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ABSTRACT
          Designed for educators requesting information from
ERIC and for the search intermediary who channels educators' requests
to a search service, this updated guide explains in non-technical
language the steps involved in preparing a computer search for the
ERIC database. A beginning section on how to initiate a search
discusses the choice of a database and whether to use a manual or
computer search. A discussion of the search negotiation process
covers the type of search and problem definition. The process of
developing a search strategy is also examined, including access
points to ERIC materials; using the Thesaurus of ERIC Descriptors;
indexing rules, including use of major descriptors and identifiers,
indexing specificity, and educational levels; and indexable elements,
i.e., population concepts, activities/action and
methodology/materials concepts, curriculum concepts, identifiers, and
document form/type concepts. Five appendices list the ERIC
Clearinghouses with contact information, databases of interest to
educators, publication types and codes, and educational level
descriptors, and provide forms for ordering ERIC documents and
reprints of journal articles. A glossary and a 42-item bibliography
are included. (LMM)

HOW TO PREPARE FOR A COMPUTER SEARCH OF ERIC

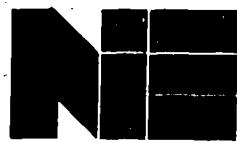## A NON-TECHNICAL APPROACH

Revised and updated by

Marilyn R. Laubacher

The original publication was prepared

for the Clearinghouse on Information Resources

by Judith Yarborough and published in 1975.

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Marilyn R. Laubacher, the User Services Coordinator at the ERIC Clearinghouse on Information Resources at Syracuse University from 1977 to 1983, is the Director of the Baldwinsville Public Library, Baldwinsville, New York.

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INTRODUCTION

Computer searching of the ERIC database has become widespread. A <u>Cost and Usage Study of the Educational Resources Information Center (ERIC) System</u> (ED 208 902), conducted by King Research in December 1981, estimated that 197,668 ERIC searches are performed annually, with approximately 60% being done for administrators, planners, teachers, trainers, and counselors. The number of online database search services providing access to citations from <u>Resources in Education</u> and the <u>Current Index to Journals in Education,</u> ERIC's two monthly indexes, has increased significantly in the past eight years. The first <u>Survey of ERIC Data Base Search Services</u> (1974) listed 122 search locations in the United States, 5 in Canada, and 1 in Sweden. The fourth and most current <u>Directory of ERIC Search Services</u> (March 1981) contains entries for 415 search locations in the United States and 42 foreign locations, primarily in Canada and Australia.

It is important that educators requesting information from ERIC become informed about the process of computerized retrieval and the ERIC database in order to improve the relevance and scope of their search results. Similarly, the search intermediary (usually a librarian) who channels a request from the educator to a search service must be aware of how a computer search is prepared so that he/she will be able to help with the process.

This updated edition is written with these two audiences in mind. It is not intended to be a tutorial for the sophisticated searcher who processes many searches a day; rather it is an attempt to describe in non-technical language the steps involved in preparing a computer search for ERIC.

One of few available resources designed specifically for use by the person requesting an ERIC search, the original edition of this guide was prepared by Judith Yarborough for the ERIC Clearinghouse on Information Resources in 1975.

Marilyn R. Laubacher
Syracuse, New York
May 1983

INITIATING A SEARCH

Choice of a Database

One of the first considerations is whether ERIC, the Educational Resources Information Center, is the most appropriate database in which to search for information on a particular topic. To make this decision, it is useful to know the subjects covered, types of materials included, when the database was started and number of entries to date, and accessibility of the primary materials located through the search.

Through its network of 16 Clearinghouses, ERIC collects materials in the field of education, covering the areas of adult, career, and vocational education; counseling and personnel services; educational management; elementary and early childhood education; handicapped and gifted children; higher education; information resources; junior colleges; languages and linguistics; reading and communications skills; rural education and small schools; science, mathematics, and environmental education; social studies/social science education; teacher education; tests, measurement, and evaluation; and urban education. (A list of Clearinghouses and their addresses appears as Appendix A.)

The materials consist of unpublished, noncopyrighted, "fugitive" documents such as research reports, conference papers and proceedings, and curriculum materials, which are announced monthly in Resources in Education (RIE), and journal articles, which are announced monthly in the Current Index to Journals in Education (CIJE). Since the ERIC system was started in 1966, more than 220,000 documents have been announced in RIE, and over 270,000 journal articles in CIJE. Approximately 95% of the documents cited in RIE are available on microfiche and may be read at one of over 700 ERIC microfiche collection sites, or ordered individually from the ERIC Document Reproduction Service (EDRS). Journal article reprints for about 65% of the titles from CIJE are available through University Microfilms International (UMI).

One way to determine whether ERIC is the appropriate database, particularly if the search intermediary is not familiar with its content, is to look up titles that might be of interest in a few issues of RIE and CIJE, or an ERIC bibliography.

If the search question is psychologically oriented, it might be better to choose the PSYCHINFO database, which covers materials in psychology and related disciplines in the behavioral sciences. If there are very technical aspects, the NTIS database offers reports of government funded research in the scientific and technical fields. (A more complete listing of alternative databases is found in Appendix B.) In some cases, searching more than one database may be desirable and/or necessary to provide all relevant materials on a particular topic.

Computer or Manual Search?

Having decided that ERIC is the appropriate database, one must then determine whether a computer search is the best approach. A search that is relatively simple to perform (e.g., specific writings of a particular author or

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examination of a narrow topic such as "School Newspapers") can probably best be done manually (by hand). Using a computer in fact lessens the possibility of finding interesting material serendipitously. A computer search is desirable when the question is multifaceted and requires coordination of concepts. For example, the question "What is the effect of educational television on bilingual children of elementary school age?" has at least three facets: educational television, bilingualism, and elementary school children. A manual search would be very time consuming because it would involve sifting through many irrelevant titles under each individual facet. However, a computer could very quickly isolate those titles having something to do with all three of the facets.

A computer search is also useful when doing an in-depth retrospective literature review. If the topic were "tests and testing" and the requestor conducted a manual search to locate everything about the topic in ERIC, he/she would have to look through each annual volume of RIE and semi-annual volume of CIJE for titles listed under the ERIC subject headings (descriptors) "tests" and "testing" and then look up each associated resume to find more information. Then, since the ERIC system does not index specific items under their general heading, the requestor would also have to check items indexed under specific types of tests, such as Intelligence Tests, Occupational Tests, and Preschool Tests. This process would also be time consuming without a computer.

A computer can also be used effectively for "free text" searching. Free text searching, usually available on computer systems, allows searching of ERIC titles and abstracts for any word or phrase, whether or not it is in the controlled vocabulary of the ERIC Thesaurus. It can also be used to locate minor descriptors (not listed in the printed indexes) or identifiers (terms not suitable for or not yet included in the Thesaurus). A requestor who wants to know when a given word or concept begins to appear in the literature, or to examine the literature in depth for a given concept that is not yet represented by an ERIC descriptor, would probably find computer free text searching the best answer.

A computer search must be done to locate certain types of information about the documents that do not appear in the printed RIE index. Examples include the language in which the document is written, the level of government which sponsored it (local, state, federal, foreign, or international), the place where the document was written, and the educational level about which it is concerned (elementary, secondary, adult); the level is usually assigned as a minor descriptor. Information about the language of a journal article and type of publication (i.e., besides being a journal article, a certain item might also be a research report or opinion paper) is also available through the computer, but does not appear in the printed CIJE index.

SEARCH NEGOTIATION

Type of Search

After selection of the appropriate database(s) and search mode, the information need and search objec .ive of the requestor must be determined. For example, the requestor might want (1) an indepth, comprehensive search that would retrieve all relevant items from the database(s) selected on a particular topic (high recall); (2) a high precision search, in which only items relevant to a specific question are retrieved; (3) a Brief-search, in which some relevant items are retrieved; or (4) a current awareness search, limited to the most recent materials on a topic.

