This case study provides a real-world example of the way ScienceDirect topics has supported users in the education market to explore original research, increasing their level of confidence.
In an Elsevier researcher survey*, many respondents revealed that they often need to locate information outside their own area of expertise. In fact, 44 percent of these researchers say they search for interdisciplinary information at least once a week. But as we all know, venturing into the vast amount of online literature can leave anyone—even a seasoned researcher—wondering if sources are credible, if information is accurate, and if they are getting to the information they really need quickly enough. It can be easy to veer off path and get lost in the tangled mass of literature.

A new strategic approach to research

To help researchers, educators and students feel confident that the information they are compiling on a topic is relevant and trustworthy, Elsevier has introduced a new enhancement on SciendoDirect. SciendoDirect topics offers a free layer of reliable foundational information that helps users take a deeper dive into a given subject, enhancing their research experience on the spot. SciendoDirect topics not only provides a wealth of critical and relevant information on a topic including definitions and overviews, each topic page also links to the book sources that may be of further interest for deeper exploration. In addition, SciendoDirect topics brings new information resources to researchers, educators and students they include links to related topics, providing a well-rounded resource for those searching for information in a field that is either new to them or outside of their expertise. The topic pages are hyperlinked directly from terms within journal articles or can be accessed via search engines to ensure they are accessible at all points in a research workflow. As the amount of scientific data and papers has grown exponentially in the past decade, it is crucial that publishers help all users gain access to the right information—at the time of need. This is ever imperative at institutions where students are not only learning how to research, but also how to find the best and most accurate research for their needs.

*Elsevier researcher survey 2022.
Meet Elaine Reynolds, an educator at Lafayette College

As a professor at Lafayette, a small liberal arts college with small class sizes, Elaine Reynolds was well aware of the vast amount of misleading information in online sources. From her experiences in the classroom, she knew that students were equally confused, often citing Google searches or Wiki pages as reliable tools for finding information.

As a development partner with Elsevier, Elaine conducted a study with the students in two of her classes, a Neurobiology course and an Aging and Age-Related Disease course. She was interested in determining where students were doing their research, their comfort level with reading reviews and primary literature, the frequency with which students came across unfamiliar terms, and how they handled cases where they needed additional clarity.

Goals

The goals for Elaine’s courses, and hence the reason for her study, were simple. She wanted students to be able to demonstrate that they could read and understand original research, including research presented in graphic form. In addition, she wanted students to be able to identify and employ a range of strategies for gathering valid information.

Here’s how she did it

Elaine began by asking her students several questions regarding their research experiences, compiling and charting their answers. Next, she presented the new ScienceDirect Topics that included enhanced reading features as examples in the classroom and encouraged students to use these tools in their own literature searches.

Survey of students at Lafayette College

How often do you come across specific terms in an article or review that you are unfamiliar with or you are unsure of the term's full meaning?

- Occasionally
- Often
- Frequently

Students were then given access to the articles with enhanced features on ScienceDirect. The students were instructed to use ScienceDirect Topics and their traditional research process in other search engines for new class projects.
Survey of students at Lafayette College

When polled on their experience, after taking the classes and using the topic pages, the students at Lafayette College reported a dramatically enhanced understanding and comfort level when conducting web-based research. Students were more likely to use the tool if they were less comfortable when beginning their research, and showed a greater trend in improvement in comfort level than those that did not use the tool.

Did the reference material in ScienceDirect topics provided improve your understanding of the term?

In engaging with the reference material in ScienceDirect Topics, did you:

- Click multiple links in the same article?
- Follow up on related reference material?
- Read the material linked to the word?
How comfortable are you with reading primary literature articles?

- Extremely uncomfortable
- Moderately uncomfortable
- Slightly uncomfortable
- Neither
- Slightly comfortable
- Moderately comfortable
- Extremely comfortable

Pre vs. Post
When Elaine asked them to share some of their initial feelings about this research tool, the students responded with answers such as the following:

“I thought it was very helpful. I could contain my searches to the article without wasting time looking information up elsewhere.”

“. . .the easy to digest definitions or explanations of scientific terms.”

“They made the article more clear and provided an easy way to make sure one had a full understanding.”
Conclusion

Elaine reports that her students gained a greater ability to further curate their own research and felt an increased level of confidence when using ScienceDirect Topics. She noted that the capability to quickly navigate between journal and book content and the access to interdisciplinary research and relevant topics made the new addition a valuable tool for her students.

Learn more

Elsevier constantly strives to bring researchers from all levels of science the tools they need to enhance their work. The addition of ScienceDirect Topics helps researchers and students navigate any topic with confidence, giving them the content they need at just the right time.

ScienceDirect will be expanding more than 150,000 topic pages in multiple domains throughout 2017. Researchers in the Biomedical Sciences, and the Neurosciences and Life Sciences can already experience these valuable tools now. ScienceDirect Topics is free to ScienceDirect users, and when combined with licensed journal and book content on ScienceDirect, creates a valuable tool for research and learning.
ScienceDirect
Built upon thousands of journals and books and stringent quality standards, ScienceDirect delivers you reliable information to help you move your research forward. It offers smart, intuitive functionality and personalized recommendations so you can answer pressing research questions in less time, generate ideas, get in-depth insights about trending research topics, stay on top of your field, and take your next big step towards discovery.

For more information about ScienceDirect, visit elsevier.com/solutions/sciencedirect/contact-sales