This manual provides information to aid home computer owners in performing literature searches of ERIC and other education and social science databases, such as the DIALOG Information Services "Knowledge Index" System. Assuming some familiarity with printed ERIC indexes or online searches, this manual is divided into five chapters. It is suggested that potential searchers should study the first two chapters before going online. These chapters cover the basic concepts of developing a search strategy and the commands used by the DIALOG Information Services "Knowledge Index" system. The third chapter discusses various ways to modify the search strategy regarding the retrieval of too few or too many citations. The next chapter explains how to accomplish some common types of non-subject searches: specific authors or articles from specific journals. The final chapter provides basic information concerning other searchable databases: Psychological Abstracts; Microcomputer Index; and Books in Print. Attachments include: Search Strategy Worksheet; ERIC Field Names and Abbreviations; "Knowledge Index" Command Summary; Mandatory Level Descriptors; and Publication Type Codes. (PM)
AT HOME WITH ERIC®

ONLINE SEARCHING FROM YOUR HOME COMPUTER

by

Emma González-Stupp

and

Barbara M. Wildemuth
AT HOME WITH ERIC

ONLINE SEARCHING
FROM YOUR HOME COMPUTER

"KNOWLEDGE INDEX" EDITION

by
Emma Gonzalez-Stu;
and
Barbara M. Wildemuth

January 1986

ERIC Clearinghouse on Tests, Measurement, and Evaluation
Educational Testing Service, Princeton, NJ 08541-0001
The material in this publication was prepared pursuant to a contract with the Office of Educational Research and Improvement, U.S. Department of Education. Contractors undertaking such projects under government sponsorship are encouraged to express freely their judgment in professional and technical matters. Prior to publication, the manuscript was submitted to qualified professionals for critical review and determination of professional competence. This publication has met such standards. Points of view or opinions, however, do not necessarily represent the official view or opinions of either these reviewers or the Office of Educational Research and Improvement.

ERIC Clearinghouse on Tests, Measurement, and Evaluation
Educational Testing Service
Princeton, N.J. 08541

This publication was prepared with funding from the Office of Educational Research and Improvement, U.S. Department of Education under contract No. NIE-400-83-0015. The opinions expressed in this report do not necessarily reflect the positions or policies of OERI or the Department of Education.
TABLE OF CONTENTS

Preface ................................................................. i

Table of Contents ...................................................... ii

Chapter 1: BASIC CONCEPTS IN ONLINE SEARCHING .......... 1
  Defining Your Information Needs
  Selecting the Search Terms
  Organizing Your Search Terms
  Evaluating Preliminary Results

Chapter 2: USING "KNOWLEDGE INDEX" ......................... 7
  Logging On
  Getting Help While Online
  Beginning Your Search
  Entering the Search Terms
  Our Sample Search
  Printing the Citations
  Ordering Publications
  Other System Commands

Chapter 3: ADJUSTING YOUR SEARCH STRATEGY WHILE ONLINE .... 20
  What If You Retrieved Too Many Citations?
  What If You Retrieved Too Few Citations?

Chapter 4: CAN I SEARCH SOMETHING OTHER THAN A SUBJECT? .... 30
  Searching for a Specific Author
  Searching for Articles from Specific Journals

Chapter 5: SEARCHING OTHER DATABASES ...................... 34
  Psychological Abstracts
  Microcomputer Index
  Books in Print

Attachment 1: Search Strategy Worksheet ......................... 38

Attachment 2: ERIC Field Names and Abbreviations ............... 39

Attachment 3: "Knowledge Index" Command Summary ............... 40

Attachment 4: Mandatory Level Descriptors ...................... 41

Attachment 5: Publication Type Codes ........................... 42
The purpose of this manual is to provide guidance to home computer owners who would like to do their own literature searches of ERIC and other education and social science databases. It is assumed that the reader will have some familiarity with ERIC, either through experience in searching the printed ERIC indexes or through use of online literature searches performed by a librarian. This manual is not intended to develop "expert" searchers, and readers are advised to continue to get assistance from an experienced online searcher for their more complex searches. It is also assumed that the reader is familiar with the use of his or her home computer and modem.

The manual is divided into five chapters. All potential searchers should study the first two chapters before going online. They cover the basic concepts of developing a search strategy, and the commands used by the "Knowledge Index" system. The third chapter discusses various ways to modify your search strategy, if too many or too few citations were retrieved. Though you may not need this information with your first search, it would be helpful to read it before going online. Chapter 4 explains how to do some common types of non-subject searches, such as searches for the works of a specific author. Specific sections of it can be consulted as needed. The final chapter provides basic information about a few of the other databases you may wish to search. For more detail about these databases, or for a more complete listing of the databases available, you should consult the materials provided to you by DIALOG Information Services.

The draft version of the manual was used as a workshop syllabus at the 1985 Annual Meeting of the American Educational Research Association. Comments from the workshop participants, the 15 other ERIC Clearinghouses, and the staff of DIALOG Information Services were used to improve its content and organization. Funding for its development was provided by the National Institute of Education, under Contract No. 400-83-0015. We would like to express our appreciation to all those who have assisted in bringing it to its current form.
CHAPTER 1

BASIC CONCEPTS IN ONLINE SEARCHING

The first step in any literature search involves the careful analysis of the research problem—deciding what information is needed, the level of information needed, and the amount of results expected or desired. Determining search objectives at the onset of your literature search can save time and money. Once you have defined your information need, you must develop the search strategy by compiling and organizing the terms or keywords representing the concepts which could be used to retrieve citations in a particular subject area.

DEFINING YOUR INFORMATION NEEDS

Before you can begin searching for documents and articles about a certain topic, you must have a clear idea about the topic in which you are interested. You should define the topic, both in terms of examples of documents that would satisfy your information need, and examples of closely-related documents that would not satisfy your information need. Of course, your topic will evolve as you do more reading about it, but you should have a clear definition of it in your mind before you begin your search.

As an example, let’s assume that you are on the staff of the state department of education. You have been given the assignment of examining state-supported efforts (including legislation, court litigation, state-supported research, etc.) in the area of merit pay for teachers. The purpose of your review is to provide information to agency and legislative staff considering merit pay legislation for your state.

You could define your search question as identifying any documents that discuss merit pay for teachers. However, that would probably retrieve many documents that express personal opinions about merit pay; these documents would be of limited usefulness in satisfying your information need. You really need only those opinion papers that explain the positions of other states taking some type of action on merit pay. Therefore, you will want to limit your search to state-related papers.

Now that you have clearly defined your topic, you know that you are looking for recent documents that describe state-related activity on merit pay for teachers. Next, let’s see how to choose the terms to use in this search.
SELECTING THE SEARCH TERMS

Before going online, some check of word lists and thesauri will help insure that the search terms used will lead to useful results. Both the controlled vocabulary of a data base (subject terms in the descriptor field) and the free text (other subject-conveying fields such as the identifier, title, and abstract fields) are possible sources of search terms.

Descriptors

The most common approach to ERIC material is by subject. The ERIC system uses a controlled vocabulary when assigning subject headings to a document. These subject headings, known as descriptors, are taken from the Thesaurus of ERIC Descriptors.

In developing your search strategy, you should consult the ERIC Thesaurus to identify appropriate subject headings using the following steps:

1. "Translate" your topic into ERIC descriptors. The Rotated Descriptor Display in the back of the Thesaurus may help you.

