



GATEWAY OF BASIC RESEARCH IS FOCUSED ON RESEARCHGATE BY WEB TRAFFIC

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ABSTRACT

www.researchgate.net is a social networking website for academics. It was launched in May 2008 and had over 6.5 million registered users as of April 2015. The platform can be used to share papers, monitor their impact and follow the research in a particular field. ResearchGate was created by Dr. Ijad Madisch, Dr. Sören Hofmayer and Horst Fickenscher. The domain name ResearchGate is *www.researchgate.net* domain name registered prior to 2008 was grandfathered in and not made subject to the regulation of being an accredited post-secondary institution. It is a participant in the open science or open access movements, responding to a perceived need in science for instant distribution of research and the need for a peer-review system that occurs alongside distribution, instead of occurring before it.

KEYWORDS: Social network, Alexa, Scopus, Academia.edu, Google Scholar, Google Books, Microsoft Academic, Worldwide Science, Science.gov, Wolfram Alpha, Refseek, ERIC, Virtual Learning Resources Center, iSeek, ResearchGate, BASE, Infotopia, PubMed Central, Lexis Web, Mendeley, Medscape.

Overview:

ResearchGate



ResearchGate

Type of site: Social network service for scientists, Available in English, Area served: Worldwide, Owner: ResearchGate GmbH, Created by: Dr. Ijad Madisch (M.D., Ph.D.), Dr. Sören Hofmayer (M.D.) and Horst Fickenscher (Dipl.-Inf.), Website: www.researchgate.net, Alexa rank: Increase 265 (December 2017), Users: Increase 15 million (April 2018), Launched: May 2008 (10 years ago). Research in any subject complies with so

many **questions** and **answers** on *who, what, where, when, why and how* because all these are regularly coming in each step of basic research.^[1-3] Research is based on discovery, curiosity, systems, experimental, knowledge, working skill, practice, marketing, novel, study, management, results, science, data, methods, evidence, explanation, explore, documentation, development, innovation, information and new findings.



Figure-1: Coins of basic research.

Alexa Internet, Inc. is an American company based in California that provides commercial web traffic data and analytics. It is a subsidiary of Amazon. Founded as an

independent company in 1996, Alexa was acquired by the company Amazon in 1999. Its toolbar collects data on Internet browsing behavior and transmits them to the

Alexa website, where they are stored and analyzed. This is the basis for the company's web traffic reporting. According to its website, Alexa provides web traffic data, global rankings, and other information on 30 million websites. As of 2015, its website has been visited by over 6.5 million people monthly. As of November 2017, the number 1 Alexa Rank belongs to Google.com, its average daily time on the website being 8 minutes, 2 seconds and the average daily page views per person being 8.94.

ResearchGate is a social networking site for scientists and researchers to:

1. Share papers
2. Ask and answer questions
3. Find collaborators (indexes self-published information on user profiles to find those with similar interests)
4. Follow research interests
5. Follow individual authors
6. Write short reviews on articles
7. Use private chat rooms for sharing data, documents or to discuss confidential topics.

ResearchGate shows a higher citation rate than Scopus or Web of Science. Authors are able to submit their own documents which may not have been published in an academic journal. ResearchGate is a social networking site for scientists and researchers to share papers, ask and answer questions, and find collaborators. According to a study by Nature and an article in Times Higher

Education, it is the largest academic social network in terms of active users, although other services have more registered users and more recent data suggests that almost as many academics have Google Scholar profiles. While reading articles does not require registration, people that wish to become site members need to have an email address at a recognized institution or to be manually confirmed as a published researcher in order to sign up for an account. Members of the site each have a user profile and can upload research output including papers, data, chapters, negative results, patents, research proposals, methods, presentations and software source code.

Users may also follow the activities of other users and engage in discussions with them. Users are also able to block interactions with other users. The site has been criticized for sending unsolicited email invitations to coauthors of the articles listed on the site that were written to appear as if the email messages were sent by the other coauthors of the articles (a practice the site said it has discontinued as of November 2016 and for automatically generating apparent profiles for non-users who have sometimes felt misrepresented by them. A study found that over half of the uploaded papers appear to infringe copyright, because the authors uploaded the publisher's version.



Figure-2: ResearchGate Team members [Dr. Ijad Madisch, CEO, physician Dr. Sören Hofmayer and computer scientist Horst Fickenschel].

History: ResearchGate was founded in 2008 by virologist and computer scientist Dr. Ijad Madisch, who remains the company's CEO, with physician Dr. Sören Hofmayer and computer scientist Horst Fickenschel. It started in Boston, Massachusetts and moved to Berlin,

Germany, shortly afterwards. The company's first round of funding, in 2010, was led by the venture capital firm Benchmark. Benchmark partner Matt Cohler became a member of the board and participated in the decision to move to Berlin.



Figure-3: ResearchGate members Matt Cohler and Peter Thiel.

According to The New York Times, the website began with few features, then was developed further over time based on input from scientists. From 2009 to 2011, the number of users of the site grew from 25,000 to more than 1 million. A second round of funding led by Peter Thiel's Founders Fund was announced in February 2012.

