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ResearchGate: a Scholar's Companion

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Wouldn't it be great to use a tool that retrieves items quickly, finds great results, and identifies other researchers in your field? What about if it automatically provides relevant job openings and posts them to your profile? Welcome to ResearchGate, the easy-to-use tool introduced in 2008 that is becoming indispensable to millions of scholars.

What is it? Fifteen years ago, two physicians and a computer scientist were frustrated with the lack of openness of scientific research and developed what is currently known as ResearchGate. They wanted an article repository where researchers could post their scholarly works for others to read. Word quickly spread, and by 2014 ResearchGate was very well known among a group of 3,500 scientists surveyed by *Nature*.[1]

ResearchGate states that it retrieves its content by gathering open access material, version-of-record items from publishers, and preprints from members.[2] Format-wise, there is an emphasis on journal articles, however, conference papers and book chapter citations are also present. Members can list their publications on their ResearchGate profile and upload full-text content provided their copyright agreements are amenable. As a result, ResearchGate contains a lot of full-text material making it a very attractive tool for scholars worldwide. ResearchGate claims over 20 million scholar profiles as well as more than 135 million publication pages.[3] Those who have not developed a profile may still have their articles itemized since ResearchGate generates an author shell with a list of publications. Data points listed on a ResearchGate profile include number of reads, citations, and a Research Interest Score. Previously an RG Score, partially based on impact and popularity, had been assigned to each member profile, however, this controversial practice was recently discontinued as there was little transparency on how the RG score was tallied.

International in scope, ResearchGate tends to be more heavily used by those in the sciences than those in the humanities. But what makes ResearchGate so appealing? Five factors were recently identified: 1) research support, 2) self-esteem and self-promotion, 3) social interaction, 4) information seeking, and 5) entertainment with the top two factors being overwhelmingly dominant.[4] While there are other avenues for self-promotion, ResearchGate makes it easy by encouraging members to follow others in similar fields and by notifying them when they have been cited. Additionally, members can showcase their work on the Research Spotlight.

Easy to use, easy to find full-text: Librarians would like to see faculty and students actively use the library discovery tool and library databases to identify relevant articles on their topics. However, discovery tools can produce an overwhelming number of results, some bearing little resemblance to the inputted search terms. In comparison, ResearchGate search terms are usually found within the titles of results. Finding full-text from a library discovery tool can be, at times, problematic because of bad links, print-only holdings or unavailability. ResearchGate announces full-text by a simple notification: *download full-text PDF*.

Recently, there has been a decline in the use of library discovery systems while an increased use of ResearchGate.[5] Library discovery systems are not as simplified or streamlined as ResearchGate, and users get bogged down with too many formats, too many filter options, and the less than user-friendly advanced search screens. The straightforward design of ResearchGate's search interface appeals to students and researchers. Perhaps those designing library search tools could learn from ResearchGate's success.

Institutional repositories (IRs) don't fare much better than library discovery tools. IRs contain plenty of full-text material yet many scholars are unaware of their existence.[6] The search interface on many IRs is also cumbersome and results tend to appear irrelevant. "Academic

libraries need to better promote the availability of their IR to better facilitate researchers' adoption and use of these platforms."[7]

ResearchGate has partnered with a number of publishers providing even more open access full-text access. It has recently formed partnerships with De Gruyter, the UK Royal Society, the American Society for Microbiology Journals, EDP Sciences, and others.[8] Springer Nature has a long-standing partnership with ResearchGate and even provides preview material through a notice that indicates "Publisher preview available" on selected articles.

Scholars have embraced ResearchGate, and it has become a top tool for them. In a recent post highlighting nine "must-have" online tools for researchers, number one was Google Scholar number two Zotero, followed by ResearchGate.[9] No library databases were listed in these "must-haves". In very little time ResearchGate has become a vital companion for many scholars. Using ResearchGate is easy, and library discovery tools and IR's have not kept up.