2. Look up the best descriptors in the Alphabetical Descriptor Display.
   - Read the Scope Notes for information on how ERIC uses the terms.
   - Check the Broader Terms (BT), Narrower Terms (NT), and Related Terms (RT) for additional relevant terms.

3. Make a final list of the descriptors most likely to have been used to represent your topic.

The introduction to the Thesaurus is clearly written and contains useful information and examples. It should be consulted for more specific assistance.

Identifiers. Terms reflecting the content of the document, such as personal names, geographic locations, trade names, and organizations, are frequently assigned as identifiers. Besides specific entities, identifiers may also consist of more general concepts that have been introduced in the literature but not yet added to the Thesaurus. Identifiers are searched in the same way that descriptors are searched.

Descriptors That Apply to Our Sample Search. After consulting the Thesaurus, you will find that there are several terms that apply to our search topic. They include:

Identifiers:

Descriptors:

- [List of descriptors that apply to the sample search]
Free Text Searching

The free text searching capability of DIALOG allows for the scanning of all subject-conveying fields of the ERIC record: title, abstract, descriptor, identifier, descriptive note, corporate source and sponsoring agency. Search terms compiled from sources other than the ERIC Thesaurus can be searched as free text in all or a specified number of subject-conveying fields; however, the number of documents retrieved may be low if only a single subject-conveying field is searched.

Free Text Terms That Apply to Our Sample Search. Several free text terms may be used to supplement the descriptors we have chosen for our sample search. These free text words and phrases include:

MERIT PAY
MERIT RATING
PREMIUM PAY
TEACHERS
PUBLIC SCHOOL TEACHERS
BEGINNING TEACHERS
ELEMENTARY SCHOOL TEACHERS
SECONDARY SCHOOL TEACHERS
STATE PROGRAMS
STATE AGENCIES
STATE LEGISLATION
STATE ACTION
STATE GOVERNMENT
STATE COURTS
STATE STANDARDS

By now, you have noticed that some of these terms are exactly the same as the descriptors we chose. Using them as free text subject terms will allow us to retrieve documents for which they were not assigned as subject terms by the indexer, but were used in the title, abstract, or identifier fields. Using them in this way will allow us to retrieve more citations than if we restrict our search to descriptors. However, it may also add less relevant citations to the search output.

ORGANIZING YOUR SEARCH TERMS

At this point, we have selected several subject terms that are related to our search topic: state activities in merit pay for teachers. Before going online, we need to organize these search terms into sets, and decide how the sets should be combined. In our example, there are three separate subject concepts (merit pay, teachers, and state activities). A diagram of these concepts might look something like this:
Next, we need some tools to help us organize our subject terms into concept groups, and then to combine those groups to form a search strategy. The tools we will need are called logical operators. There are three logical operators used in online searching: OR, AND, and NOT. The following table defines each:

<table>
<thead>
<tr>
<th>Logical Operator</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OR</strong></td>
<td>Either one or both subject terms must be in each citation retrieved.</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td>Both subject terms must be in each citation retrieved.</td>
</tr>
<tr>
<td><strong>NOT</strong></td>
<td>The subject term must not appear in the citation.</td>
</tr>
</tbody>
</table>

Using the OR operator, we can combine all the terms describing our "merit pay" concept to form one big set of terms about merit pay. We can do likewise with each of our subject concepts. The result could be diagrammed like this:
So far, we have three separate sets of concepts. Next, we need to combine them in some meaningful way. We will do this using the AND operator. As you know from a previous table, the AND operator will require that both terms used must appear in the same document. When sets of terms are combined, any possible combination of a term from the first set and a term from the second set will meet this criterion. For our sample search, we will want to combine all three sets with AND operators. The result of the combination can be illustrated:
EVALUATING PRELIMINARY RESULTS

While online, you should monitor the search in progress and check on results. Are you retrieving enough citations? Are you retrieving too many citations? Are the retrieved titles relevant to your search topic? Your answers to these questions may signal a need for changes in your search strategy or the overall approach to your search. See Chapter 3 for examples of possible changes to your search strategy.
LOGGING ON

Now that you have defined your information need and developed your search strategy, it's time to go ONLINE and do some searching. The first step is to log on to the DIALOG "Knowledge Index" service.

DIALOG's "Knowledge Index" can be accessed through four telecommunications networks: DIALNET, TELENET, TTYNET, and UNINET. With local access in all major cities and many smaller metropolitan areas, most networks permit users to dial a local number and then be switched to the DIALOG computer at hourly rates significantly lower than normal long-distance charges. A list of the cities with public dial access for each of the four networks is provided to DIALOG users and updated periodically in the Knowledge Index News.

Please note that there are slightly different logging-on instructions for each of the four telecommunications networks. A sample of each is provided below. In the sample, user input is in **BOLD** to distinguish it from system responses; `<CR>` indicates the "enter" or "carriage return" key.

Sample DIALNET Sign-In

CONNECT

<CR> <CR>

Dialog Information Services' DIALNET
-2035: 01-001-
Enter Service: XI

DIALNET: CALL CONNECTED

DIALOG INFORMATION SERVICES
PLEASE LOGON:
***************
?(ENTER USER ID NUMBER)

***************

ENTER PASSWORD:
***************
?(ENTER DIALOG PASSWORD)

***************
WELCOME TO KNOWLEDGE INDEX

Accounting starting at 6:23:41 EST

For instructions on how to use Knowledge Index, enter KI or ?
New Database REFR2 now online. Type BULLETIN for announcements and changes.

**

?(READY TO SEARCH)

Sample TELENET Sign-In

<CRL><CR>

TELENET
612 DL2

TERMINAL= <CR>
@C 415 48K <CR>

41548K CONNECTED

DIALOG Information Services
PLEASE LOGON:
***************
?(ENTER USER ID NUMBER)

***************

ENTER PASSWORD:
****** ******
?(ENTER PASSWORD)

***************

WELCOME TO KNOWLEDGE INDEX

Accounting starting at 8:59:04 EST

For instructions on how to use Knowledge Index, enter KI or ?
New Database REFR2 now online. Type BULLETIN for announcements and changes.

**

?(READY TO SEARCH)
Sample TYMNET Sign-In

please type your terminal identifier
<CR>
-3354-005-
please log in: KI

DIALOG: call connected

DIALOG INFORMATION SERVICES
PLEASE LOGON:
*******
?(ENTER DIALOG ID NUMBER)

*******

ENTER PASSWORD:
*******
?(ENTER DIALOG PASSWORD)

*******

WELCOME TO KNOWLEDGE INDEX

Accounting starting at 9:32:08 EST

For instructions on how to use Knowledge Index, enter KI or ?
New Database RFPR2 now online. Type BULLETIN for announcements and changes.

**

?(READY TO SEARCH)

Sample UNINET Sign-In

CONNECT

X: 
<CR> . <CR>

UNINET PAD 66c8 port 00
service:
DLC;KI <CR>

*U001000 CONNECTED TO 51800006
DIALOG INFORMATION SERVICES
PLEASE LOGON:
*******
?(ENTER DIALOG ID NUMBER)
**WELCOME TO KNOWLEDGE INDEX**

Accounting starting at 10:23:12 EST

For instructions on how to use Knowledge Index, enter KI or ?

New Database REFR2 now online. Type BULLETIN for announcements and changes.