The current awareness search, sometimes called Selective Dissemination of Information (SDI), establishes a profile of interest that is run periodically only on new additions to the database. SDI is carefully tailored to fit the requestor's needs and is supplied on a continuing basis.

Defining the Problem

The next step in setting up a search is carefully defining the problem or question. The process is ideally carried on face-to-face between the requestor and the searcher. If this cannot be accomplished, the telephone is the next best alternative. When personal or telephone contact is not possible, this phase is sometimes carried out by mail. However, relevancy of response can be low when a mailed request is processed at face value, unless the question has been very clearly stated.

The requestor is encouraged to describe the search topic in natural language and at some length. He/she is asked to state the question as clearly and concisely as possible and to tell what information is not wanted as well as what is needed, taking into account educational level, who will be using the information and how it will be used, the population about which information is desired, particular authorities in the field or institutions where work is being performed, sources already considered, and appropriate time frame (e.g., nothing prior to 1970). Often, in talking over the question with the searcher, the requestor is able to clarify and refine the topic considerably.

The requestor should take time to focus the question, to examine in depth what information is needed, and to determine what is already available. It helps to try to break the problem down into concepts; that is, to think in terms of the facets of the question rather than just the expected answer. For example, "What is the most effective method to teach mathematics to elementary school students who are bilingual?" is a better question than "What do I do with children who don't speak English?"

During this phase, it is important that the requestor be told what he/she can expect to receive and in what format. A computer search of ERIC results in an annotated bibliography of citations from both RIE and CIJE, unless only one is specified. Titles from RIE include bibliographic information such as author,

institution, sponsoring agency, availability, and descriptive notes; subject headings
used to index the document; and a 200-word abstract. Titles from CIJE include
author and journal citation; indexing terms; and a 50-word annotation. After
examining the search results and deciding which titles are of interest, the
requestor must find and read the primary materials. ERIC microfiche collection
sites can be identified by contacting one of the ERIC Clearinghouses listed in
Appendix A for a list, if the searcher does not know where the nearest collection is
located. Individual titles may be ordered from EDRS in microfiche (MF) and/or
paper copy (PC) form, if indicated in the search printout. The EDRS price codes
found in the citation are translated in the back of a recent issue of RIE. Addresses
are provided for those titles unavailable from EDRS. Journal articles should be
located in a library collection, borrowed through interlibrary loan at a nearby
library, or ordered through UMI. Order forms for EDRS and UMI are found in
Appendix C.

DEVELOPING SEARCH STRATEGIES

The strategy used in computer searching is based on set theory. It is easier to break the search down into facets if one understands this concept. The Venn diagram below consists of three overlapping circles, A, B, and C, each representing a concept or facet of a search for information on methods for teaching science to the disadvantaged.
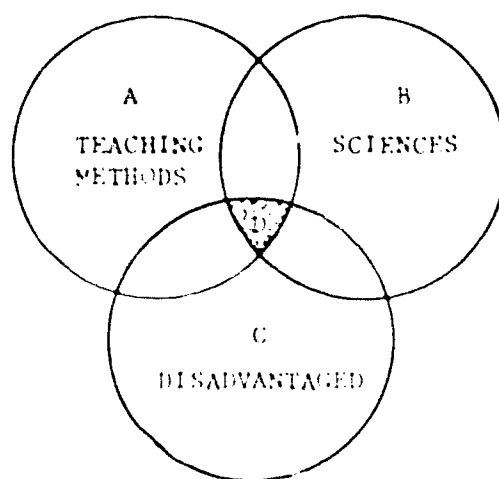
Circle A represents the set of ERIC materials indexed using the descriptor Teaching Methods, Circle B those indexed using Sciences, and Circle C the set which were indexed using Disadvantaged. The area of overlap for the three circles, D, represents those materials indexed using all three ERIC descriptors. A search for materials on methods for teaching science, not restricted to a particular group, could be done by simply combining sets A and B. Similarly, sets A and C could be combined to locate titles about methods for teaching the disadvantaged. All set combinations are based on the logical operators OR, AND, and NOT.

When performing a computer search, one is defining all the material included in each of the circles, which is called a "set." The search illustrated in the Venn diagram above could be expanded using the OR operator as follows: Set A (Circle A) could be increased to include material indexed using the ERIC descriptors Teaching Methods OR Teacher Effectiveness OR Educational Strategies. Set B (Circle B) could be expanded to include Sciences OR Science Instruction OR Science Curriculum, and Set C (Circle C) could be defined as Disadvantaged OR Disadvantaged Youth OR Economically Disadvantaged OR Educationally Disadvantaged OR Low Income Groups. After the sets have been defined, the AND operator is used to refine the search by decreasing the total number of items and providing a set of titles indexed using descriptors common to two or more sets. For example, titles located in the search done by combining Set A AND Set B AND Set C (represented by overlap area D) would have to have at least one descriptor

assigned from each of the three sets. The NOT operator is used to eliminate titles
indexed using particular descriptors from the search output.

These operations are performed rapidly by the computer and can save most of
the time consumed in a manual search involving a large number of descriptors.
Although the logical operations may be performed differently by the various
computer systems, the method of breaking the search down into facets and defining
the sets is the same from the requester's viewpoint.

Access Points to ERIC Materials

An understanding of the various points of access provided to ERIC materials
is useful to anyone preparing a search strategy. The ERIC index Resources in
Education contains four indexes to document titles: Personal Author, Institution,
Publication Type, and Subject. The first two ways are self-explanatory, the latter
two may be unfamiliar. All documents are categorized by their "form" of
publication (i.e., Publication Type or PUBTYPE). Thirty-five categories include
such forms as bibliographies, teacher guides, descriptive reports, speeches,
information analyses, and research reports. Up to three PUBTYPE code
assignments are permitted for a single document to allow flexibility in
classification. All appear in the Publication Type Index of RIE and may be
searched online. (A list of these categories and their codes is found in Appendix
IV.)

The most common approach to ERIC material is by subject. The ERIC
system uses a "controlled vocabulary" when assigning subject headings to (indexing)
a document. These key words, known as descriptors in ERIC, are taken from the
Thesaurus of ERIC Descriptors. Other terms reflecting the content of the
document such as personal names, geographical locations, trade names,
organizations, and new terminology, are called identifiers. They are not found in
the Thesaurus; however, standard forms for entering the same name or concept are
found in the Identifier Authority List.

The Current Index to Journals in Education contains three indexes to journal
articles: Personal Author, Subject, and Journal Contents. The first two correspond
to the same access points provided in RIE. The Journal Contents Index, which is
found in the printed CIJE index, provides names of articles indexed from a
particular issue of a journal, listed alphabetically by journal name. Although the
Publication Type codes do not appear in the printed CIJE index, they are assigned
to articles, and are available for online searching.

Using the Thesaurus of ERIC Descriptors

When the requester and searcher both have a clear understanding of the topic
to be searched and how it can be divided into concepts, or "sets," the Thesaurus of
ERIC Descriptors should be used to identify appropriate subject headings using the
following steps:

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

f. Looking the best descriptors in the Alphabetical Descriptor Display are the main part of the Thesaurus.

    a. Read the Scope Notes (SN) for definitions of how an ERIC uses the terms.

    b. Check the Broader Terms (BT), Narrower Terms (NT), and Related Terms (RT) under your descriptor and identify other possible descriptors relevant to your topic.

    c. Make a list of other descriptors that you might also use.

    d. Looking these descriptors and repeat steps above.

g. Make a final list of the descriptors which seems to have been used to represent your topic.

The introduction to the Thesaurus contains written and contains useful information and examples that enable the student in more specific assistance.

    Identifiers are free text words or phrases which are used in referencing the search topic.

Indexing Rules

    Since most ERIC searching is done by subject, the rules governing assignment of descriptors and identifiers, taken from the ERIC Processing Manual, provide useful information to the requestor and the searcher. The following summary of significant indexing rules is from Section VII, pages 1 and 2:

    1. Descriptors used in the indexing process must be in the Thesaurus of ERIC Descriptors.

    2. The Identifier Field should be used to index specific entities, such as geographic locations, project names, etc. Identifiers must be structured in conformance with the rules contained in Section VIII. Proposed Descriptors are entered in the Identifier field until approved and implemented in the Thesaurus.

