WHAT IS PEER REVIEW AND WHY DOES IT MATTER?

When you begin a Masters or Doctoral degree program, you are likely to hear your professors and classmates talking about "peerreviewed" sources. Most of your assignments will require you to find and use those sources. But what is a peer-reviewed source, and how is it different from any other professional source?

In scientific and academic journals, "peer review" is the process of authors submitting their articles to a panel of peers in their field. Those peers are usually selected by the journal publishing the work, and the group of peers is charged with commenting on the article and suggesting revisions. The author then makes those revisions prior to publication. Nearly all scientific journals use this process to revise articles and maintain a high standard of scientific evidence.

For academic work, peer-review is the standard way of knowing whether obvious junk and obvious mistakes have been weeded out. Even then, just because something was peer-reviewed doesn't even mean we found all the problems—plenty of published, peer-reviewed articles turn out not to be true. Small studies, preliminary studies, and studies with non-obvious bias are regularly disproven by better research. Peer review, though, is the first step in making that group smaller. A peer-reviewed source in academia is just like saying "this product was checked for obvious defects." Since academic work is the pursuit of better, more nuanced truth, checking ideas for accuracy is a fundamental first step.

Does that mean all other sources are junk? Not at all—professional articles and websites are great sources for big-picture ideas, overviews of a topic, or current events; they are just not very good sources for arguing evidence in an academic field. Professional sources are usually designed to present information to the public in an informative way. Peer-reviewed academic sources, in contrast, are designed to present that information rigorously as a foundation for further research. If you are studying psychology, for example, you can't just rely on summaries of what has been done in years past—the state of our knowledge evolves, and you need to look at peer-reviewed sources to find the most recent developments in the field.

Identifying Peer-Reviewed Sources

With so much material available online, it can be difficult to figure out whether something is peer-reviewed or not. A good rule of thumb when doing your research is that peer-reviewed sources are usually published in academic journals. Peer-reviewed sources will typically contain author and date information, as well as the issue and volume number of a peer-reviewed publication. If you aren't sure, look up the journal's website or ask your librarian.

That's not to say the authors of other professional sources haven't published the same information in rigorous ways. They may have. But, it's difficult to know whether the information from a professional source is a true and accurate representation of more nuanced research. There are so many professional organizations, and so many online sources, that you often don't know what standard was applied to their information to check its accuracy

Many sources, even apparently academic sources, are not peerreviewed and instead go through less rigorous editorial review, or no review at all. Peer review is not common in industry, agency, news outlet, or government publications. Peer review is also less common in humanities journals. Finally, you might be surprised to know that peer review is also not common for books (although many academic books are collections of peer-reviewed articles previously published elsewhere). Even academic books are rarely reviewed by peer researchers, though an

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editing board may approve content from university presses and similar publishers.

Usually Peer-Reviewed	Not Usually Peer-Reviewed
Social Science Journals	Humanities Journals
Experimental Science Journals	Agency or Government Reports
University Journals	Industry Publications
Edited Books of Journal Articles	Popular Science Books
	Organizational Reports and Publications
	News Reports
	Websites

So, when you see a professor has assigned you to use peer-reviewed sources, remember they are trying to get you familiar with how to find, read, evaluate, and synthesize the kind of sources that are the core of academic research. You may not be publishing your course papers in a journal, but writing for courses isn't just about the finished paper—it's about the process of learning and articulating sound arguments.

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