**(READY TO SEARCH)**

**GETTING HELP WHILE ONLINE**

You have successfully logged on and are now ready to select a database. The DIALOG "Knowledge Index" system classifies its databases into 15 categories: Agriculture (AGRI), Books (BOOK), Business Information (BUSI), Computers and Electronics (COMP), Corporate News (CORP), Education (EDUC), Engineering (ENG), Government Publications (GOVE), Legal Information (LEGA), Magazines (MAGA), Mathematics (MATH), Medicine (MEDI), Newspapers (NEWS), Psychology (PSYC), and Reference (REFR). To examine the list of available databases, type HELP SECTIONS after the system prompt ? . We know that you will probably want to concentrate on information in your field of interest, EDUCATION, so we will use the ERIC database in all of our examples.

The "Knowledge Index" system has several "help" commands which you will want to review to better understand the system. The general format is HELP followed by the type of information you need. The possibilities include:

General

<table>
<thead>
<tr>
<th>HELP KI</th>
<th>HELP COMMANDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HELP HELP</td>
<td>HELP SECTIONS</td>
</tr>
</tbody>
</table>

Commands

<table>
<thead>
<tr>
<th>HELP BEGIN</th>
<th>HELP PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>HELP FIND</td>
<td>HELP ORDER</td>
</tr>
<tr>
<td>HELP COST</td>
<td>HELP KEEP</td>
</tr>
<tr>
<td>HELP DISPLAY</td>
<td>HELP AU=</td>
</tr>
<tr>
<td>HELP RECAP</td>
<td>HELP JN=</td>
</tr>
<tr>
<td>HELP EXPAND</td>
<td>HELP FY=</td>
</tr>
<tr>
<td>HELP LOGOFF</td>
<td>HELP UD=</td>
</tr>
</tbody>
</table>
BEGINNING YOUR SEARCH

Knowledge Index uses three basic commands for searching: BEGIN, FIND, and DISPLAY. These three commands together allow you to access a database, identify relevant documents, and print online as much information about these documents as you need. A space should be typed between each command and whatever term is being searched or printed. The first letter of each command can be abbreviated and used in place of the full word (B for BEGIN, F for FIND, and D for DISPLAY). When using KI commands, always wait for the prompt ?.

The command BEGIN allows you to specify a database or change databases if already searching. Remember each time a new BEGIN command is entered all your previously created sets are erased.

ENTERING THE SEARCH TERMS

The command FIND is your main searching command. When followed by a keyword or phrase, it allows you to locate citations or articles of interest.

The features of any computerized retrieval system influence the way in which a given search is formulated for that system. A few of the operations which can seriously affect search strategy operations are described briefly below. Once you've determined the correct form of each term that you wish to use in your search, you may wish to use the worksheet in Attachment 1 to organize them into sets. Organizing your search strategy in this way before going online will help you to perform your search more efficiently.

Descriptor Format

Single-word and multiple-word descriptors must be distinguished from words in other fields by limiting them to the descriptor field. This is done by adding the abbreviation for the descriptor field at the end of the term. The format is:

TEACHERS/DE
Word Proximity Searching

Free text terms frequently appear as phrases, rather than individual words. To tell the system that you want to search for a free text phrase, you tell it that you want the words of the phrase to be within a specific proximity to the other words in the phrase. Within "Knowledge Index", adjacency is possible by leaving a blank space between two terms:

MERIT PAY

Some phrases consist of more than two words, but only the first and last words are important, e.g., "Gone with the Wind". To search such a phrase, you can specify that you will allow up to two words (unspecified) to appear between "Gone" and "Wind." The format to be used is:

GONE (2W) WIND

Limiting The Term to a Specific Field

By typing a field label immediately after a keyword, the searcher can limit the searching of that term to that particular field. This feature was described above when we limited our search to descriptors. It can also be very useful in the searching of words adjacent in a title or in limiting a keyword to be searched in both the title and identifier fields. The field label must be preceded by a slash with no spaces in between. Several fields can be searched in the same manner, separating each paragraph label by a comma. Some examples are:

MERIT PAY/TI,ID
MERIT RAISE/TI

All the ERIC fields and their abbreviations are listed in Attachment 2.

Use of Truncation

Some searches require the keying in of many related terms which can be very time-consuming. One way to bypass this is to use the feature of truncation, or stem searching. The symbol for truncation is the question mark (?) which must be entered immediately after the stem that is being truncated.

When using truncation, you can specify the number of characters you may want to retrieve or leave it unspecified so as to retrieve more "endings" or words. Entering a space after the last ? will tell the computer that you are ending the truncation command.
TEST

This will retrieve TEST, TESTS, as well as all other TEST-related terms such as TEST ITEMS, TEST REVIEWS, etc.

TEST???

This will retrieve TEST, TESTS, and TESTING, but not longer TEST-related terms.

TEST? ?

This will limit your truncation to one character, retrieving the terms TEST or TESTS.

The searcher should note that unrestricted truncation can produce unwanted citations. Caution should be taken to account for all possible endings of words.

OUR SAMPLE SEARCH

You now know all the basic information that you need to know to set up and run a subject search in ERIC. Using our example, let’s see what it would look like:

WELCOME TO KNOWLEDGE INDEX

ACCOUNTING STARTING AT 8:58:19 EST

For instructions on how to use Knowledge Index, enter KI or ?
New Database REFR2 now online. Type BULLETIN for announcements and changes.

1 BEGIN EDUC1

3/13/85 14:31:03 EST
Now in EDUCATION (EDUC) Section
ERIC (EDUC1) Database

?F MERIT PAY/DE, TI, AB OR MERIT RATING/DE, TI, ID

244 MERIT PAY/DE, TI, AB
117 MERIT RATING/DE, TI, ID
S1 322 MERIT PAY/DE, TI, AB OR MERIT RATING/DE, TI, ID

?F PREMIUM PAY/DE OR BONUS??TI, ID

29 PREMIUM PAY/DE
30 BONUS??/TI, ID
S2 58 PREMIUM PAY/DE/ OR BONUS??/TI, ID

-13-
?F S1 OR S2

S3 371 S1 OR S2

?F TEACHERS/DE OR BEGINNING TEACHERS/DE OR PUBLIC SCHOOL TEACHERS/DE

20965 TEACHERS/DE
811 BEGINNING TEACHERS/DE
344 PUBLIC SCHOOL TEACHERS/DE
S4 20965 TEACHERS/DE OR BEGINNING TEACHERS/DE OR PUBLIC SCHOOL TEACHERS/DE

?F SECONDARY SCHOOL TEACHERS/DE OR ELEMENTARY SCHOOL TEACHERS/DE

1906 SECONDARY SCHOOL TEACHERS/DE
3065 ELEMENTARY SCHOOL TEACHERS/DE
S5 4490 SECONDARY SCHOOL TEACHERS/DE OR ELEMENTARY SCHOOL TEACHERS/DE

?F S4 OR S5

S6 20965 S4 OR S5

?F S3 AND S6

S7 68 S3 AND S6

?F STATE PROGRAMS/DE OR STATE AGENCIES/DE OR STATE GOVERNMENT/DE OR STATE COURTS/DE

5880 STATE PROGRAMS/DE
1287 STATE AGENCIES/DE
1476 STATE GOVERNMENT/DE
187 STATE COURTS/DE
S8 8437 STATE PROGRAMS/DE OR STATE AGENCIES/DE OR STATE GOVERNMENT/DE OR STATE COURTS/DE

?F STATE ACTION/DE OR STATE ACTIVITY??/?TI,ID

590 STATE ACTION/DE
6 STATE ACTIVITY??/?TI,ID
S9 595 STATE ACTION/DE OR STATE ACTIVITY??/?TI,ID

?F STATE LEGISLATION/DE OR STATE LAWS/DE

3841 STATE LEGISLATION/DE
44 STATE LAWS/DE
S10 3846 STATE LEGISLATION/DE OR STATE LAWS/DE
In just a few minutes, you have identified 8 relevant documents from the half a million documents in the ERIC database. The next step is to evaluate your results by looking at some of the citations retrieved.