Scholars want to get noticed: Accessing full-text articles is only part of the attraction of ResearchGate; self-promotion is another. Scholars can highlight their publications by a) listing them on ResearchGate, b) providing full-text if licenses allow, and c) submitting them to Research Spotlight. This "popularity contest" mentality is driven by the need for high metrics to satisfy promotion and tenure standards.[10] Indian scholars using ResearchGate find their publications cited more frequently than those not on social media.[11] To take this step further, "Researchers' participation in the ResearchGate social network is effective in increasing citation indicators. Therefore, more activity in the ResearchGate social network may have favorable results in improving universities' ranking."[12] In fact, it has been suggested that universities recommend that their scholars develop ResearchGate accounts in order to increase the visibility of the institution.[13] ResearchGate makes it easy for scholars and institutions to get noticed.

Downsides to RG: While there are advantages to having a ResearchGate profile, there are a couple of downsides. Members will likely receive weekly updates indicating that numerous ResearchGate scholars are reading their works, however, a *read* actually means merely browsing the abstract or downloading a figure or article. Additionally, new members may receive offers to publish their articles in a periodical which initially looks promising but upon further examination appears to require authors to pay a fee to publish. Also, members can, by a single click, initiate a series of unsolicited emails to be sent to their co-authors encouraging them to join ResearchGate.

ResearchGate has been plagued with copyright issues in the past. In 2017 it was discovered that 51% of the articles examined were not copyright compliant finding that, in most cases, the wrong version of the articles had been uploaded to ResearchGate.[14] The following year Elsevier and the American Chemical Society sued ResearchGate in a U.S. court over copyright issues while a similar suit was filed in Germany a year earlier.[15] Recently, the German court ruled that ResearchGate is responsible for the copyright issues of articles uploaded by authors.[16] Now, when authors upload full-text articles to ResearchGate, they must confirm that they hold the rights needed to share the articles on this platform.

ResearchGate has a great deal of data on researchers regarding their areas of interest, co-authors, reading history, followers and followees, and citation history. ResearchGate is a commercial business, so it appears that part of this data can be used to "drive traffic to your landing page" with "targeted advertising."[17] Also, ResearchGate pairs researcher data with job openings which appear when one logs into their account. Certainly, this data is valuable and can be used in a variety of different ways.

Tenure and Promotion implications: What happens when scholars prefer to publish in ResearchGate instead of scholarly journals? Sound improbable? Think again. A Hong Kong

professor published his works in ResearchGate for the higher speed of delivery.[18] Recently, a

teaching grant recipient stated that they planned to publish their research findings in

ResearchGate instead of a scholarly journal (this author was a grant reviewer). There's no peer

review process when "publishing" a paper in ResearchGate; However, will the author count this

paper as a publication for promotion and tenure purposes? Moreover, there exists the possibility

that an untenured scholar could count their Twitter followers as a metric for impactful

scholarship.[19] Given the high pressure, "publish or perish" mentality, aggressive self-promotion

efforts leading to high citation rates could become an attractive avenue for those seeking tenure

and promotion, and review committees need to be prepared to address these issues. Between that

and the vast number of full-text articles available on this platform, "ResearchGate is certainly

threatening to change scholarly communication."[20]

Conclusion

ResearchGate is being heavily used by scholars who want to share their articles and connect with

colleagues. Its search interface is easy to use and results are targeted and relevant. When

compared to the ease of using ResearchGate, academic library discovery tools and IRs fall short.

Add to that the subscription costs of maintaining these library tools, and ResearchGate starts to

look very attractive. Library databases need to be streamlined to provide quick, relevant results,

or else they may be replaced by cheaper or free academic social networks such as ResearchGate.

To increase database usage, libraries need to market their services aggressively so that students

and faculty recognize and appreciate the added value that library tools provide. In the university

setting, tenure and promotion committees must decide whether ResearchGate "publications" that

are impactful based on a high number of "reads" and downloads are valid indicators of high

quality, scholarly contributions. How will librarians and university officials react to

ResearchGate? This user-friendly tool isn't going away, and scholars love it.

Notes

[1] Richard Van Noorden, "Online Collaboration: Scientists and the Social Network." *Nature* 512, no. 7513 (2014): 126–29. https://doi.org/10.1038/512126a

[2] "ResearchGate," https://www.researchgate.net/ (accessed April 4, 2023).