On June 4, 2013, it closed Series C financing arrangements for \$35M from investors including Bill Gates. The company grew from 12 employees in 2011 to 120 in 2014. It currently has about 300 employees, including a sales staff of 100.^[4-6]



Figure-4: Basic research.

ResearchGate's competitors include **Academia Edu** [www.academia.edu], **Google Scholar** [<https://scholar.google.co.in/>] and **Mendeley** [<https://www.mendeley.com/>].

Academia.edu reportedly has more registered users (about 34 million versus 11 million and higher web traffic, but ResearchGate is substantially larger in terms of active usage by researchers. The fact that ResearchGate restricts its user accounts to people at recognized institutions and published researchers may explain the disparity in active usage, as a high percentage of the accounts on Academia.edu are lapsed or inactive. In a recent and ongoing survey of academic profile tools, about as many respondents have ResearchGate profiles and Google Scholar profiles, but almost twice as many respondents use Google Scholar for search than use ResearchGate for accessing publications. In November 2015 they acquired additional funding of \$52.6 million from a range of investors including Goldman Sachs, Benchmark Capital, Wellcome Trust and Bill Gates, but did not announce this until February 2017.^[7-10]

After hours spent scrolling through Google and pulling up endless clickbait results, you're frustrated with the internet. You have a paper to write, homework to do and things to learn. You know you won't get away with citing Wikipedia or Buzzfeed in your research paper. Even the big news engines aren't scholarly enough. You need reputable sources for your homework, and you need them now. With so many resources online, it's hard to narrow it down and find ones that are not only reliable and useful, but also free for students. Time has been saved by browsing 18 best free search engines for research.

18 scholarly search engines every student should bookmark:

1. Google Scholar [<https://scholar.google.co.in/>]: Google Scholar was created as a tool to congregate scholarly literature on the web. From one place, students

have the ability to hunt for peer-reviewed papers, theses, books, abstracts and articles from academic publishers, professional societies, preprint repositories, universities and other scholarly organizations.^[11]

2. Google Books [<https://books.google.co.in/>]: Google Books allows web users to browse an index of thousands of books, from popular titles to old, to find pages that include your search terms. Once you find the book you are looking for, you can look through pages, find online reviews and learn where you can get a hard copy.^[12]

3. Microsoft Academic [<https://academic.microsoft.com/>]: Operated by the company that brings you Word, PowerPoint and Excel, Microsoft Academic is a reliable, comprehensive research tool. The search engine pulls content from over 120 million publications, including scientific papers, conferences and journals. You can search directly by topic, or you can search by an extensive list of fields of study. For example, if you're interested in computer science, you can filter through topics such as artificial intelligence, computer security, data science, programming languages and more.^[13]

4. WorldWideScience [<https://worldwidescience.org/>]: WorldWideScience, which refers to itself as "The Global Science Gateway," is operated by the Office of Scientific and Technical Information—a branch of the Office of Science within the U.S. Department of Energy. The site utilizes databases from over 70 countries. When users type a query, it hits databases from all over the world and will display both English and translated results from related journals and academic resources.^[14]

5. Science.gov [<https://www.science.gov/>]: Science.gov is operated and maintained by the Office of Science and Technical Information, the same department that collaborates on WorldWideScience.org. This search engine pulls from over 60 databases, over 2,200 websites and 200 million pages of journals, documents and

scientific data. Search results can be filtered by author, date, topic and format (text or multimedia).^[15]

6. Wolfram Alpha [<http://www.wolframalpha.com/>]: A self-described “computational knowledge engine,” Wolfram Alpha does not so much provide search results as it does search answers. Simply type in a topic or question you may be interested in, such as, “What is the function of the pancreas?” and the answer will show up without making you scroll through pages of results. This is especially handy for those in need of math help.^[16]

7. Refseek [<https://www.refseek.com/>]: With its minimalist design, Refseek doesn’t look like much. However, the engine pulls from over one billion web pages, encyclopedias, journals and books. It is similar to Google in its functionality, except that it focuses more on scientific and academic results—meaning more results will come from .edu or .org sites, as well as online encyclopedias. It also has an option to search documents directly—providing easy access to PDFs of academic papers.^[17]

8. Educational Resources Information Center [<https://eric.ed.gov/>]: Populated by the U.S. Department of Education, the Educational Resources Information Center (ERIC) is a great tool for academic research with more than 1.3 million bibliographic records of articles and online materials. ERIC provides access to an extensive body of education-related literature including journal articles, books, research syntheses, conference papers, technical reports, policy papers and more. With more than eight million searches each month, it’s no wonder why this search engine is a great web source for education.^[18]

9. Virtual Learning Resources Center [<http://www.virtuallrc.com/>]: The Virtual Learning Resources Center (VLRC) is an online index hosting thousands of scholarly websites, all of which are selected by teachers and librarians from around the globe. The site provides students and teachers with current, valid information for school and university academic projects using an index gathered from research portals, universities and library internet subject guides recommended by teachers and librarians.^[19]