PRINTING THE CITIONS RETRIEVED

You are now ready to print the output of your search. Online prints are requested with the command, DISPLAY (D). You can specify to print a short, medium, or long citation. A short citation consists of the title field only; a medium citation consists of a full bibliographic entry (accession number, title, author(s), source, and issue date, corresponding to the RIE and CIJE monthly issues) and price (for RIE documents only); a long citation contains the complete citation including descriptors and abstract. The format for requesting a print of a citation is as follows:

D Statement #/Type of citation/# to be printed

Example of a Short Citation

D 12/S/1

Display 12/S/1
EJ286621
Merit Pay Revisited.

Example of a Medium Citation

D 12/M/2

Display 12/M/2
EJ307594
The Operational Importance of Teaching: A Study from the Perspective of Social Science and Graduate Deans.
Bowker, Lee R.; Lynch, David M.
Teaching Sociology, v12 n1 p47-70 oct 1984
Example of a Long Citation

?D 12/L/3

Display 12/L/3

ED144636 JC770447


Bartos, Michael W.
EDRS Price - MF01/PC07 Plus Postage.
Language: ENGLISH
Document Type: RESEARCH REPORT
Journal Announcement: RIZFEB78

Written to "help to improve faculty-board/administration relationships," this report carefully describes the salary negotiation impasse at William Rainey Harper College (WRHC) in 1975-76. Board and faculty senate actions and reactions are presented in time sequence, as are the subsequent court decisions. Told primarily from the faculty view, with an emphasis on the need for public employee collective bargaining legislation, the account identifies as critical to successful future negotiations at WRHC the following issues: (1) definition of the rights and roles of faculty and board; (2) determination of proper subject matter for negotiations; (3) acknowledgement by the board that it has no right to terminate negotiations unilaterally; and (4) recognition by the board of the Faculty Senate as an affiliate of the American Federation of Teachers. This in-depth case study would be valuable to administrators and faculty of any institution considering unionization and collective bargaining. A bibliography; a review of collective bargaining legislation by states; the faculty salary questionnaire; faculty salaries for 1975-76; salary and schedule proposals for 1976-77; statements and letters by board members, professors, and the college president; and bargaining proposals are appended. (RT)

The PAGE Command

The PAGE or P command causes the next page of the requested citations to be displayed. PAGE should be entered in response to the "For more, enter PAGE" message. This message will appear when printing an extra long citation. PAGE- or P- can be used to return to the previous page.
ORDERING PUBLICATIONS

You may want to request copies of documents from your search results. This is done in two steps: first, by entering KEEP, you can create a file of documents you want to order. This set is then used with the ORDER command to request the items listed from the document supplier. (See HELP KEEP and HELP ORDER for more information.) Remember to order the document found in each database before BEGINNING a new database.

Once you have ordered a document, you can check to see how many documents you have ordered and if they have been processed. To do this, enter ORDER LIST. This will provide you with a list of all publications you have ordered and tell you whether they have been processed.

To cancel an order that has not been processed, enter ORDER CANCEL. Orders placed in the evening are processed early the following day and you can cancel up to the time the order is processed. Special instructions up to 30 characters can be added after the ORDER II COMMAND: for example, ORDER II PLEASE RUSH.

OTHER SYSTEM COMMANDS

Reviewing the Search Strategy

Imagine that you have been entering and modifying your search for some time, and would like to examine what you have done. By entering the command RECAP (R), DIALOG provides you a display of your search strategy for your review:

?R

In EDUC1 database:

S1  322  MERIT PAY/DE, TI, AB OR MERIT RATING/DE, TI, ID
S2  58   PREMIUM PAY/DE OR BONUS??/TI, ID
S3  371  S1 OR S2
S4  20965 TEACHERS/DE OR BEGINNING TEACHERS/DE OR PUBLIC SCHOOL TEACHERS/DE
S5  4490  SECONDARY SCHOOL TEACHERS/DE OR ELEMENTARY SCHOOL TEACHERS/DE
S6  20965 S4 OR S5
S7  8437  STATE PROGRAMS/DE OR STATE AGENCIES/DE OR STATE GOVERNMENT/DE OR STATE COURTS/DE
S9  595   STATE ACTION/DE OR STATE ACTIVITY??/TI, ID
S10 3846  STATE LEGISLATION/DE OR STATE LAW??/TI, ID
S11 11960 S8 OR S9 OR S10
S12  10   S7 AND S11
Changing Databases

DIALOG allows you to change databases or start over in the same database by typing in the command BEGIN anytime during a search. DIALOG will respond with the following dialogue:

?B EDUC1
3/15/85 11:23:12 EST
Now in EDUCATION (EDUC) Section
ERIC (EDUC1) Database

Displaying the Master Index

The EXPAND or E command allows you to look at the index "Knowledge Index" uses to retrieve your search request. Most commonly, it can be used to determine how an author's name was entered. Additionally, it can be used to display the subject words or phrases in the index. This is particularly helpful when searching a less familiar database.

?E AU-RUSSELL, WILLIAM

Ref Items  Index-term
E1  1  AU-RUSSELL, WENDELL
E2  2  AU-RUSSELL, WENDELL H.
E3  4  *AU-RUSSELL, WILLIAM
E4  1  AU-RUSSELL, WILLIAM A.
E5  1  AU-RUSSELL, WILLIAM J.
E6  1  AU-RUSSELL, WILLIAM J. C.
E7  2  AU-RUSSELL, WILLIAM J., ED.

For more, enter PAGE

Logging Off

When you are ready to log off, simply type the command LOGOFF. The computer will respond with connect time and cost information:

?LOGOFF

3/15/85 14:20:47 EST
Session Total: 0.805 Hours $19.32 User U12345
REVIEW OF "KNOWLEDGE INDEX" COMMANDS

There are ten commands in the "Knowledge Index" system. They are summarized below.

B  Begin  To begin a new database
F  Find   To select a search term
D  Display To display the citations retrieved; the format is:  D Statement #/Length/# to Print
K  Keep   To keep selected citations in set 99, for later ordering
O  Order  To order the selected documents
E  Expand To view the master index
R  Recap  To review the search terms already entered
P  Page   To view the next page of a display
C  Cost   To display the current cost of the search
L  Logoff To log off the system

All the "Knowledge Index" commands and logical operators are summarized in Attachment 3.
CHAPTER 3

ADJUSTING YOUR SEARCH STRATEGY WHILE ONLINE

Online searching is an interactive process, requiring you, the searcher, to adjust the search strategy as the need arises. It is advisable to select an alternative search strategy to use in case the first one does not yield the expected results. While searching, you need to be continually aware of the results, examining titles to determine their relevancy, and if need be, examining descriptors for possible new terms to use. Thinking online is the name of the game, for it can save you time and money as well as resulting in a much better search strategy with a higher percentage of "hits".

