include publication dates, and a date-restricted search will not return articles for which Google Scholar was unable to determine a date of publication.

searching for papers in specific publications   (Only available on the Advanced Scholar Search page.)
A publication-restricted search only returns results with specific words from a specific publication. For example, if you want to search the *Journal of Finance* for articles about mutual funds, you might search for "mutual funds" as a keyword, and "journal of finance" in the publication field. Keep in mind, however, that publication-restricted searches may be incomplete. Google Scholar gathers bibliographical data from many sources, including automatically extracting it from text and citations. This information may be incomplete or even incorrect; many preprints, for instance, don't say where (or even whether) the article was ultimately published.

In general, publication-restricted searches are effective if you're certain of what you're looking for, but they're often narrower than you might expect. For instance, you might find that a search across all publications for [mutual funds] gives more useful results than a more specific search for "funds" only in the *Journal of Finance*. Finally, bear in mind that one journal can be spelled several ways (e.g., *Journal of Biological Chemistry* is often abbreviated as *J Biol Chem*), so you may need to try several spellings of a given publication in order to get complete search results.

searching by category
From the Advanced Search page, you can search for scholarly literature within seven broad areas of research. Simply check the boxes for the subject areas you're interested in searching.

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A Quick Look at Some Other Google Products

Google Videos   video.google.com

Search for: Alaska tsunami 1964

Google Images   images.google.com

Search for: Tacoma bridge

Google Blogs   blogsearch.google.com

Search for: new york fashion week

Google Maps

Search Google Web   mapping the Afghan experience in the u.s.
for:
                       http://gis.uta.edu/afghan

Google Earth   Examples of projects:
(requires a software   Rising Sea Level Animation
download)   City of London Timeline
                       Hurricane Katrina
                       World Population Density

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Bonus: Google Web Search Tips

Phrase Searching

Use quotation marks to ensure that the words you type in appear next to each other, in a specific order.

"interpersonal communication"
"stem cell research"
"so say we all"

Domain Limiting

Use the advanced searching option to limit to a type of domain, or to a particular site.

.edu = educational institution	.org = non-profit organization
.com = commercial enterprise	.net = Internet Service Provider
.gov = U.S. governmental body	.mil = military

There may also be 2-letter codes at the ends of some domains indicating country (e.g., uk for United Kingdom) or type of U.S. government organization (e.g., .oh for state of Ohio).

Assorted Search Tips

These are all searches that you can enter in the Google Web search box.

Compiled from:

Top 10 Obscure Google Search Tricks. http://lifehacker.com/339474/top-10-obscure-google-search-tricks
Accessed 1/30/2008.
GoogleGuide. By Nancy Blachman and Jerry Peek.
http://www.googleguide.com/advanced_operators_reference.html Accessed 1/29/2008.

1. Get the local time anywhere.
Examples: what time is it in hong kong
                          time Hong Kong

2. Track flight status.
Example: Airtran 201

3. Conversions: currency, metrics, bytes, and more.
Examples: 10 US dollars in Australian money
                          30 CAD to USD
                          5oz to liters

4. Find related terms and documents. Adding a tilde (~) to a search term will return related terms.
Example: ~nutrition   returns results with the words nutrition, food, and health

5. Track deliveries from UPS, FedEx, and USPS. Enter the tracking number
Example: 1Z14662R0340419000

6. Get weather reports by zip code or city.
Examples: weather 90210
                          weather kent ohio

7. Get definitions.
Example: define: libertarian

8. Local movie times.
Example: Atonement 44242
                          movie: Atonement

9. Mathematical calculations.
Examples: 12 + 34 - 56 * 7/8
                          45% of 39
                          2^5 or 2**5   (raise to a power)

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