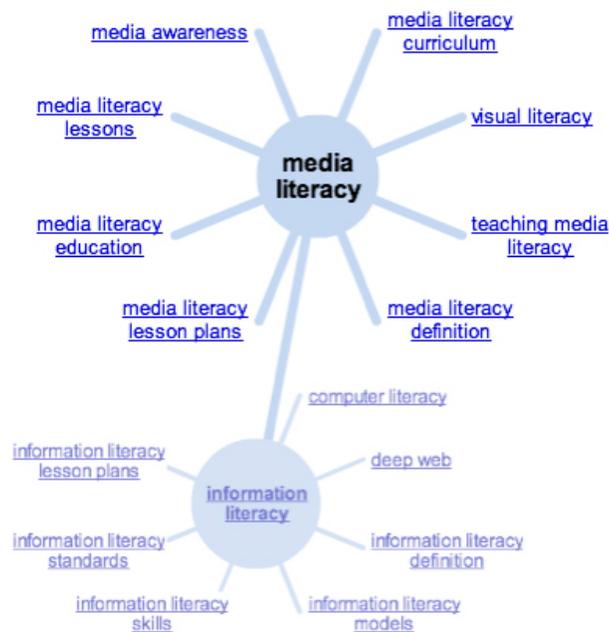By Mark Wagner, Ph.D.
mwagner@cue.org

Specialized (and Little Known) Google Search Tools

Google has recently changed their search user experience to highlight and make more accessible some of their specialized (and little known) tools. Several of these can be useful to educators and their students.

Once a search is entered into Google, a new left-hand column appears alongside the usual results. The top part of this column makes specialized search tools such as Images, Videos, Books, and Maps accessible with only one click. There's no need to go to a separate website and retype your search in order to search for specialized media, or to search Books instead of the Internet.

The lower part of the left-hand column also includes additional options. For instance, instead of viewing results from "any time" you can now click on "latest" to see up-to-the-second results from news sources, the blogosphere, and other social media, such as Twitter. New results will scroll by live as they happen. Similarly, instead of viewing "all results" you can view "social" results to see items that others in your social circle have found useful. (Others in your social circle might include your contacts in Gmail or people you follow in Google Reader, for instance.)
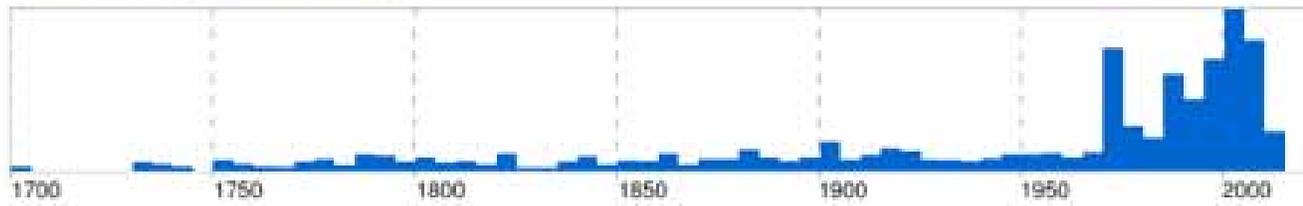
Some of the most impressive new ways to visualize search data are alternatives to "standard view." By selecting "Wonder wheel" you'll now see a visual representation of searches related to what you entered—organized as a mind map. This can be helpful for students (or educators) trying to narrow down their search—or visualize the sort of information they are exploring. For example, a search for "information literacy" reveals a web of related searches including "media literacy." Clicking on media literacy in turn reveals a new web, including a node for "media literacy lessons," which might be useful for you and your students.

> Simply visiting the Google News homepage can be a great place to start any discussion of current events at any grade level....

Timeline

1700-2010 Search other dates

Another alternative way of visualizing search results is the "timeline," which produces a visual timeline of search results that is clickable, allowing users to zoom in on specific time periods. A search for "information literacy" reveals a cluster of results between the 1980s and the present, with a peak a few years ago. One might be curious though, about the smaller peak in the 1780s. Clicking on the peak reveals a quote from president Jefferson: "Were it left to me to decide whether we should have a government without newspapers or newspapers without government, I should not hesitate to prefer the latter."

Note: In order to see all of the options available for your search, you may need to click on the "More" link below "Everything" in the left-hand column, or the "More Search Tools" link in the lower half of the column.

Though the ease of accessing these new options is impressive, it is sometimes still worth a trip to more specialized Google search tools in order to provide a more comprehensive search experience for students. If a typical research project requires students to cite a number of books, periodicals, and websites, the following tools might be useful: Google Books, Google Scholar, Google News, Google Blogsearch, and Google Alerts.

Google Books (at <books.google.com>) allows students to search the contents of the world's libraries (rather than the contents of the Internet). Through ground-breaking deals with world libraries, universities, and publishers, Google has made millions of volumes searchable online—and many of them viewable online in either snippet, preview, or full-text versions. Students can search for a term, discover books containing that term, and then click on a book to be taken directly to the most relevant location in the book—where the search term will be highlighted for them. This tool can be used to supplement the school's library (with access available from anywhere) and to save students time by allowing them to quickly and easily home in on (and evaluate) relevant information. Google Books also allows users to save books to "My Library" for easy access (or sharing) later. This can be an ideal way for teachers or librarians to share books with students.

Similarly, instead of searching the entire Internet, Google Scholar (at <scholar.google.com>) searches only scholarly sources (mostly peer-reviewed journals, trade journals, and university publications). Many of the sources are also available in a full-text version. The killer feature, though, is the "Cited By" link provided for each resource. Once you find a relevant resource, you're no longer limited to using the works cited to find other relevant sources (looking backward in time)—you can now click on "Cited By" to see who has cited an article since it was published! While this tool might not be appropriate for younger students, many high school students (or teachers in graduate programs) might find this useful.

Google News (at <news.google.com>), of course, searches only news sources. Automated algorithms produce the top news from various sources on a wide variety of topics. Simply visiting the Google News homepage can be a great place to start any discussion of current events at any grade level—particularly when you can discuss the agenda or bias of various headlines and articles from a variety of news sources around the world. Entering a search at Google News can also help you find more up-to-date information than you might at Google Books or Google Scholar.

Continuing along the spectrum from the most authoritative to the most timely, students might also explore Google Blogsearch (at <blogsearch.google.com>) for even more up-to-date sources—and a wider variety of opinions—from a number of blogs and other social media. Again, top stories are presented on the home page, and a search result can be entered to reveal sources that might have remained buried deep in the usual Google results.

Finally, Google Alerts (at <www.google.com/alerts/>) can be used to have Google research for you 24/7. Enter a search term, what sort of media you'd like searched, how many results you'd like, and how often you'd like them... and then enjoy the benefits of your own virtual research staff emailing you new and relevant links as often as you like.

With these research tools on hand, any student or educator will be better prepared to conduct research, more efficient at locating and evaluating resources, and better able to discover the things they want to learn.

Formerly a high school English teacher, Dr. Mark Wagner has served as an educational technology coordinator at the site, district, and county levels. He is now the president of the EdTechTeam, which provides professional development and consulting services to schools, districts, and other educational institutions. In this capacity, he is the CUEtoYOU professional development coordinator and by extension, Director of the CUE-produced Google Teacher Academy. He is also a Google Certified Teacher and has a Ph.D. in Educational Technology and focused his research on video games in education. For more information, see <www.edtechteam.com>.