Two problems that require search strategy revision commonly arise: retrieving too many citations, or retrieving too few citations. These two types of problems reflect your competing goals as a searcher. You want to retrieve every citation that is relevant, and you don’t want to retrieve any citation that is not relevant. You need to remember that expanding your search results will optimize your results in meeting the first goal; reducing the number of citations retrieved will hopefully optimize your results in meeting the second goal. It is impossible to optimize your search results for both goals simultaneously.

WHAT IF YOU RETRIEVED TOO MANY CITATIONS?

You think you have devised the "perfect" search strategy—you have identified the descriptors and free-text terms you want to use and you have combined them using the "set" theory approach. After going online and inputting your search, you discover that you have retrieved too many citations. WHAT SHOULD YOU DO? Don’t panic! There are several methods of limiting your search output.

Some of the methods most commonly used in limiting a search are: (1) adding an additional set of terms, (2) restricting your search terms to specific fields, and (3) limiting your search output by date of publication.

Adding Another Set of Terms

Let’s try an example of a search where adding another set of terms is necessary to limit the search output. The search topic was "Equity and Excellence in Education". Originally, two sets of terms were developed:

EQUITY/TI,DE and EXCELLENCE/TI
EQUAL EDUCATION/DE and EDUCATIONAL QUALITY/DE
The online search then looked like this:

WELCOME TO KNOWLEDGE INDEX

?R EDUC1

3/14/85 14:31:03 EST
Now in EDUCATION (EDUC) Section
ERIC (EDUC1) Database

?f EQUITY/TI,DE OR EQUAL EDUCATION/DE

966  EQUITY/TI,DE
5254  EQUAL EDUCATION/DE
S1  5844  EQUITY/TI,DE OR EQUAL EDUCATION/DE

?f EXCELLENCE/TI OR EDUCATIONAL QUALITY/DE

695  EXCELLENCE/TI
3757  EDUCATIONAL QUALITY/DE
S2  4265  EXCELLENCE/TI OR EDUCATIONAL QUALITY/DE

?f S1 AND S2

S3  418  S1 AND S2

...we combined the excellence terms with our equal education terms, we discovered that we still had too many citations. Since we were really interested in trends at the elementary-secondary levels, we then revised our search by adding a third set of descriptors.

To describe the elementary-secondary level of education, these descriptors were selected from ERIC's list of 14 "mandatory" educational level terms. These descriptors subsume several of the more specific terms, and one or more of them is always used to index the appropriate educational level of each document. These "mandatory" level terms are listed in Attachment 4.

Our sample would be revised in the following way:

?f ELEMENTARY SECONDARY EDUCATION/DE OR ELEMENTARY EDUCATION/DE OR SECONDARY EDUCATION/DE

53638 ELEMENTARY SECONDARY EDUCATION/DE
31483 ELEMENTARY EDUCATION/DE
40489 SECONDARY EDUCATION/DE
S4 123042 ELEMENTARY SECONDARY EDUCATION/DE OR ELEMENTARY EDUCATION/DE OR SECONDARY EDUCATION/DE

?f S3 AND S4

S5  211 S3 AND S4
By adding this third set of terms, we have lowered the number of citations retrieved. To determine whether the retrieved citations are relevant to the topic, the first 10-15 titles should be scanned. Based on this evaluation, the search strategy may need additional revision.

Restricting Terms to a Particular Field

Limiting the search output by restricting terms to a particular field (known as paragraph qualification) is widely used by most searchers. Let’s take a look at the following example on "Essay test scoring".

?B EDUC

3/13/85 14:31:03 EST
Now in EDUCATION (EDUC) Section
ERIC (EDUC1) Database

?F ESSAY? ?
S1 5308 ESSAY? ?

?F GRADING OR SCORING
3127 GRADING
3352 SCORING
S2 6334 GRADING OR SCORING

?F HIGH SCHOOLS/DE OR SECONDARY EDUCATION/DE
7775 HIGH SCHOOLS/DE
40489 SECONDARY EDUCATION/DE
S3 7510 HIGH SCHOOLS/DE OR SECONDARY EDUCATION/DE

?F S1 AND S2 AND S3
S4 69 S1 AND S2 AND S3

After entering the appropriate ESSAY terms ANDed with the GRADING terms, we discovered that we had retrieved more citations than we wanted to review. The next step was to qualify our "essay" and "scoring" sets to descriptors only.

?F ESSAY TESTS/DE OR ESSAYS/DE
311 ESSAY TESTS/DE
1025 ESSAYS/DE
S5 1321 ESSAY TESTS/DE OR ESSAYS/DE
How much the results are limited depends on the objectives of the search. We could have stopped after search statement number 6 and printed the entire 109 citations. Instead, we limited our terms to descriptors, resulting in a final set of only 44 citations. Your information need will determine how and how much you limit your results.

Limiting Your Search Output by Publication Date

In the following example, the search output will be limited by publication date. The search topic was on "Effects of nutrition on young children."

?B EDUC1

3/15/85 13:09:54 EST
Now in EDUCATION (EDUC) Section ERIC (EDUC1) Database

?F NUTRITION/TI,DE OR DIET/TI,ID OR MALNUTRITION/TI

2817 NUTRITION/TI,DE
71 DIET/TI,ID
72 MALNUTRITION/TI
S1 2843 NUTRITION/DE OR DIET/TI,ID OR MALNUTRITION/TI

?F PRESCHOOL CHILDREN/DE OR YOUNG CHILDREN/DE

5642 PRESCHOOL CHILDREN/DE
2285 YOUNG CHILDREN/DE
S2 7819 PRESCHOOL CHILDREN/DE OR YOUNG CHILDREN/DE

?F S1 AND S2

S3 176 S1 AND S2


34169 FY=1980
31145 FY=1981
29860 FY=1982
28669 FY=1983
As you can see, two sets of terms were originally entered, one representing a "nutrition" concept, the other representing a "young children" concept. When these two sets were combined in search statement 3, 176 documents were retrieved. Since this was too many, the search was limited by adding a set representing the publication date.

The publication date for each citation is stored in the PY field, as the year of publication. This field can be searched in the same way that subject-conveying fields are searched: specific years can be selected and combined using logical operators. However, you should note that the format is different: The field abbreviation and = precede the year.

When this "publication date" set was combined with the other two sets, the number of documents retrieved was reduced from 176 to 33.

WHAT IF YOU RETRIEVED TOO FEW CITATIONS?

There will be times when even the most logically planned search will not yield the expected results. It will be necessary to adjust the search strategy to retrieve a larger number of documents. There are two ways of doing this: adding descriptors to each concept set, or adding free text terminology to each concept set.

Adding Descriptors

Let's try some sample searches where adding descriptors is necessary to expand the search output. The first search topic is "Test Scores of Black and Hispanic Junior High Students."