    3. The "major" subject matters of the document, whether expressed as Descriptors or Identifiers, must be asterisked (*) in order to listing of them from the less substantial or "minor" topics. The following kinds of terms should be avoided as major, where possible:

        a. Excessively broad terms, which lack discrimination (e.g., DEVELOPMENT, and which might otherwise collect large numbers of just types in a single journal issue;

        b. Educational levels, age levels, methodology, or publication document type terms, unless they are the subject of the document;

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c.   Multiple terms beginning with the same word, thereby causing unnecessary repetitive access in the manual indexes.

4.   At least one (1) major descriptor must be assigned to a document; not more than five (5) major descriptors are permitted for each document (six if only one major identifier is used). There is, however, no upper limit on the total number of descriptors that can be used to index a given document; the average for RIE is around eleven (11) per document.

5.   There is no minimum requirement for identifiers; no more than two (2) identifiers should be designated as major.

6.   Index to the specific level of subject matter covered by the document. Do not automatically index "up" to higher generic levels than the document actually deals with. Do not automatically index "down" to all the sub-elements of the level dealt with.

7.   Index in depth, or exhaustively, all significant concepts covered in the document.

8.   Index the document and exposition in hand; avoid indexing implications, possible uses, and other aspects referred to, but not actually dealt with.

9.   Index on the basis of the entire document, not just a part such as the "Introduction" or "Conclusions."

10. If a document is concerned with a particular educational (grade/academic) level, the indexer must index tc hat level.

11. Insofar as possible, index terms used should appear (in recognizable form) in the abstract (or title) of the document. This provides the user with a reassuring justification for the use of each index term for that particular item.

12. Index terms are written with initial capital letters. Except when used as the initial word, articles and connectives (prepositions and conjunctions) are not capitalized in a descriptor. Exceptions to this rule occur in certain identifiers, e.g., book titles such as "Graduate (The)."

13. Index terms are written without punctuation or special characters, with the sole exception being parentheses (to enclose a qualifier).

14. Over-indexing and under-indexing should be avoided. The excessive use of terms beginning with the same word can lead to over-indexing, as can the unrestrained listing of every concept contained in a small document. Under-indexing usually results from failure to assume the searcher's point of view.

Several of these rules need further elaboration in order to understand how they affect ERIC search strategy formulation: Rule #3, major descriptors and identifiers; Rule #6, indexing specificity; and Rule #10, educational levels.

Major descriptors and identifiers. Major descriptors and identifiers represent the main concepts contained in individual documents and journal articles. Titles in the printed RIE and CIJE subject indexes are listed only under the major descriptors and identifiers assigned to them as part of the indexing process. No more than five major descriptors (six if only one major identifier is used) and two major identifiers may be assigned per title. A set of descriptors and identifiers used in performing a computer search can be limited to instances where they have been designated as major subject headings. This will decrease the number of items in the set and insure that the remaining titles deal primarily with the concepts represented by the terms in the set.

Indexing specificity. ERIC guidelines call for indexing to "the specific level of subject matter" covered by the document or article in hand. In practice this means that an item about cable television would be indexed using the descriptor Cable Television and not the broader term Television. As with any rule there are exceptions: When the document/or article discusses a concept at both a general and a specific level (e.g., intelligence tests in general and specific tests as well) in about equal detail; when the document or article discusses a specific concept, but the indexer thinks the document adds useful information to the body of knowledge about the general concept; or when the document or article discusses many specifics of a general concept, but none in sufficient detail to merit the indexing of each specific concept. Knowing this, the searcher must be careful to choose not only those broad terms that cover the topic but also the narrower terms that are included in the more general area. For instance, when the requestor is interested in Television, all of the specific kinds of television that may be of interest must also be specified if the search is to retrieve items which deal with these sub-sets specifically, i.e., Broadcast Television, Childrens Television, Cable Television, Closed Circuit Television, Commercial Television, Educational Television, Public Television.

Educational levels. There are 71 descriptors in the ERIC Thesaurus which can be used to identify the educational level being studied or toward which a document or article is directed, e.g., Adult Programs, Inservice Education, or Undergraduate Study (see Appendix E for complete list). Fourteen of these descriptors have been identified as subsuming several of the more specific terms, and one or more of the 14 must always be used to index the educational level when the document deals with such levels. This "mandatory" educational level descriptor procedure was implemented in February 1975, and is particularly useful for restricting the output of a computer search to the appropriate grade level. Since the level terms are usually assigned as minor descriptors (unless the level is the central focus of the document or article) titles do not appear under these descriptors in the printed subject indexes. The exceptions to the mandatory rule are instances where the level is incidental to the content and not specifically treated, or where any or all levels might apply equally. The mandatory educational

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level descriptors, taken from the front of the Thesaurus of ERIC Descriptors, are listed below:

- EARLY CHILDHOOD EDUCATION
    Scope Note: Activities and/or experiences that are intended to effect developmental changes in children, from birth through the primary units of elementary school (grades K-3).

    - ● PRESCHOOL EDUCATION
        Scope Note: Activities and/or experiences that are intended to effect developmental changes in children, from birth to entrance in kindergarten (or grade 1 when kindergarten is not attended).

    - ● PRIMARY EDUCATION
        Scope Note: Education provided in kindergarten through grade 3.

- ELEMENTARY SECONDARY EDUCATION
    Scope Note: Formal education provided in kindergarten or grade 1 through grade 12.

    - ● ELEMENTARY EDUCATION
        Scope Note: Education provided in kindergarten or grade 1 through grade 6, 7, or 8.

        - ●● ADULT BASIC EDUCATION
            Scope Note: Education provided for adults at the elementary level (through grade 8), usually with emph communicative, computational, and social skills.

        - ●● PRIMARY EDUCATION
            Scope Note: (See above.)

        - ●● INTERMEDIATE GRADES
            Scope Note: Includes the middle and/or upper elementary grades, but usually 4, 5, and 6.

    - ● SECONDARY EDUCATION
        Scope Note: Education provided in grade 7, 8, or 9 through grade 12.

        - ●● JUNIOR HIGH SCHOOLS
            Scope Note: Education provided in grades 7, 8, and 9--less commonly 7 and 8, or 8 and 9.

        - ●● HIGH SCHOOLS (Changed from "Senior High Schools" in March 1980.)
            Scope Note: Providing formal education in grades 9 or 10 through 12.

••• HIGH SCHOOL EQUIVALENCY PROGRAMS
   Scope Note: Adult educational activities concerned with the preparation for and the taking of tests which lead to a high school equivalency certificate, e.g., General Educational Development program.

• POSTSECONDARY EDUCATION
   Scope Note: All education beyond the secondary level--includes learning activities and experiences beyond the compulsory school attendance age, with the exception of adult basic education and high school equivalency programs. (Before Apr75, restricted to "education beyond grade 12 and less than the baccalaureate level.")

•• HIGHER EDUCATION
   Scope Note: All education beyond the secondary level leading to a formal degree.

•• TWO YEAR COLLEGES (Changed from "Junior Colleges" in March 1980.)
   Scope Note: Public or private postsecondary institutions providing at least 2, but less than 4, years of academic and/or occupational education.

