



OVERVIEW

BIG IDEA

Accessing the wealth of research findings from scholarly communities is virtually instantaneous using online search tools like Google Scholar.

OBJECTIVE

10.10: Conduct an effective search for a journal article using Google Scholar.

AGENDA

1. Questions
2. Information at Your Fingertips
3. What is Google Scholar?
4. Steps to Using Google Scholar
5. Scavenger Hunt

HOMEWORK

Suppose you want to know the current state of knowledge among the public about carbon monoxide. Find a research study on this topic using Google Scholar, read the abstract, and summarize

LESSON 10.10

Google Scholar

SUMMARY:

This lesson will help students lay an initial foundation for using tools for searching scholarly texts, by explaining the gist of Google Scholar and giving them practice using it. Students will begin with questions to reflect on their background and then discuss the changes in the technological landscape that have completely altered how scientists share and consume information in their fields. Next students will read an overview about Google Scholar and actively review a simple step-by-step guide for using it. To practice, students will be paired up and sent off to find answers to three “scavenger hunt” questions by searching on Google Scholar.

STANDARDS:

NHES 3.12.2: Use resources from home, school, and community that provide valid health information.

MODULE 10: ENVIRONMENTAL HEALTH LESSON 10.10

Google Scholar

Obj. 10.10: Conduct an effective search for a journal article using Google Scholar.

Questions

1. Name 2 technological tools (websites, programs, software, devices, etc.) that you have learned how to use within the past year.
2. Have you ever used Google Scholar? If yes, describe the experience. If no, why not?
3. Have you ever used the library to physically look up research in a hard-copy journal or book? If yes, describe the experience. If no, why not?

Information at Your Fingertips

The first full-text Web search engine was launched in 1994. Google was not developed until 1998. Google Scholar started in 2004.

1. Prior to Google Scholar, how did researchers share their work with one another and the general public?
2. How do you think the shift to online journal databases impacted researchers and society?

What is Google Scholar?

Google Scholar is a freely accessible Internet search engine that connects and indexes the full text of scholarly literature. Google Scholar includes a wide range of publishing formats and subject areas or disciplines. It was released (in beta) in November 2004. It includes most peer-reviewed online journals of Europe and America's largest scholarly publishers, plus scholarly books and other non-peer reviewed journals. Its advertising slogan – "Stand on the shoulders of giants" is a nod to Isaac Newton and scholars in general. Google Scholar has many unique features such as the "cited by" feature, which allows access to abstracts of articles that have cited the article you are viewing. And "Related articles," which shows a list of closely related articles, ranked by both similarity and relevance. Google Scholar is also linked to universities and institutions of research and learning, so that you can connect to larger databases in order to see

DO NOW: Have students partner up and share their answers.

DISCUSS: Ask students, "What might be challenging about doing everything online for generations that 'grew up' using hard copies, paper, libraries, etc...?"

READ: Ask students, why do you think the developers of Google Scholar elected to use the Isaac Newton quote, "'Stand on the shoulders of giants.'?"



the full-text of almost all articles. Without connecting to a database, you are only able to access the abstracts of many article, although some are certainly available full text for free. Google Scholar is definitely not the only method for searching for journal articles and you will probably learn more methods in future classes, but it is certainly a convenient, fast, and openly accessible way to do so.

Source: Adapted from Wikipedia "Google Scholar" <http://en.wikipedia.org/wiki/Google_Scholar>



Steps To Using Google Scholar

Read the steps below to get started on Google Scholar.

- 1. Go to: http://scholar.google.com/
2. Uncheck patents and legal documents (you just want articles for our purposes!)
3. Type in various search terms. Think about the population, risk factor, & outcome variables you might be interested in.
a. i.e.: sleep stress headaches teenagers
4. Try to find articles from the past 10 years. Research changes quickly! You can adjust the date range on the left-hand side.
5. Read the abstract to determine whether the article will be useful and is aligned to your purpose.
6. If the article is a fit, download or click to the entire text (if available).



Google Scholar Scavenger Hunt

With a partner, navigate back to Google Scholar and try to answer the three scavenger hunt questions below by searching the Google Scholar database.

- 1) According to a study on suicide ideation and substance abuse among Latinos by Pena et al. (2010), what subpopulation of youth was used in their methods?
2) In what year did Tremblay et al. find out that 12 year-old females and males who were physically active in their study had considerably higher levels of self-esteem?
3) According to a pediatric study on breakfast habits, nutritional status, body weight, and academic performance in the Journal of the American Dietetic Association, how common is breakfast skipping in the United States and in Europe?

NEW INFO: If the school has access to a university or another partner to provide full-text access to journal articles, teach students how to add the library data base in the Google Scholar settings. Reach out to a local partner institution to inquire about this possibility.

THINK: ANSWERS

1. Answer: youth who reported a suicide attempt requiring medical attention

Hint: Search "suicide ideation latino substance abuse" and click Since 2010

Source: Pena, Juan B., et al. "Co-occurring risk behaviors among White, Black, and Hispanic US high school adolescents with suicide attempts requiring medical attention, 1999-2007: Implications for future prevention initiatives." Social psychiatry and psychiatric epidemiology 47.1 (2012): 29-42.

2. Answer: The study was published in 2000


Hint: Search "positive self-esteem exercise children Tremblay"

Source: Tremblay, Mark S., J. Wyatt Inman, and J. Douglas Willms. "The relationship between physical activity, self-esteem, and academic achievement in 12-year-old children." Pediatric Exercise Science 12.3 (2000): 312-323.

3. Answer: 10%-30% depending on age group, population & definition

Hint: Search " breakfast cereal sugar diabetes adolescents


Source: Rampersaud, Gail C., et al. "Breakfast habits, nutritional status, body weight, and academic performance in children and adolescents." Journal of the American Dietetic Association 105.5 (2005): 743-760.



Google Scholar

Name 3 advantages of Google Scholar compared to the traditional method of going to a library, finding a book or journal publication, and reading the research study article via hard copy.

- 1.
- 2.
- 3.



Carbon Monoxide Knowledge & Health Education

Suppose you want to know the current state of knowledge among the public about carbon monoxide. Find a research study on this topic using Google Scholar, read the abstract, and summarize it below.

Citation	
Purpose	
Methods	
Results	
Conclusions	

ASSESS:
 Possible answers: search-ability—now you can find way MORE studies on a topic MUCH faster!, allows users to save time, allows saving of paper, promotes more sharing and collaboration, eases the process of finding and citing other scholars, more easily accessible and available to those outside the research community...etc.

HOMEWORK: The purpose of this homework assignment is to get students practicing with Google Scholar in a more authentic context. The topic of the search they will be doing also connects back to the previous case study (10.9) which focuses on carbon monoxide.