

The Importance of Journals in the Sciences

- The general rule of thumb in science and technology is that if it is five (5) years old, it must be too old; this means age of the information, experiments, etc., discussed by the text, *not* that the material was published within the last five (5) years. This "rule" then indicates that, in science and technology, journals, which are published more frequently, will contain the most current, up-to-date information on a particular topic.
- Authors of scientific information face tremendous pressure to participate in the peer evaluation process and publish in the "top" journals in their fields. As a result, the most credible, current information on a particular topic will be published in these peer-reviewed journals.
- Periodical Types: Scholarly Journals vs. Popular Magazines
 - A ***scholarly journal*** (also known as *peer-reviewed*, *professional*, *refereed*, or *juried*) contains articles and research by scholars and experts in a specific field who wish to share their research with other professionals. Articles are usually based on original research and have undergone a review process. This review process, known as "peer review," requires submitted articles to be reviewed by other scholars in the field (peers) to determine if they are worthy of publication. Scholarly articles can be identified by their technical and specialized vocabulary (jargon), author credentials, abstracts, and bibliographies. Scholarly journals are usually published monthly, quarterly, semi-annually, or annually. (example: *Southwestern Naturalist*)
 - A ***popular magazine*** (also known as *general interest magazine*) contains current events and general interest articles written by journalists and freelance writers for the general public. Articles in popular magazines are characterized by relatively short articles that are written in non-technical language. Author credentials, abstracts, and bibliographies are rarely included. Popular magazines are typically published weekly or monthly. (example: *Scientific American*)

Library Databases vs. Electronic Journal Collections

Library Database: Library databases are large, searchable collections of references on different topics

. Practically, what this means is that when you search for a topic in a library database you will get many references to articles on that topic which appear in a variety of journals.

Electronic Journal Collections: Electronic journal collections are collections of a small number of electronic journals. These electronic journal collections are usually packages that publishers offer to libraries based upon the library's subscriptions to the publisher's journals. Although most electronic journal collections have a search function, electronic journal collections are best used when browsing titles or attempting to locate specific articles.