Indexable Elements

Documents and articles in ERIC are indexed based on the following concept groups, as applicable:

- Population Concepts
- Activities/Action Concepts; Methodology/Materials Concepts
- Curriculum Concepts
- Identifiers
- Document Form/Type

Population concepts. These elements categorize and identify the group or individual studied by the document or intended as the users of the document. Most important to ERIC users are terms identifying the population's educational (grade/academic) level or age level. However, other categories which may be applicable are: Occupation; Race or Nationality; Religion; Intelligence or Ability Level; Physical or Emotional Characteristics; Socioeconomic Characteristics; Sex. Examples of some terms in the Thesaurus which represent these various population concepts follow:

Age - e.g.,

INFANTS	0 - 24 months
PRESCHOOL CHILDREN	2 - 5 years
YOUNG CHILDREN	0 - 8 years
CHILDREN	0 - 12 years
ADOLESCENTS	13 - 17 years

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YOUNG ADULTS   18 – 30 years
ADULTS   Over 18 years
MIDDLE AGED ADULTS   45 – 64 years
OLDER ADULTS   Over 65 years

Occupation - e.g.,

ACCOUNTANTS
COOKS
COUNSELORS
LIBRARIANS
MEDICAL LABORATORY ASSISTANTS
OPTOMETRISTS
TEACHERS

Note: See also list of Narrower Terms under term OCCUPATIONS, and
           Descriptor Group "OCCUPATIONS."

Race/Nationality - e.g.,

AMERICAN INDIANS   JAPANESE AMERICANS
ARABS   KOREAN AMERICANS
BLACKS   LATIN AMERICANS
CHINESE AMERICANS   MEXICAN AMERICANS
CUBANS   MEXICANS
ESKIMOS   NORTH AMERICANS
FILIPINO AMERICANS   POLISH AMERICANS
HISPANIC AMERICANS   PUERTO RICANS
INDIANS   SPANISH AMERICANS
ITALIAN AMERICANS   WHITES

Religion - e.g.,

AMISH   JEWS
CATHOLICS   JUDAISM
CHRISTIANITY   PROTESTANTS
ISLAMIC CULTURE   PURITANS

Intelligence/Ability Level - e.g.,

ACADEMICALLY GIFTED   ILLITERACY
DEVELOPMENTAL DISABILITIES MENTAL RETARDATION
HIGH ACHIEVEMENT   SLOW LEARNERS
LEARNING DISABILITIES   TALENT

Physical/Emotional Characteristics - e.g.,

AMPUTATIONS   HYPERACTIVITY
BLINDNESS   MENTAL DISORDERS
DEAFNESS   NEUROLOGICAL IMPAIRMENTS

DEAF BLIND   PARANOID BEHAVIOR
DOWNS SYNDROME   PERCEPTUAL HANDICAPS
DRUG ADDICTION   PHYSICAL DISABILITIES
EMOTIONAL DISTURBANCES   PSYCHOSIS
HOSTILITY   SCHIZOPHRENIA

Socioeconomic Characteristics - e.g.,

ADOPTED CHILDREN   FOSTER CHILDREN
ADVANTAGED   MIGRANTS
CRIMINALS   NOMADS
DELINQUENCY   PRISONERS
ECONOMICALLY DISADVANTAGED   REFUGEES
EDUCATIONALLY DISADVANTAGED

Sex - e.g.,

EMPLOYED WOMEN   MALES
FATHERS   MOTHERS
FEMALES

Activities/action and methodology/materials concepts.   Such terms as
Instruction, Testing, and Experiments describe activities or action concepts, while
Language Laboratories, Objective Tests, Programed Instructional Materials, and
Filmstrips describe methodology and materials concepts.

Curriculum concepts.   This refers to the educational subject or concept that
is being administered, taught, or measured.   Examples are Arithmetic, History,
Learning Disabilities, Reading, Spatial Ability, and the like.

Identifiers.   Highly specific terms such as proper names of persons,
organizations, or geographic locations, which are varied and often transient. are
not usually appropriate for the Thesaurus. However, they can be highly . :ful
access points and must be taken into account in the indexing process. The ERIC
solution to this problem is the identifier field, a relatively "free" and open subject
indexing field. Although they are not rigidly defined, structured, or controlled as
are descriptors, identifiers are constructed using certain standards to avoid
excessive scattering under different word forms and to aid retrieval. The proper
format for all existing identifier concepts is found in the Identifier Authority List.
Existing categories of identifiers are: conferences/meetings, curriculum areas,
equipment (including computer programs), facilities, geographic locations, groups
(ethnic, occupations, and other), health-related terms (including psychology),
historical/special events, languages/linguistics, laws/legislation, methods/theories,
miscellaneous, organizations, personal names, projects/programs, science and
technology, tests/testing, titles (literature, films, etc.) 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.

Document form/type concepts.   Labeling of publication type or document
characteristics, e.g., Annual Reports, Catalogs, or Newspapers, is done by

descriptor as well as publication type code (PUBTYPE). From 1966 to mid-1974 the only way to index the publication type concept was to use descriptors or identifiers. In mid-1974 the PUBTYPE code was initiated to supplement the full indexing and provide another means of restricting search output. There are twenty descriptors that are not used for indexing document form in the descriptor field, since they coincide exactly with names of PUBTYPE categories and would duplicate that field. These twenty terms carry the following note in the Thesaurus: "Corresponds to pubtype code ___--Do not use except as the subject of a document." (This rule was implemented in mid-1979, when the coding scheme was changed.) A fairly comprehensive list of descriptors which can be used to identify publication type appears below. Those terms which correspond to a PUBTYPE code and are not to be used except as the subject of a document are asterisked.

ABSTRACTS
ADMINISTRATOR GUIDES
ANNOTATED BIBLIOGRAPHIES
ANNUAL REPORTS
ANSWER KEYS
ANSWER SHEETS
ANTHOLOGIES
ATLASES
AUDIODISC RECORDINGS
AUDIOTAPE RECORDINGS
*AUDIOVISUAL AIDS
AUTOBIOGRAPHIES
*BIBLIOGRAPHIES
BIOGRAPHICAL INVENTORIES
BIOGRAPHIES
BOOK REVIEWS
*BOOKS
BULLETINS
CARTOONS
CASE RECORDS
CASE STUDIES
CATALOGS
CHARTS
CHECK LISTS
CHILDRENS LITERATURE
CHRONICLES
CITATION INDEXES
CODES OF ETHICS
COMICS (PUBLICATIONS)
COMPUTER OUTPUT MICROFILM
COMPUTER PROGRAMS
*CONFERENCE PAPERS
*CONFERENCE PROCEEDINGS
CONTRACTS
COURSE DESCRIPTIONS
CURRICULUM GUIDES
DIAGRAMS

ENCYLOPEDIAS
ESSAYS
FACILITY GUIDELINES
FACULTY HANDBOOKS
FEASIBILITY STUDIES
FILMOGRAPHIES
FILMS
FILMSTRIPS
FLOW CHARTS
FOREIGN LANGUAGE BOOKS
FOREIGN LANGUAGE FILMS
FOREIGN LANGUAGE PERIODICALS
GAMES
GLOSSARIES
GRAPHS
GUIDELINES
*GUIDES
HEARINGS
ILLUSTRATIONS
INDEXES
INSTRUCTIONAL MATERIALS
INTERVIEWS
ITEM BANKS
KINESCOPE RECORDINGS
LABORATORY MANUALS
LARGE TYPE MATERIALS
LEADERS GUIDES
LEGISLATION
LESSON PLANS
LETTERS (CORRESPONDENCE)
LITERATURE REVIEWS
MAGNETIC TAPE CASSETTES
MAGNETIC TAPES
MAPS
MASTER PLANS
*MASTERS THESES
MATRICES

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DIARIES   MICROFORMS
*DICTIONARIES   MODELS
*DIRECTORIES   NEGOTIATION AGREEMENTS
DISCOGRAPHIES   NEWSLETTERS
*DOCTORAL DISSERTATIONS   NEWSPAPERS
DOCUMENTARIES   NONPRINT MEDIA
DRAMA   OPINIONS
EDITORIALS   PAMPHLETS
PATENTS   SLIDES
PERIODICALS   SPECIFICATIONS
PERMUTED INDEXES   *SPEECHES
PHOTOGRAPHS   STANDARDS
POETRY   STATE OF THE ART REVIEWS
POSITION PAPERS   *STATISTICAL DATA
*PRACTICUM PAPERS   STUDENT PUBLICATIONS
PROGRAM DESCRIPTIONS   STUDY GUIDES
PROGRAM EVALUATION   SURVEYS
PROGRAM GUIDES   TABLES (DATA)
PROGRAM PROPOSALS   TALKING BOOKS
PUZZLES   TAPE RECORDINGS
QUESTIONNAIRES   TEACHING GUIDES
RATING SCALES   TEST REVIEWS
RECORDS (FORMS)   *TESTS
*REFERENCE MATERIALS   TEXTBOOKS
*REPORTS   THESAURI
RESEARCH PROPOSALS   *THESES
*RESEARCH REPORTS   VIDEODISC RECORDINGS
RESOURCE MATERIALS   VIDEOTAPE RECORDINGS
SCHOLARLY JOURNALS   *VOCABULARY
SCHOOL NEWSPAPERS   WORD LISTS
SCHOOL PUBLICATIONS   WORKBOOKS
SCRIPTS   WORKSHEETS
*SERIALS   YEARBOOKS
SHORT STORIES

