

Research Tips

Conducting successful research in today's complex information environment takes a special set of tools and skills. The following research tips will help you develop the skills to use such vital information tools as databases, search engines, and the Library's online catalog, Voyager.

Choosing Search Terms

The first crucial step in developing a successful search strategy is to decide which words and terms to use in the search. To do this, try writing out your search statement. For example, "Will taking naps during long haul flights help reduce pilot fatigue?" Underline the key terms in your statement and use those as your search terms, "Will taking naps during long haul flights help reduce pilot fatigue?" When starting out, use as few terms as necessary to describe your topic. This "less is more" approach will keep your search broad enough to guard against bringing up too few "hits" and will still allow you to go back and add more search terms later to narrow your results.

Another way to choose search terms is by reviewing some of the records in your search results. The **descriptors** or **subject(s)** field in an item's record can be an excellent source of alternate search terms.

A helpful tool to use when typing in search terms is called **truncation**. A truncation symbol (usually * or ?) is added to a search term in order to automatically search for variant endings of that term. For example, using **nap*** as a search term will search for **nap, naps, napping**, etc. all at once. Most databases use the asterisk (*) as their truncation symbol; Voyager uses the question mark (?).

How Terms Relate

How your search terms relate to one another is an important consideration in developing a successful search strategy. For example, if you want all of your search terms to be present in each of your results, you must use 'and' to connect the terms. In this case, 'and' is an example of a **Boolean operator**. Using Boolean operators can help you control whether all or only some of your search terms appear in your results. **Phrase searching** is a similar technique and is used to search for terms in the exact order you put them in. These concepts are summarized in the table below:

Type of Search	Operator for use in Databases	Operator for use in Voyager	Effect on your Search
AND Searching	AND	All of These	All search terms must be present in each result.
OR Searching	OR	Any of These	At least one search term must be present in each result.
Phrase Searching	Quotation Marks ("")	As a Phrase	Search terms appear in exact order.

A search in the Aerospace and High Technology database for items containing the search terms nap, pilots, and fatigue, might be structured as follows:

The screenshot shows the ProQuest search interface. At the top, there are tabs for 'Logout', 'Quick Search', 'Advanced Search', and 'Search Tools'. The 'Advanced Search' tab is selected. The search bar contains the query 'nap* AND pilot* AND fatigue'. Below the search bar, there is a 'Search' button and a 'Search Tips' section that reads: 'All Fields are being searched. For best results, use AND between terms, wildcard*, or "exact phrase"'. Below the search bar, there is a section for 'Now Selected: Multiple Databases (Hide)' with two options: 'Aerospace & High Technology Database' and 'NTIS'. There is also a 'Change:' section with a dropdown menu set to 'Subject Area' and a link to 'Specific Databases'. A 'Date Range:' section has a dropdown menu set to 'Earliest to Current'. At the bottom of the page, there is a footer with copyright information, a 'Privacy Policy' link, 'Terms and Conditions of Use' link, 'Contact Us' link, and an 'Interface' dropdown menu set to 'English' with a 'Go' button.

The same search in Voyager might be structured as:

The screenshot shows the Voyager Online Catalog search interface. At the top, there is a header for 'Hunt Library' and 'Voyager Online Catalog'. Below the header, there is a navigation bar with buttons for 'Search', 'History', 'Place a Request', 'ILL', 'My Library Record', 'My Bookbag', 'My Voyager', 'My Saved Searches', 'Login', 'Help', and 'Exit'. Below the navigation bar, there is a section for 'Database Name: ERAU Hunt Library'. There are four tabs: 'Basic Search', 'Search With Limits', 'Course Reserves', and 'New Items'. The 'Basic Search' tab is selected. The search bar contains the query 'nap? pilot? fatigue'. Below the search bar, there is a dropdown menu set to 'all of these' and a 'Search by:' dropdown menu set to 'Keyword Anywhere'. There are three radio buttons for 'AND', 'OR', and 'NOT', with 'AND' selected. Below the search bar, there are two more search bars, each with a dropdown menu set to 'all of these' and a 'Search by:' dropdown menu set to 'Keyword Anywhere'. At the bottom of the page, there is a footer with a dropdown menu set to '50 records per page', a 'Search' button, a 'Reset' button, and a 'Set Limits' button with a pencil icon.

Modifying a Search

Once you feel comfortable with basic searching, you can then try modifying your searches. Most databases allow you to refine some aspects of your search, such as the date range, type of publication (scholarly journal, trade publication, etc.), or whether or not the publication is peer-reviewed. These options are normally found on the **Advanced Search** page of a database.

It is also possible to specify which field of an item's record you would like to search in. For example, you can search just the author, title, or subject heading fields. We recommend that instead of limiting your search in this way, you first try the broadest possible method of searching, **keyword** or **anywhere**, where appropriate.

Results

The search results from databases and online catalogs provide you with the information you need to locate the printed text of a document. This information is called the document's **citation** and typically consists of the following: author's name, title of the document, title of the periodical (if applicable), place of publication, and publication date. Voyager will also provide you with an item's call number, location, and status. Some databases will provide the full text of a document along with its citation information.

Research Help

There are several forms of assistance you can use if you need some help with your searching. The Hunt Library provides **Online Instructions** for most of our databases. We highly recommend that you review the Online Instructions for a database BEFORE you perform your search. The Online Instructions will provide you with step-by-step directions and tips for performing a search, and for letting us know which items you want if they do not appear in full-text format within the database. The Online Instructions can be accessed from the Find Articles (Databases) portion of the Library website or through the Databases access page.

Most databases also contain a help function somewhere on their search page. Look for the word "**Help**" or a question mark icon.

Students wanting a refresher course in using the library can take the online **Library Basic Training** course. Library Basic Training is designed to provide Worldwide students with library instruction opportunities similar to the classroom instruction provided to Daytona Beach students. The online course is available through ERNIE and introduces students to the services available to off-campus students, teaches them how to use Voyager, and demonstrates how to access our online databases as well as request books and articles from the Hunt Library.

Of course, you can always ask a librarian for assistance by calling us at 800-678-9428 or 386-226-7656, Monday – Friday between 8 am and 5 pm ET or by emailing us at library@erau.edu. We will gladly assist you with your search.