?B EDUC1

3/15/85 12:57:30 EST
Now in EDUCATION (EDUC) Section
ERIC (EDUC1) Database

?F TEST RESULTS/DE OR SCORES/DE

2841 TEST RESULTS/DE
2685 SCORES/DE
S1 5244 TEST RESULTS/DE OR SCORES/DE
Let's examine the search strategy so far. We had three different concepts: TEST SCORES, BLACKS OR HISPANICS, and JUNIOR HIGH SCHOOLS. When we ANDed the three concepts, we discovered very few "hits". There are two ways we can broaden this search strategy. First, we can take a look at what we mean by TEST SCORES. If we are talking of "how well students perform", we should add ACADEMIC ACHIEVEMENT and ACHIEVEMENT GAINS to the TEST SCORES concept. The second approach is to add terms to our population concept, thus broadening it. When we make these
changes, the result looks like this:

?F ACADEMIC ACHIEVEMENT/DE OR ACHIEVEMENT GAINS/DE

17649 ACADEMIC ACHIEVEMENT/DE
1379 ACHIEVEMENT GAINS/DE
S8 18649 ACADEMIC ACHIEVEMENT/DE OR ACHIEVEMENT GAINS/DE

?F S1 OR S8

S9 22889 S1 OR S8

?F ETHNIC GROUPS/DE OR ETHNICITY/DE OR MINORITY GROUPS/DE OR MINORITY GROUP CHILDREN/DE

3981 ETHNIC GROUPS/DE
984 ETHNICITY/DE
7333 MINORITY GROUPS/DE
1232 MINORITY GROUP CHILDREN/DE
S10 12020 ETHNIC GROUPS/DE OR ETHNICITY/DE OR MINORITY GROUPS/DE OR MINORITY GROUP CHILDREN/DE

?F S5 OR S10

S11 27948 S5 OR S10

?F S6 AND S9 AND S11

S12 112 S6 AND S9 AND S11

By expanding two of the concept sets, we were able to increase the number of documents retrieved from 13 to 109. As you expand your results in this way, remember to scan some titles to make sure the documents retrieved are relevant to your topic.

Now let's take a similar problem. The search question is "Burnout among Elementary Teachers." See what happens in this case:
Let's examine what happened in this search. We used the descriptor TEACHER BURNOUT because we knew we wanted this as a major concept. We used only one term to describe the elementary level because it is the "mandatory" term for that level. However, we retrieved only 4 citations. By examining some of the titles from statement #1, we can discover several other descriptors to use in our search. We can then "adjust" our strategy to broaden our results.

?F TEACHER MORALE/DE

S4  686 TEACHER MORALE/DE

?F STRESS VARIABLES/DE OR WORK ATTITUDES/DE OR JOB SATISFACTION/DE

  2305 STRESS VARIABLES/DE
  2718 WORK ATTITUDES/DE
  2752 JOB SATISFACTION/DE

S5  6968 STRESS VARIABLES/DE OR WORK ATTITUDES/DE OR JOB SATISFACTION/DE

?F TEACHERS/DE OR TEACHER/DE

  20397 TEACHERS/DE
  77370 TEACHER/DE

S6  84050 TEACHERS/DE OR TEACHER/DE

?F S5 AND S6

S7  1200 S5 AND S6

?F S1 OR S4 OR S7

S8  1714 S1 OR S4 OR S7

?F ELEMENTARY SCHOOL TEACHERS/DE

S9  2972 ELEMENTARY SCHOOL TEACHERS/DE

?F S2 OR S9

S10  32409 S2 OR S9

?F S8 AND S10

S11  150 S8 AND S10

We now have a larger set of results to use. In most cases, the rotated display in the ERIC Thesaurus will help lead the way to locate
additional terms. However, when this does not happen, remember to examine the citations already located to identify additional useful descriptors.

Using Free Text Terminology

Free text terms allow searchers to access "hard-to-find" documents in a fast and easy manner. They are particularly helpful when your search topic calls for terms that are jargon (such as "user-friendly") or are technical (such as "Rasch model"). Using the above example on teacher burnout, several changes have been made to add free text terminology to the search strategy:

?B EDUC1

3/15/85 14:59:49 EST
Now in EDUCATION (EDUC) Section
ERIC (EDUC1) Database

?F BURNOUT OR BURN OUT

482 BURNOUT
43 BURN OUT
S1 510 BURNOUT OR BURN OUT

?F MORALE OR STRESS OR JOB SATISFACTION/DE

1597 MORALE
5541 STRESS
2837 JOB SATISFACTION/DE
S2 9439 MORALE OR STRESS OR JOB SATISFACTION/DE

?F TEACHER?

S3 133228 TEACHER?

?F S1 OR S2

S4 9573 S1 OR S2

?F S3 AND S4

S5 2881 S3 AND S4

?F ELEMENTARY EDUCATION/DE OR ELEMENTARY SCHOOL TEACHERS/DE

31483 ELEMENTARY EDUCATION/DE
3065 ELEMENTARY SCHOOL TEACHERS/DE
S7 33676 ELEMENTARY EDUCATION/DE OR ELEMENTARY SCHOOL TEACHERS/DE

?F S5 AND S6

S7 280 S5 AND S6
In this search, the use of free text terms expanded the results from 150 to 280 documents. As discussed earlier, several titles should now be scanned to insure that the new results are relevant to your information need.
The answer to this question is, of course, YES. Two other ways to search ERIC will be discussed in this chapter, with examples of each. They are:

Searches for specific authors

Searches for articles from specific journals

Each of these types of searches uses information from a specific field in the ERIC database. Therefore, you will be identifying the information you are seeking, identifying the field in which that information is located, and then limiting your search statement to that field. These three steps will give you access to the non-subject information stored in ERIC.

SEARCHING FOR A SPECIFIC AUTHOR

ERIC records the author of each document or article in the database. However, there are two things you need to know about this author information and the way it is recorded. First, the author names are recorded exactly as they appear on the article. Unless an author uses the same form of his or her name consistently, it may appear in the database in several different ways. For example, William J. Russell may have authored articles as William Russell, William J. Russell, or W. J. Russell. Your search strategy needs to allow for this kind of variation. Second, ERIC only records two authors for each article. If there were three or more authors, only the first author's name will be stored in the database.

Let's try an example of an author search. Assume that you want to find out what William J. Russell has published. Your dialogue with the computer will be:

?F AU=RUSSELL, WILLIAM?

S1 13 AU=RUSSELL, WILLIAM?
Let's review what we have done. After the system prompt, we told DIALOG that we wanted to search by typing in an F. Then, we typed in AU=RUSSELL, WILLIAM. The field abbreviation for the author field is followed by an equals sign, the last name of the person, a comma, and the first name. By truncating the first name with the question mark, we located all the citations in ERIC that were written by any William Russell. The advantage of the truncation is that we will retrieve citations by Russell, even if he didn't use his middle initial. The disadvantage of the truncation is that we may retrieve citations by another William Russell. In fact, that is what happened. Let's look at the results.

?D 1/M/1-3

Display 1/M/1

EJ273292
PROVE: An Innovative High School Program for Educating Anti-Social Disturbed Adolescents.
Lin, Thomas E.; Russell, William P.
Available from: Reprint: UMI

?D

Display 1/M/2

ED182979
Russell, William J. Ed.
Southwest Regional Laboratory for Educational Research and Development, Los Alamitos, Calif.
85p. 15 Nov 1978
EDRS Price - MF01/PC04 Plus Postage.

?D

Display 1/M/3

ED174002
Russell, William; Snow, David
Southwest Regional Laboratory for Educational Research and Development, Los Alamitos, Calif.
40p. 31 Oct 1977
EDRS Price - MF01/PC02 Plus Postage.
Look at the author(s) listed for each of these citations. In the first one, William P. Russell is the second author. Since we are looking for publications by William J. Russell, this citation is not relevant. The second citation lists William J. Russell as the editor; it matches our search. The third citation lists William Russell as a co-author (no middle initial). Based on the information we have, it is impossible to tell if this document is relevant.