Although it is useful to be able to limit titles in a search to teaching guides
or evaluative reports, for example, searchers of ERIC need to be cautious when
restricting their output by publication type code due to changes that have occurred
in the codes and their assignment over time. One-letter codes (such as "L" for
Bibliographies and "R" for Research Reports) were used for five years between
mid-1974 and mid-1979. The publication type descriptors (such as Directories and
Guides) were also used, even if they overlapped with the PUBTYPE code. Studies
of ERIC Clearinghouse practice determined that the ability to assign only one code
was inadequate and was causing inconsistent use, e.g., a conference paper might
also be a research report or an opinion paper, and there was no order of priority in
choosing the code. Consequently, in 1979 the codes were changed to 3-digit codes
(see Appendix C) which were more specific, the use of certain publication type
descriptors was restricted when they overlapped with the new PUBTYPE codes, up
to three codes could be assigned per title, the codes were assigned to CIJE articles
for the first time (a journal article can also be a research report, opinion paper, or

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Publication type), a publication type index was added to the printed RIE index, and the ERIC computer tapes were changed to include the new codes.

However, in some categories it was difficult to make a one-to-one change from the 1-letter code to the 3-digit code on the computer tapes. For example, Research Reports, Technical Reports, and Studies, formerly coded "R," could be assigned several possible codes under the new system: 140 (General Reports), 141 (Descriptive Reports), 142 (Evaluative/Feasibility Reports), or 143 (Research/Technical Reports). Since there was no way of determining which new category applied without studying each individual title, all of the documents coded "R" between 1974 and 1979 were put into the new 140 category, General Reports.

Therefore, the searcher needs to be aware of certain things when limiting by PUBTYPE: any materials included prior to mid-1974 will be automatically eliminated, as will any journal articles included prior to mid-1979; titles included in RIE between 1974 and 1979 will include publication type descriptors as well as PUBTYPE codes, and many of them will be found under the general category headings for the PUBTYPE codes (e.g., General Guides, 050; General Reference Materials, 130; or General Reports, 140); and titles included in RIE and CIJE after mid-1979 can contain up to three PUBTYPE codes but will not include those publication type descriptors which correspond exactly to the PUBTYPE codes (see list on pages 14-15).

CONCLUSION

To a novice new to ERIC searching, the first negotiation and search process may seem difficult and time consuming. However, learning to construct a computer search is something like learning to drive a car: the first few times there are so many things to remember that it seems impossible to concentrate on a destination. In a short time, however, the process becomes remote automatic, allowing concentration on the desired results instead of on the steps necessary to reach those results.

To recap the steps in the process of computer searching the ERIC system:

1. Decide which database(s) span the most appropriate for a search on a particular topic.

2. Determine whether a computer or a manual search is the most effective way to approach the problem.

3. Decide how much information is needed.

4. Define the search question. First describe the topic in natural language, then break it down into concepts or facets.

5. Choose ERIC descriptors and identifiers and/or free text words and phrases to describe each facet of the search, keeping in mind the Boolean search logic to be used by the computer, ERIC indexing rules, and indexable elements of document and journal articles.

6. Find out what to expect as a result of the search, in what format it will be, and where to locate the primary materials cited.

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ERIC CLEARINGHOUSES

(body text heavily faded and illegible)

ERIC Clearinghouse on ...

ERIC Clearinghouse on ...

ERIC Clearinghouse on Educational Management
University of Oregon
Library, Room 108
Eugene, Oregon 97403
Telephone (503) 686-5043

leadership, management ...

ERIC Clearinghouse on Elementary and Early Childhood Education
University of Illinois
College of Education
805 W. Pennsylvania Ave.
Urbana, Illinois 61801
Telephone (217) 333-1386

Prenatal factors, parental behavior, the physical, psychological, social, educational and cultural development of children from birth through the primary grades education and learning theory, assessment and practice related to the development of young children. Includes teacher preparation, educational programs and curricula related community ... ies, as well as administration, instruction and physical settings ... es both the early years and childhood (ages 0-7), the middle ... (ages 8-12) and early adolescence (ages 10-14)

ERIC Clearinghouse on ...

ERIC Clearinghouse on ...

ERIC Clearinghouse on Information Resources
School of Education
...
Huntington Hall
150 Marshall St
Syracuse, New York 13210
Telephone (315) 423-3640

Management, general ...

ERIC Clearinghouse for Junior Colleges
University of California at Los Angeles
Mathematical Sciences Building, Room 8118
405 Hilgard Avenue
Los Angeles, California 90024
Telephone (213) 825-3931

Development, administration, and evaluation of two-year public and private community and junior colleges. Junior college students, staff, curricula, programs, libraries, and community services.

ERIC Clearinghouse on ...

ERIC Clearinghouse on ...

ERIC Clearinghouse ...

New Mexico ...
Box 587
Las Cruces, New Mexico ...
Telephone ...

ERIC Clearinghouse for *Science, Mathematics, and Environmental Education*
Ohio State University
1200 Chambers Road, R...
Columbus, Ohio 43212
Telephone (614) 422-6...

ERIC Clearinghouse for *Social Studies/Social Science Education*
Social Science Education Consortium, Inc.
855 Broadway
Boulder, Colorado 80302
Telephone (303) 492-8434

Educational Resources Information Center (Central ERIC)
National Institute of Education
Washington, DC 20208
Telephone (202) 254-...

ERIC Processing & Reference Facility
ORI, Inc. Information Systems Division
4833 Rugby Avenue, Suite ...
Bethesda, Maryland 20814
Telephone (301) 656-9723

ERIC Document Reproduction Service
Computer Microfilm International Corporation (CMIC)
P.O. Box 190
Arlington, Virginia 22210
Telephone (703) 841-1212

Oryx Press
2214 North Central at Encanto
Phoenix, Arizona 85004
Telephone (602) 254-6156

Data Processing and Information Science Contents (DPIX)

Exceptional Child Education Resources (ECER)

Grants

Print version:	Grant Information System (quarterly) and Faculty Alert Bulletins (monthly, in six subject areas: Creative and Performing Arts, Education, Health, Humanities, Physical and Life Sciences, and Social Sciences)
Thesaurus:	None
Producer:	Compiled by Betty L. Wilson and William K. Wilson, published by Oryx Press, 2214 North Central at Encanto, Phoenix, AZ 85004
Online vendors:	DIALOG and SDC

Scope: GRANTS covers awards that are greater than $5,000 in all subject areas and that are available on a national or regional level from government, private foundations, associations, or organizations.

International Software Database

Coverage dates:	1983 (current offerings)
Number of citations:	10,000
Updates:	Monthly
Print version:	International Microcomputer Software Directory and International Minicomputer Software Directory
Thesaurus:	None
Producer:	Imprint Software, Ltd., 1520 South College, Fort Collins, CO 80524
Online vendor:	DIALOG

Scope: Lists commercially available software (computer programs) for any microcomputer or minicomputer; includes items of interest for the expert or the hobbyist on a wide range of topics.