10. iSeek [<http://education.iseek.com/iseek/home.page>]: iSeek is a great search engine for students, teachers and administrators alike. Simply ask a question or enter search topics or tools, and iSeek will pull from scholastic sources to find exactly what you are looking for. The search engine is safe, intelligent and timesaving—and it draws from trusted resources from universities, government and established non-commercial sites.^[20]

11. ResearchGate [<https://www.researchgate.net/>]: ResearchGate is a unique social networking site for scientists and researchers. Over 11 million researchers

submit their work, which totals more than 100 million publications, on the site for anyone to access. You can search by publication, data and author, or you can even ask the researchers questions. Though it’s not a search engine that pulls from external sources, ResearchGate’s own collection of publications provides a hearty selection for any inquisitive scholar.^[21]

12. BASE [<https://www.base-search.net/about/en/>]: The Bielefeld Academic Search Engine (BASE) prides itself as being “one of the world’s most voluminous search engines especially for academic web resources.” Utilizing 4,000 sources, the site contains results from over 100 million documents. The advanced search option allows users to narrow their research—so whether you’re looking for a book, review, lecture, video or thesis, BASE can provide the specific format you need.^[22]

13. Infotopia [http://www.infotopia.info/index_red_fox.html]: Infotopia describes itself as a “Google-alternative safe search engine.” The academic search engine pulls from results that have been curated by librarians, teachers and other educational workers. A unique search feature allows users to select a category, which ranges from art to health to science and technology, and then see a list of internal and external resources pertaining to the topic. So if you don’t find what you’re looking for within the pages of Infotopia, you will probably find it in one of its many suggested sites.^[23]

14. PubMed Central [<https://www.ncbi.nlm.nih.gov/pmc/>]: This site is perfect for those studying anything related to healthcare or science. PubMed Central is operated by the National Center for Biotechnology Information, a division of the U.S. National Library of Medicine. The database contains more than 3 million full-text journal articles. It’s similar to PubMed Health, which is specifically for health-related research and studies, and includes citations and abstracts to more than 26 million articles.^[24]

15. Lexis Web [<https://www.lexisweb.com/>]: Researching legal topics? Lexis Web is your go-to for any law-related inquiries you may have. The results are drawn from legal sites, which can be filtered by criteria such as news, blog, government and commercial. Users can also filter results by jurisdiction, practice area, source and file format.^[25]

16. Academia.edu [<https://www.academia.edu/>]: is a for-profit American social networking website for academics. The platform can be used to share papers, monitor their impact, and follow the research in a particular field. It was launched in September 2008, with 36 million unique visitors per month as of December 2017 and over 20 million uploaded texts.^[26]

17. Mendeley [<https://www.mendeley.com/>]: Mendeley is a desktop and web program produced by Elsevier for

managing and sharing research papers, discovering research data and collaborating online. It combines Mendeley Desktop, a PDF and reference management application available for Windows, macOS (Sierra and High Sierra no longer supported) and Linux. It also provides Mendeley for Android and iOS, with Mendeley Web, an online social network for researchers. Mendeley requires the user to store all basic citation data on its servers—storing copies of documents is at the user's discretion. Upon registration, Mendeley provides the user with 2 GB of free web storage space, which is upgradeable at a cost.^[27]

18. Medscape [<https://www.medscape.com/>]: Medscape is a website providing access to medical information for clinicians and the general public. The organization also provides continuing education for physicians and health professionals. It references medical journal articles, CME (Continuing Medical Education), a version of the National Library of Medicine's MEDLINE database, medical news, and drug information (Medscape Drug Reference, or MDR). At one time Medscape published seven electronic peer reviewed journals. Content is free of charge for professionals and others. but registration is required.^[28]

CONCLUSION

Research comprises *creative and systematic work undertaken to increase the stock of knowledge, including knowledge of humans, culture and society, and the use of*

this stock of knowledge to devise new applications. It is used to establish or confirm facts, reaffirm the results of previous work, solve new or existing problems, support theorems, or develop new theories. A research project may also be an expansion on past work in the field. Research projects can be used to develop further knowledge on a topic, or in the example of a school research project, they can be used to further a student's research prowess to prepare them for future jobs or reports. To test the validity of instruments, procedures, or experiments, research may replicate elements of prior projects or the project as a whole. The primary purposes of basic research (as opposed to applied research) are documentation, discovery, interpretation, or the research and development (R&D) of methods and systems for the advancement of human knowledge. Approaches to research depend on epistemologies, which vary considerably both within and between humanities and sciences. There are several forms of research: scientific, humanities, artistic, economic, social, business, marketing, practitioner research, life, technological, etc. Gateway of research is compiled with the following points: Identification of research problem, Literature review, Specifying the purpose of research, Determining specific research questions, Specification of a conceptual framework, sometimes including a set of hypotheses, Choice of a methodology (for data collection), Data collection, Verifying data, Analyzing and interpreting the data, Reporting and evaluating research, Communicating the research findings and, possibly, recommendations.



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