Based on this example, you can see the types of problems you might encounter when searching for the publications of a particular author. Remember that it is best to truncate the author's name, unless you know that this author always uses the same form of his or her name. This approach will probably yield a few citations that are off target, but will be fairly complete in locating the citations by the selected author.

SEARCHING FOR ARTICLES FROM SPECIFIC JOURNALS

The title of each journal indexed in the ERIC database is reviewed in the journal name field (JN). If you want to review the recent titles indexed from your favorite journal, or if you want to locate the exact citation for a title that you recall was in a certain journal, you can search for the journal title. For example, you may wish to see a list of the recent articles that appeared in the Review of Educational Research. Your dialogue with the computer will be:

```
?B EDUCI
3/15/85 14:39:15 EST
Now in EDUCATION (EDUC) Section
ERIC (EDUCI) Database
?F JN=REVIEW OF EDUCATIONAL RESEARCH
S1 1245 JN=REVIEW OF EDUCATIONAL RESEARCH
```

As you can see, this search was similar in format to the author search described in the previous section. The field abbreviation for the journal name field was followed by an equals sign, and the name of the journal.

Sometimes you may not be sure of the exact name of the journal, or you may not be sure if the full name was included in the database records. In these cases, you can first look up the name of the journal in the journal name index, by using the EXPAND command. The following dialogue illustrates the procedure.
The EXPAND command can also be used in author and subject searches. You will find it helpful for locating the variations in spelling of an author's name. In subject searches, the EXPAND command is most useful in identifying additional related terms to add to your search strategy.

Once you have located the journal title you wanted, you can print the titles that have recently been indexed.

Display 1/S/1–3

EJ320533
Self-Questioning Instructional Research: A Review.

EJ320532
Toward a Solution of the Learning Paradox.

EJ320530
The Upgrading and Downgrading of Occupations: Issues, Evidence, and Implications for Education.
CHAPTER 5

SEARCHING OTHER DATABASES

At times, you will want to search other education and social science databases. DIALOG's "Knowledge Index" offers a total of 32 databases divided into 15 categories. Your choice of a database will be based on the topic you are trying to search or the types of materials you are trying to find. If your topic is methodological or deals with some aspect of psychology, you will want to continue your search in Psychological Abstracts. If your topic relates to microcomputers, be sure to include the Microcomputer Index database in your search. If you are trying to find the title of a book or verify a publisher, be sure to search in the Books in Print database.

Each of these databases will be briefly described in this chapter. The descriptions will include the name and file number for each database, a brief review of the types of materials and period of time covered in the database, the searchable fields that might be of special interest, and sources of further information.
PSYCHOLOGICAL ABSTRACTS

(PSY1)

COVERAGE: Journal articles, technical reports, monographic series¹, and dissertations on psychology and related disciplines in the behavioral sciences. 1967–present.

FIELDS:

DESCRIPTORS (DE): Subject terms selected from the Thesaurus of Psychological Index Terms.

IDENTIFIER (ID): A phrase describing the content of the article. For experimental articles, it lists the independent and dependent variable(s) and the subject population. A controlled vocabulary is not used, so new or jargon terms may be used. This field can be effectively used in combination with the title field for free text searches.

CLASSIFICATION CODE (CL): A numeric code assigned to each article to classify it for placement in the printed index. Prior to 1976, 14 two-digit codes were used, since then a classified set of four-digit codes has been in use. This field will be particularly useful if one of their codes corresponds with your general area of interest.

LANGUAGE (LA): Psychological Abstracts is international (and thus multilingual) in scope. You may wish to limit your search to English (Eng.) or some other specific language.

SOURCES FOR ADDITIONAL INFORMATION:


MICROCOMPUTER INDEX

(COMP3)

COVERAGE: Citations to the literature on the use of microcomputers in business, education, and the home. Magazine articles, as well as software and hardware reviews, new product announcements, and book reviews are included. 1981-present.

FIELDS: Subject-conveying information can be obtained from the title (TI), descriptor (DE), and abstract (AB) fields. More specific information can also be found in the following fields:

PROGRAM LISTING (PR): This field allows you to search by name of computer program/software.
DOCUMENT TYPE (DT): This field allows you to search by type of material: for example, SOFTWARE REVIEW.

SOURCES FOR ADDITIONAL INFORMATION:

Joe Ward, Microcomputer Information Services, 2464 El Camino Real, Suite 247, Santa Clara, CA 95051. (408) 984 - 1097
BOOKS IN PRINT

(C00K1)

COVERAGE: Citations to scholarly, popular, adult, juvenile, reprint, and all other types of books covering all subjects, provided they are published or exclusively distributed in the U.S. and are available to the trade or to the general public for single or multiple copy purchase. 1900–present.

FIELDS: The descriptor field (DE) uses a controlled vocabulary taken from the Library of Congress Subject Headings List.

SOURCES FOR ADDITIONAL INFORMATION:

Iris L. Rugoff, Manager – Online Services, R. R. Bowker Company, 1180 Avenue of the Americas, New York, NY 10036. (212) 764-5107.
ATTACHMENT 1

SEARCH STRATEGY WORKSHEET

CONCEPT SET 1:

________________ OR __________________ OR __________________

________________ OR __________________ OR __________________

________________ OR __________________ OR __________________


AND

CONCEPT SET 2:

________________ OR __________________ OR __________________

________________ OR __________________ OR __________________

________________ OR __________________ OR __________________


AND

CONCEPT SET 3:

________________ OR __________________ OR __________________

________________ OR __________________ OR __________________

________________ OR __________________ OR __________________


AND

CONCEPT SET 4:

________________ OR __________________ OR __________________

________________ OR __________________ OR __________________

________________ OR __________________ OR __________________
ATTACHMENT 2

**ERIC FIELD NAMES AND ABBREVIATIONS**

<table>
<thead>
<tr>
<th>Suffix</th>
<th>Field Name</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>/AB</td>
<td>Abstract</td>
<td>search</td>
</tr>
<tr>
<td>/DE</td>
<td>Descriptor</td>
<td>search</td>
</tr>
<tr>
<td>/ID</td>
<td>Identifier</td>
<td>search</td>
</tr>
<tr>
<td>/TI</td>
<td>Title</td>
<td>search</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Field Name</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>AU=</td>
<td>Author</td>
<td>search</td>
</tr>
<tr>
<td>JN=</td>
<td>Journal name</td>
<td>search</td>
</tr>
</tbody>
</table>
ATTACHMENT 3

"KNOWLEDGE INDEX" COMMAND SUMMARY

LOGICAL OPERATORS

OR Either one or both subject terms must be in each citation retrieved.

AND Both subject terms must be in each citation retrieved.

NOT The subject term must not appear in the citation.

TRUNCATION

Place a ? at the point of truncation.

"KNOWLEDGE INDEX" COMMANDS

B Begin To begin a new database
F Find To print search results online.
D Display To display the citations retrieved; the format is: D Statement #/Length/# to Print
K Keep To keep selected citations in set 99, for later ordering
O Order To order the selected documents
E Expand To view the master index
R Recap To review the search terms already entered
P Page To view the next page of a display
C Cost To display the current cost of the search
L Logoff To log off the system
MANDATORY LEVEL DESCRIPTORS

In the ERIC system, one or more of the 14 descriptors listed below must be used to index educational level, when a document or journal article deals with such levels.