Microcomputer Index

Coverage dates:	1980 to present
Number of citations:	13,000
Updates:	Quarterly
Print version:	Microcomputer Index
Thesaurus:	List of Controlled Vocabulary Terms Used in Microcomputer Index
Producer:	Microcomputer Information Services, 2464 El Camino Real, Suite 247, Santa Clara, CA 95051
Online vendor:	DIALOG

Scope: Subject and abstract guide to magazine articles from 40 microcomputer journals which includes general articles on microcomputing, book and software reviews, applications, and product descriptions.

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National Information Center for Educational Media (NICEM)

Coverage dates: 1979 edition currently available

Number of citations: 331,000

Updates: Completely reloaded every two years with irregular online updates in between

Print version: NICEM Indexes to: 16mm Educational Films, 35mm Educational Filmstrips, Educational Overhead Transparencies, 8mm Motion Cartridges, Educational Video Tapes, Educational Audio Tapes, Educational Records, Educational Slides, Producers and Distributors, Psychology--Multimedia, Health and Safety Education--Multimedia, Vocational and Technical Education--Multimedia, Environmental Studies--Multimedia, Nonprint Special Education Materials--Multimedia (Learner Volume), and Nonprint Special Education Materials--Multimedia (Professional Volume). Updated every 2½ years.

Thesaurus: NICEM Subject Headings

Producer: National Information Center for Educational Media, University of Southern California, University Park, Los Angeles, CA 90007

Online vendor: DIALOG

Scope: Complete coverage of nonprint educational materials (see list of titles above) from pre-school to professional and graduate school levels.

National Information Center for Special Education Materials/National Instructional Materials Information Center (NICSEM/NIMIS).

Coverage dates: DIALOG: online from 1974-1977; BRS: online from 1977-1980 (NIMIS II)

Number of citations: 39,000 (1974-1977); 32,000 (1977-1980)

Updates: None

Print version: No printed equivalent to file, although NICSEM publishes:
Master Index to Special Education Materials,
Special Education Index to Learner Materials,
Special Education Index to Parent Materials,
Special Education Index to Assessment Materials,
Special Education Index to In-Service Training Materials

Thesaurus: NICSEM Special Education Thesaurus and Instructional Materials Thesaurus for Special Education

Producer: National Information Center for Special Education Materials, 3716 South Hope Street, 2nd Floor, Los Angeles, CA 90007

Online vendors: BRS and DIALOG

Scope: Media for handicapped or exceptional learners, in all subject areas, at all levels, including audiovisual materials and equipment, braille books, equipment and adaptive devices, and assessment instruments.

National Technical Information Service (NTIS)

Coverage dates:	1964 to present
Number of citations:	957,000
Updates:	Biweekly, with approximately 5,000 added monthly
Print version:	Government Reports Announcements and Index
Thesaurus:	Eight major thesauri used to index a variety of government-sponsored reports: 1) DDC Retrieval and Indexing Terminology, 2) Thesaurus of DDC Descriptors (1964-1973), 3) ERDA Subject Indexing and Retrieval Thesaurus, 4) INIS: Thesaurus (1973-1975), 5) Subject Headings Used by the USAEC Division of Technical Information (1964-1973), 6) NASA Thesaurus, Volumes I and II, 7) Thesaurus of ERIC Descriptors, and 8) Thesaurus of Engineering and Scientific Terms.
Producer:	National Technical Information Service, U.S. Department of Commerce, 5285 Port Royal Road, Springfield, V. ˉ2161
Online vendors:	BRS, DIALOG, and SDC

Scope: Government-sponsored research, development, and engineering reports, foreign technical reports, and analyses prepared by national and local government agencies, their contractors or grantees. Includes material from hard and soft sciences.

PsycINFO (formerly Psychological Abstracts)

Coverage dates:	1967 to present (online)
Number of citations:	402,000, with 36,000 added annually
Updates:	Monthly (online)
Print version:	Psychological Abstracts (1927 to present)
Thesaurus:	Thesaurus of Psychological Index Terms
Producer:	Psychological Abstracts Information Service, American Psychological Association, 1400 North Uhle Street, Arlington, VA 22201
Online vendors:	BRS, DIALOG, and SDC

Scope: Approximately 100 periodicals and 1,500 books, technical reports, dissertations, and monographs are scanned each year to provide coverage of original research, reviews, discussion, theory, conference papers, panel discussions, case studies, and descriptions of the apparatus in the field of psychology and related disciplines in the behavioral sciences as well as education.

Resources in Computer Education (RICE)

Coverage dates:	1979 to present
Number of citations:	2,000, with 1,200-1,800 added yearly
Updates:	Bimonthly
Print version:	None

Thesaurus:	Thesaurus of ERIC Descriptors
Producer:	Northwest Regional Educational Laboratory, 300 S.W. Sixth Avenue, Portland, OR 97204
Online vendor:	BRS

Scope: Information concerning the state of the art in elementary and secondary school computer applications, includes direct references to software packages and producers. Expansion in 1983 will include categories on computer literacy, with objectives and test items for education; Project Register, containing descriptions of school projects in K-12 computer applications; and Inventory, containing data on installation of hardware in schools.

School Practices Information File (SPIF)

Coverage dates:	Projects and products currently in operation or use
Number of citations:	12,000, with 500 added monthly
Updates:	Bimonthly
Print version:	None
Thesaurus:	Thesaurus of ERIC Descriptors
Producer:	Education Service Group, Bibliographic Retrieval Services, 1200 Route 7, Latham, NY 12110
Online vendor:	BRS

Scope: Educational practices, programs, and materials currently in operation or use, including such things as Title IV-C and NDN projects.

Social Science Citation Index (SSCI)

Coverage dates:	DIALOG: online from 1972 to present; BRS: online from 1978 to present, offline from 1972-1977
Number of citations:	1,177,000, with 10,000 added monthly
Updates:	Monthly (online)
Print version:	Social Science Citation Index (1969 to present; 3/year)
Thesaurus:	None
Producer:	Institute for Scientific Information (ISI), 3501 Market Street, University City Science Center, Philadelphia, PA 19104
Online vendors:	BRS and DIALOG

Scope: A multidisciplinary database indexing every significant item from over 1,000 social sciences journals (including 155 educational research journals), selected articles from almost 3,000 additional journals in natural, physical, and biomedical sciences, and monographs. In addition to traditional retrieval by author, journal name, or title, the database provides the capability to search an author's cited references.

Sociological Abstracts.

Coverage dates:	1963 to present (online)
Number of citations:	Approximately 127,000, with 7,500 added annually
Updates:	Quarterly (online)
Print version:	Sociological Abstracts (1953 to present)
Thesaurus:	Sociological Abstracts User's Reference Manual, "Authority File"
Producer:	Sociological Abstracts, P.O. Box 22206, San Diego, CA 92122

Online vendor: DIALOG.

Scope: Scans over 1,200 journals and other serial publications each year to provide coverage of the original research, reviews, discussions, monographic publications, conference reports, panel discussions, and case studies in the field of sociology and related disciplines in the social and behavioral sciences, including education.

*   *   *   *   *   *

Education Index

Although it is not yet available for online searching, Education Index is an additional resource that is also of interest to educators. Begun in 1929, it provides comprehensive access by author and subject, and primarily covers the core education periodicals, although it also includes proceedings, yearbooks, bulletins, and monographs for a total of 312 titles. Education Index is published by the H. W. Wilson Company, 950 University Avenue, Bronx, NY 10452.