[3] "ResearchGate Updates Announcement: Over 150 million publication pages and growing: how ResearchGate is bringing more research to the platform," last modified December 22, 2022, https://www.researchgate.net/researchgate-updates

[4] Raluca Cozma, and Dimitrova Daniela. "Research Gate or Revolving Door? Uses and Gratifications of Academic Social Media Among Communication Scholars." *Journalism & Mass Communication Educator* 76, no. 3 (2021): 282–96. https://doi.org/10.1177/1077695820965030

[5] Aaron Tay, "The Access and Delivery Problem for Libraries." *Library Technology Reports* 58, no. 6 (2022): 5–9

[6] Youngseek Kim and Jong Sir Oh. "Researchers' Article Sharing through Institutional Repositories and ResearchGate: A Comparison Study." *Journal of Librarianship & Information Science* 53, no. 3 (2021): 475–87. https://doi.org/10.1177/0961000620962840

[7] Kim and Oh, "Researchers' Article Sharing," 484.

[8] "ResearchGate Press: News and announcements from ResearchGate," https://www.researchgate.net/press (accessed April 4, 2023).

[9] Mahmood, Syed Hammad. "9 Must-Have Online Tools for Researchers." MUO, September 8, 2022. https://www.makeuseof.com/must-have-tools-researchers/.

[10] Justin E. H. Smith "How Social Media Imperils Scholarship: It Plays on Our Vanity and Reduces Research to a Popularity Contest." *The Chronicle of Higher Education*, May 31, 2019, https://www.chronicle.com/article/how-social-media-imperils-scholarship/

[11] Sumit Kumar Banshal, Vivek Kumar Singh, and Pranab Kumar Muhuri. "Can Altmetric Mentions Predict Later Citations? A Test of Validity on Data from ResearchGate and Three Social Media Platforms." *Online Information Review* 45, no. 3 (2021): 517-536. https://doi.org/10.1108/OIR-11-2019-0364

[12] Saeideh Valizadeh-Haghi, Hamed Nasibi-Sis, Maryam Shekofteh, and Shahabedin Rahmatizadeh. "ResearchGate Metrics' Behavior and Its Correlation with RG Score and Scopus Indicators: A Combination of Bibliometric and Altmetric Analysis of Scholars in Medical Sciences." *Information Technology & Libraries* 41, no. 1 (2022): 1-12. https://doi.org/10.6017/ital.v41i1.14033

[13] Lukasz Wiechetek, and Zbigniew Pastuszak. "Academic Social Networks Metrics: An Effective Indicator for University Performance?" *Scientometrics* 127, no. 3 (2022): 1381–1401. https://doi.org/10.1007/s11192-021-04258-6

[14] Hamid R. Jamali, "Copyright Compliance and Infringement in ResearchGate Full-Text Journal Articles." *Scientometrics* 112, no. 1 (2017): 241–54. https://doi.org/10.1007/s11192-017-2291-4

[15] Holly Else, "Major Publishers Sue ResearchGate over Copyright Infringement." *Nature*, October 5, 2018. https://doi.org/10.1038/d41586-018-06945-6.

[16] Diane Kwon, "ResearchGate Dealt a Blow in Copyright Lawsuit." Nature 603, 375-376 (2022). https://doi.org/10.1038/d41586-022-00513-9

[17] "ResearchGate, Marketing Solutions, Drive traffic to your landing pages" https://www.researchgate.net/marketing-solutions/drive-traffic (accessed April 4, 2023).

[18] Steven Ovadia, "ResearchGate and Academia.Edu: Academic Social Networks." *Behavioral & Social Sciences Librarian* 33, no. 3 (2014): 165–69. https://doi.org/10.1080/01639269.2014.934093

[19] Smith, "How Social Media Imperils".

[20] David Nicholas, David Clark, and Eti Herman. "ResearchGate: Reputation Uncovered." *Learned Publishing* 29, no. 3 (2016): 181. https://doi.org/10.1002/leap.1035