EARLY CHILDHOOD EDUCATION: From birth through grade 3.

PRESCHOOL EDUCATION: From birth to entrance in kindergarten grade 1.

PRIMARY EDUCATION: From kindergarten through grade 3.

ELEMENTARY SECONDARY EDUCATION: From kindergarten through grade 12.

ELEMENTARY EDUCATION: From kindergarten through grade 8.

ADULT BASIC EDUCATION: Adults at the elementary level (K-8).

PRIMARY EDUCATION: From kindergarten through grade 3.

INTERMEDIATE GRADES: Grades 4, 5, and 6.

SECONDARY EDUCATION: From grade 7 through grade 12.

JUNIOR HIGH SCHOOLS: Grades 7, 8, and 9.

HIGH SCHOOLS: From grade 9 through grade 12.

HIGH SCHOOL EQUIVALENCY PROGRAMS: Adult education leading to a high school equivalency certificate.

POSTSECONDARY EDUCATION: Beyond the secondary level.

HIGHER EDUCATION: Beyond the secondary level leading to a formal degree.

TWO YEAR COLLEGES: Postsecondary institutions providing at least 2, but less than 4, years of academic and/or occupational education.
**ATTACHMENT 5**

**PUBLICATION TYPE (DT=) CODES**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>010</td>
<td>BOOKS</td>
<td>090</td>
<td>LEGAL/LEGISLATIVE REGULATORY MATERIALS</td>
</tr>
<tr>
<td>020</td>
<td>COLLECTED WORKS</td>
<td>100</td>
<td>AUDIOVISUAL/NON-PRINT MATERIALS</td>
</tr>
<tr>
<td>021</td>
<td>--General</td>
<td>101</td>
<td>--Computer Programs</td>
</tr>
<tr>
<td>022</td>
<td>--Conference Proceedings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>022</td>
<td>--Serials</td>
<td></td>
<td></td>
</tr>
<tr>
<td>030</td>
<td>CREATIVES WORKS (Literature, Drama, Fine Arts)</td>
<td>110</td>
<td>STATISTICAL DATA (Numerical, Quantitative)</td>
</tr>
<tr>
<td>040</td>
<td>DISSERTATIONS/THESSES</td>
<td>120</td>
<td>VIEWPOINTS (Opinion)</td>
</tr>
<tr>
<td>041</td>
<td>--Undetermined</td>
<td></td>
<td>Papers, Position Papers, Essays, etc.</td>
</tr>
<tr>
<td>042</td>
<td>--Doctoral Dissertations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>043</td>
<td>--Masters Theses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>043</td>
<td>--Practicum Papers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>050</td>
<td>GUIDES</td>
<td>131</td>
<td>REFERENCE MATERIALS</td>
</tr>
<tr>
<td>051</td>
<td>--General</td>
<td></td>
<td>--General</td>
</tr>
<tr>
<td>051</td>
<td>--Classroom Use</td>
<td>132</td>
<td>--Bibliographies</td>
</tr>
<tr>
<td>051</td>
<td>--Instructional Materials (For Learner)</td>
<td>133</td>
<td>--Directories/Catalogs</td>
</tr>
<tr>
<td>052</td>
<td>--Teaching Guides (For Teacher)</td>
<td>134</td>
<td>--Geographic Materials</td>
</tr>
<tr>
<td>055</td>
<td>--Non-Classroom Use (For Administrative &amp; Support Staff, and for Teachers, Parents, Counselors, etc. for Non-Classroom Use)</td>
<td>140</td>
<td>--Vocabularies/Classifications/Dictionaries</td>
</tr>
<tr>
<td>060</td>
<td>HISTORICAL MATERIALS</td>
<td>141</td>
<td>REPORTS</td>
</tr>
<tr>
<td>060</td>
<td></td>
<td>142</td>
<td>--General</td>
</tr>
<tr>
<td>070</td>
<td>INFORMATION ANALYSES</td>
<td>143</td>
<td>--Descriptive</td>
</tr>
<tr>
<td>071</td>
<td>(Literature Reviews, State-of-the-Art Papers)</td>
<td>150</td>
<td>--Evaluative/Feasibility</td>
</tr>
<tr>
<td>080</td>
<td>JOURNAL ARTICLES</td>
<td></td>
<td>--Research/Technical</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>SPEECHES, CONFERENCE PAPERS</td>
</tr>
<tr>
<td>090</td>
<td>LEGAL/LEGISLATIVE REGULATORY MATERIALS</td>
<td>160</td>
<td>TESTS, EVALUATION INSTRUMENTS</td>
</tr>
<tr>
<td>140</td>
<td></td>
<td>170</td>
<td>TRANSLATIONS</td>
</tr>
<tr>
<td>160</td>
<td></td>
<td></td>
<td>--Multilingual/Bilingual Materials</td>
</tr>
<tr>
<td>171</td>
<td>--ERIC Information Analysis Products</td>
<td></td>
<td></td>
</tr>
<tr>
<td>999</td>
<td>OTHER/MISCELLANEOUS</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Online searching has become a required skill for current and future librarians and other information professionals. What's more, as microcomputers continue to proliferate, more and more users are directly accessing ERIC and other educational databases without benefit of training.

This manual guides novice online users in manipulating the search system commands of BRS "Knowledge Index" to effectively search ERIC and other educational databases. It also explains basic concepts in online searching, such as planning search strategies and adjusting them online, using controlled vocabulary, searching other fields in the database, and basic techniques of free text searching.

ORDER FORM

Please send ____ copies of the ERIC/TME publication, "At Home with ERIC: Online Searching from your Home Computer "Knowledge Index", at $5.00 each.

Name _____________________________________________________________

Address __________________________________________________________

____________________________________ Zip ________________________

Total enclosed $ _______

Return this form to:

ERIC/TME
Educational Testing Service
Princeton, NJ 08541-0001
RECENT TITLES
IN THE ERIC/TME REPORT SERIES


#87 - The Statewide Assessment of Writing, by Peter Afflerbach. 8/85, $7.50.

#86 - The Effects of Testing on Teaching and Curriculum in a Large Urban School District, by Floraline Stevens. 12/84, $6.00.

#85 - Reporting Test Scores to Different Audiences, by Joy A. Frechtling and N. James Myerberg. 12/83, $7.00.

#84 - Assessment of Learning Disabilities, by Lorrie A. Shepard. 12/82, $6.50.

#83 - Statistical Methodology in Meta-Analysis, by Larry V. Hedges. 12/82, $7.00.

#82 - Microcomputers in Educational Research, by Craig W. Johnson. 12/82, $8.50.

#81 - A Bibliography to Accompany the Joint Committee's Standards on Educational Evaluation, compiled by Barbara M. Wildemuth. 12/81, $8.50.

#80 - The Evaluation of College Remedial Programs, by Jeffrey K. Smith and others. 12/81, $6.50.

#79 - An Introduction to Rasch's Measurement Model, by Jan-Eric Gustafsson. 12/81, $5.50.


#74 - Intelligence, Intelligence Testing and School Practices, by Richard DeLisi. 12/80, $4.50.

#72 - Methods of Identifying Gifted Minority Students, by Ernest H. Bernal. 12/80, $4.50.

#71 - Sex Bias in Testing: An Annotated Bibliography, compiled by Barbara Hunt. 12/79, $5.00.