*   *   *   *   *   *

The three main commercial suppliers of online computer retrieval are:

Bibliographic Retrieval Services (BRS)
1200 Route 7
Latham, NY 12110
(800) 833-4707 or (518) 783-1161

DIALOG Information Retrieval Service
3460 Hillview Avenue
Palo Alto, CA 94304
(800) 227-1960 or (800) 982-5838 in California

System Development Corporation (SDC)
2500 Colorado Avenue
Santa Monica, CA 90406
(800) 421-7229 or (800) 352-6689 in California

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Revised October 1982

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CODE	PUBLICATION/DOCUMENT TYPES
010	BOOKS
	COLLECTED WORKS
020	--General
021	--Conference Proceedings (See also 150)
022	--Serials
030	CREATIVE WORKS (Literature, Drama, Fine Arts)
	DISSERTATIONS/THESES
040	--Undetermined
041	--Doctoral Dissertations
042	--Masters Theses
043	--Practicum Papers
	GUIDES
050	--General
	--Classroom Use
051	--For Learner (Instructional Materials)
052	--For Teacher (Teaching Guides)
055	--Non Classroom Use (For Administrative and Support Staff, Teachers, Parents, Clergy, Researchers)
060	HISTORICAL MATERIALS
070	INFORMATION ANALYSES (Literature Reviews, State-of-the-Art Papers)
071	--ERIC Information Analysis Products
080	JOURNAL ARTICLES
090	LEGAL/LEGISLATIVE/REGULATORY MATERIALS
100	AUDIOVISUAL MATERIALS
110	STATISTICAL DATA (Numerical/Quantitative)
120	VIEWPOINTS (Opinion Papers, Position Papers, Essays, etc.)

CODE	PUBLICATION/DOCUMENT TYPES
	REFERENCE MATERIALS
130	General
131	Bibliographies
132	Directories/Catalogs
133	Geographic Materials
134	Vocabularies/Classifications/ Dictionaries, Glossaries
	REPORTS
140	-General
141	--Descriptive (Program/Project Descriptions)
142	--Evaluative/Feasibility
143	--Research/Technical
150	SPEECHES, CONFERENCE PAPERS (Individual) (See also 0x1)
160	TESTS, EVALUATION INSTRUMENTS
170	TRANSLATIONS
171	MULTILINGUAL/BILINGUAL MATERIALS
999	OTHER/MISCELLANEOUS (Not Classifiable Elsewhere) (Avoid use of this category if at all possible)

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ADULT BASIC EDUCATION	HIGH SCHOOL EQUIVALENCY PROGRAMS
ADULT EDUCATION	HIGH SCHOOL FRESHMEN
ADULT PROGRAMS	HIGH SCHOOL GRADUATES
COLLEGE BOUND STUDENTS	HIGH SCHOOL SENIORS
COLLEGE CURRICULUM	HIGH SCHOOL STUDENTS
COLLEGE FRESHMEN	HIGH SCHOOLS
COLLEGE GRADUATES	HIGHER EDUCATION
COLLEGE INSTRUCTION	INSERVICE EDUCATION
COLLEGE PREPARATION	INTERMEDIATE GRADES
COLLEGE PROGRAMS	JUNIOR HIGH SCHOOL STUDENTS
COLLEGE SENIORS	JUNIOR HIGH SCHOOLS
COLLEGE STUDENTS	KINDERGARTEN
COLLEGES	KINDERGARTEN CHILDREN
COMMUNITY COLLEGES	MASTERS PROGRAMS
DOCTORAL PROGRAMS	MIDDLE SCHOOLS (Grades 4-9 or some segment thereof)
EARLY CHILDHOOD EDUCATION	
ELEMENTARY EDUCATION	NONCOLLEGE BOUND STUDENTS
ELEMENTARY SCHOOL CURRICULUM	NURSERY SCHOOLS
ELEMENTARY SCHOOL STUDENTS	POSTDOCTORAL EDUCATION
ELEMENTARY SCHOOLS	POSTSECONDARY EDUCATION
ELEMENTARY SECONDARY EDUCATION	PRESCHOOL CHILDREN
EXTERNAL DEGREE PROGRAMS	PRESCHOOL CURRICULUM
GRADE 1	PRESCHOOL EDUCATION
GRADE 2	PRIMARY EDUCATION
GRADE 3	SECONDARY EDUCATION
GRADE 4	SECONDARY SCHOOL CURRICULUM
GRADE 5	SECONDARY SCHOOL STUDENTS
GRADE 6	SECONDARY SCHOOLS
GRADE 7	SPECIAL DEGREE PROGRAMS
GRADE 8	TWO YEAR COLLEGE STUDENTS
GRADE 9	TWO YEAR COLLEGES
GRADE 10	UNDERGRADUATE STUDENTS
GRADE 11	UNDERGRADUATE STUDY
GRADE 12	UNIVERSITIES
GRADUATE STUDENTS	UPPER DIVISION COLLEGES
GRADUATE STUDY	

ABSTRACT

A brief (usually at least), terse, written narrative description of the subject matter contained in a larger item or publication (e.g., a document). Each citation in RIE includes an abstract, which represents the document.

ACCESSION NUMBER

A number (or number with alpha prefix) assigned sequentially to incoming items to uniquely identify them. Clearinghouses assign a Clearinghouse Accession Number (e.g., TM 000 120) for temporary in-process control. Upon publication in RIE or CIJE, each title is assigned a permanent ERIC accession number (e.g., ED 123 456 or EJ 123 456).

ALPHABETICAL DISPLAY (THESAURUS)

The primary arrangement or format of the thesaurus of ERIC Descriptors (secondary arrangements are the Rotated Display, the Hierarchical Display, and the Descriptor Group Display). All valid Descriptors (Main Terms), invalid Descriptors ("dead" terms), and USE references appear in this display interfiled alphabetically word-by-word, together with definitions and cross-reference structures.

ANNOTATION

A brief (no more than 50 words) notation of subject content. In the ERIC system, annotations are written for journal articles (CIJE accessions) whose titles are not sufficient to adequately convey their content.

AUTHOR INDEX

Found in RIE and CIJE, this index lists personal authors in alphabetical order by last name, with titles of their documents and/or journal articles and the ED or EJ number for each.

BOOLEAN ALGEBRA

A system for symbolizing logical statements by operators, usually AND, OR, and NOT, from which relationships among statements can then be derived mechanically. Boolean Algebra is an algebra of classes and is considered a branch of symbolic logic. The notation permits the expression of conditional statements and statements of fact in symbolic form, and by means of prescribed operations allows arrival at valid conclusions. It is much in use in information retrieval to express the conditions of a computer search. It is named after the mathematician George Boole (1815-1864).

BIBLISEARCH

[text illegible]

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CENTRAL ERIC (CERIC)

[text illegible]

CIJE PUBLISHER

[text illegible]

CLEARINGHOUSE

A contractor within the ERIC network that takes responsibility for the acquisition and processing of materials in one of the major areas of the field of education, e.g., Higher Education, Languages, Tests, etc. ERIC clearinghouses have traditionally been located within non-profit institutions such as universities; the exact number (now at 16) varies with the shifting needs of the educational community.

CLEARINGHOUSE PREFIX

A two-letter code assigned to ERIC clearinghouses for easy identification. The codes are used as prefixes for the temporary clearinghouse accession numbers. The following codes are currently in use: CE, CG, CS, EA, EC, FL, HE, IR, JC, PS, RC, SE, SO, SP, TM, UD. The following codes have been used in the past: AC, AL, EF, EM, LI, RI, TE, VT.

CLEARINGHOUSE SCOPE OF INTEREST GUIDE

COMPUTER SEARCH

CONCEPTS (ACTION)

CONCEPTS (CURRICULUM)

Concepts that refer to the subject matter, subjects, or subject areas, that are taught, or researched. Examples are antithetical, of nuclearing reaction, reading, alphabetic subjects, etc.

CONCEPTS (MATERIALS)

Concepts that identify the materials in which to be used in a study or educational application. Examples are language laboratories, objective tests, and filmstrips.

CONCEPTS (POPULATION)

Concepts that categorize and identify the group or individual studied by a document or intended as the users of the document. Most important to ERIC users are concepts identifying the population's educational (grade/academic) level and age level. However, other categories which may be applicable are occupation, race or nationality, religion, intelligence or ability level, physical or emotional characteristics, socioeconomic characteristics, and sex.

CURRENT AWARENESS SEARCH

See "Selective Dissemination of Information."

