

ENGINEERING TRENDS AND ISSUES

LIBRARY RESEARCH PROCESS FOR ASSIGNMENT #2

INTRODUCTION

For this assignment you will search a library database, Academic Search Premier, for material relating to one of the National Academy of Engineers' "14 Grand Challenges for Engineering" (<http://www.engineeringchallenges.org>).

SELECTING THE DATABASE

- Log on to the Library homepage at <http://www.library.pitt.edu/>
- Follow the link to Find Articles link.
- In the beige box to the right, click the link for Databases A-Z.
- Select Academic Search Premier.
- Choose the Connect to the Database link.

IDENTIFYING SEARCH TERMS

Once you have chosen your topic you will need to develop a vocabulary of search terms. Suppose hypothetically that your broad research subject is ethanol. You may perhaps formulate your question as: "What are the current trends in the production of ethanol?" Keywords you extract might include "ethanol," "trends," and "production." Initially you can search on those terms alone, but be open synonyms and alternate descriptors including words such as biofuels, research, and agriculture. As your research progresses, you should find that you are narrowing your search and concentrating on particular aspects of your topic, primarily through the identification of more specific and more appropriate search terms. Consult one of the librarians for help if you are experiencing difficulties.

CONSTRUCTING YOUR SEARCH

The search interface to Academic Search Premier is largely straightforward and fairly typical of most library databases. You are presented with three search boxes. To search for individual terms, type

each term into a separate box. To search for a phrase, enter the entire phrase into a single search box.

INTERPRETING SEARCH RESULTS

You need at least 4 articles published within the last 5 years. Ideally, your citations should span the time period from 2004-2009. You are attempting to trace the development of your chosen topic, so all articles should not be from 2009, nor should all be from 2009.

- Academic Search Premier provides the option to Narrow Results By. For this assignment, select Magazines.
- At least one article must be from an engineering "trade magazine." Trade magazines are publications that provide news and interest stories about specific industries and professions. If you need help determining if a publication is a trade magazine, ask for assistance at the Engineering Library.
- Your other three (or more) articles can be from general interest magazines such as Time and Newsweek, or from newspapers.
- When you review your Academic Search Premier results, you have several options for locating articles. Sometimes, but not always, you will see links to **Full Text**. If you see such a link, use it. You can obtain your article immediately. If you don't see a link – don't panic. The ULS libraries might have it in print, or electronically (full text) but just not linked from that database. Look for the **Check Article Availability** link. If you see a link for full text on the subsequent page, use it. If not, you may see a Connect to Pittcat Library Catalog link, or you may search Pittcat manually under the title of the journal (not the title of the article). If you can't make sense of these screens, bring a printout to the Engineering Library and the staff will help you determine if the article is available on campus.

CONCLUSION

Library research is not a one and done event. Expect to search Academic Search Premier initially simply to develop a sense for what exists, and then expect to search it repeatedly, with variations on your search terms, or with new search terms as you refine your topic or need information on another aspect of your topic. For help, ask for Michael Ford or Judy Brink at the Engineering Library, or click on Ask Us link from the library website at: <http://www.library.pitt.edu>