CURRENT INDEX TO JOURNALS IN EDUCATION (CIJE)

A paperbound monthly (12 issues per year) index journal that announces journal articles from over 700 education and education-related journals. CIJE is made up of a main entry section, consisting of catalogric and

DATABASE

DEFINITIONS

DESCRIPTOR AND IDENTIFIER USAGE REPORT

DESCRIPTOR GROUP DISPLAY

DESCRIPTORS (DEAD/INVALID)

Terms that once were valid Descriptors but that have been deliberately removed from the usable terms in the Thesaurus. Unlike transferred Descriptors, postings for dead Descriptors remain in the ERIC files. "Dead term" status puts a 'golden lock' on Descriptors, preventing their further use in indexing and allowing them to be set aside for reexamination and possible reindexing at a later date.

DESCRIPTORS (TRANSFERRED)

Former indexable or main terms that have been downgraded to the status of Used For (UF) terms. Former Descriptors displayed as UFs are no longer carried in the ERIC files. Their postings have been transferred to the preferred USE term(s).

DOCUMENT

A generic term referring to any printed form in which a written or graphic work may be produced. Encompasses reports, speeches, journal articles, dissertations, brochures, pamphlets, proceedings, books, and many other bibliographic forms.

DOCUMENT RESUME SECTION

A section of RIE which includes the document resumes, arranged numerically by ED number, and grouped alphabetica!! by Clearinghouse prefix initials. (See also "Resume")

ED NUMBER

ED stands for ERIC Document. Ed accession numbers identify documents announced in Resources in Education (RIE). They are assigned automatically to documents by the ERIC computer system as one of the last steps in computer processing. Documents are ordered by the public from EDRS by using the ED number.

EDRS

An acronym standing for ERIC Document Reproduction Service. EDRS is the document supply and distribution component of the ERIC network and is responsible for the microfiching of all documents, the handling of standing orders (subscriptions) for microfiche, and the handling of on-demand orders for both microfiche and paper copy. The current contractor is Computer Microfilm International Corporation (P.O. Box 190, Arlington, VA 22210).

EJ NUMBER

EJ stands for ERIC Journal Number. Assigned to journal articles announced in Current Index to Journals in Education. Used for ordering reprints from article reprint sources such as University Microfilms International (UMI). (See also "University Microfilms International")

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ERIC

An acronym standing for Educational Resources Information Center. A decentralized network of organizations whose primary goal is bibliographic control over the domestic literature of education. Components are: (1) Central ERIC (the Government sponsor and monitor); (2) ERIC Clearinghouses (16 non-profit contractors); (3) Support Contractors, (a) ERIC Facility--editing, computer processing; (b) ERIC Document Reproduction Service--microfiching, document reproduction; (c) CIJE publisher--commercial publishing.

ERIC PROCESSING AND REFERENCE FACILITY

A centralized information processing facility serving all components of the ERIC network under the policy direction of Central ERIC. It accepts data from the ERIC clearinghouses, edits and keys the data, and builds, maintains, and produces various products from the database. A wide variety of supporting functions are also performed, e.g., acquisitions, lexicography, data conversion, reference, tape distribution, forms control, scheduling, etc. (4833 Rugby Avenue, Suite 301, Bethesda, MD 20814)

ERIC PROCESSING MANUAL

This manual provides detailed rules, guidelines, and examples to be used by the components of the ERIC system in acquiring, selecting, and processing documents and journal articles and updating the ERIC vocabulary.

ERICTAPES

The commercial "brand" name used for the ERIC database in machine-readable form when it is sold to outside user groups. Different files and formats are available from the ERIC Processing and Reference Facility.

ERICTOOLS

The commercial "brand" name used for the ERIC internal reference publications (e.g., Title Index, Source Directory) when they are sold to outside user groups through the ERIC Processing and Reference Facility.

FACET

Term or group of terms which express one aspect of the search topic.

FALSE DROP

A retrieval or "hit" based on an unintended coordination of index terms. Synonymous with "noise."

FREE TEXT

The natural narrative language used by authors in creating the titles of documents and by abstractors in creating the abstracts, annotations, and cataloger's notes pertaining to those documents. The text of such fields is free or uncontrolled in contrast to the Descriptors and Identifiers constituting the controlled indexing vocabulary. Modern computer retrieval systems permit retrieval from either fields controlled by authority lists (such as thesauri) or from free text fields. Since the appearance of a word in free text may or may not have a significant relationship to subject content, searching based on free text tends to retrieve a certain amount of low precision material.

FUGITIVE LITERATURE

Unpublished, limited distribution material that is produced in limited quantities. Examples would be research reports, speeches, presentations, etc. Fugitive material has a tendency to disperse rapidly and to be unavailable within a relatively short time after it is generated. It varies widely in quality. If it is to be made available for the benefit of potential users (other than the small group of initial recipients), it must be captured and put under control by one of the database systems such as ERIC.

GOVERNMENT PRINTING OFFICE (GPO)

The Public Printer responsible for printing and distributing most Federal Government publications, including Resources in Education. (Superintendent of Documents, U.S. Government Printing Office, Washington DC 20402)

GROUP CODES

These 3-digit codes refer to the placement of each Thesaurus Descriptor in one of 41 (52 prior to the 1977-1980 Vocabulary Improvement Project) Descriptor Groups. These groups are broad subject categories that provide an overview of the Thesaurus vocabulary. They can be used for general browsing and searching.

HARD COPY

See "Paper Copy."

HIERARCHICAL DISPLAY

One of four arrangements or formats of the Thesaurus of ERIC Descriptors (the others being the Alphabetical Display, the Rotated Display, and the Descriptor Group Display). This display presents sets of generic tree structures showing, for every Thesaurus Descriptor, the trail of narrower terms below it and broader terms above it, each carried to the farthest extreme.

HIT

A record (in a database) that is retrieved in the course of a search.

IDENTIFIER

Semi-controlled retrieval terms intended to add a depth to indexing that is not always possible with Descriptors alone. An Identifier is usually the name of a specific entity, e.g., project, person, place, organization, test, group, item of equipment, piece of legislation. An Identifier may also be a new concept, under consideration for Descriptor status and awaiting approval for admission to a formally controlled vocabulary or thesaurus.

IDENTIFIER AUTHORITY LIST

A complete list of all approved Identifiers (alphabetical or by category). Available from the ERIC Processing and Reference Facility.

INDEXING

The process of assigning words or terms to documents and journal articles in order to describe their subject content for purposes of subsequent retrieval.

INSTITUTION INDEX

Found in RIE, this index lists document titles under the institution responsible for producing them and under their sponsoring agency when applicable. Arranged in alphabetical order by name of university, agency, association, etc.

JOURNAL ARTICLES

Generic term referring to independent writings appearing in journals and other serial publications, e.g., newsletters.

JOURNAL CONTENTS INDEX

An index in Current Index to Journals in Education (CIJE) that lists alphabetically each journal issue, and the articles within it, covered by that issue of CIJE.

LEVEL DESCRIPTORS

Those descriptors from the Thesaurus which identify the educational level being studied or toward which a document is directed, e.g., Elementary Education, Adult Basic Education, College Programs.

LEVELS (1, 2, and 3)

Documents are announced in RIE at one of three possible levels:

Level 1.   documents are available in both microfiche and paper
copy from EDRS.

Level 2:   documents are available only in microfiche from EDRS.

Level 3:   documents are not available from EDRS, but an
alternate source of availability is cited in the
RIE announcement.

LOGICAL OPERATORS

Symbols between two operands or before the operand which form the "what
to do" portion of an operation. Used for exclusion, conjunction, disjunction,
or non-equivalence, these operators form the bases of symbolic logic and
search strategy in information retrieval systems. OR, AND, and NOT are the
most commonly used logical operators in computer searching.

MACMILLAN INFORMATION

The contractor which produced Current Index to Journals in Education from
1969 through February 1979, and continues to make editions from these years
available on microfiche (Macmillan Professional and Library Services, 100B
Brown Street, Riverside, NJ 08370).

MAIN ENTRY SECTION

A section of CIJE which includes the article annotation, indexing terms, and
journal citation. Arranged numerically by EJ number and alphabetically by
Clearinghouse prefix initials.

MAJOR TERM

A Descriptor or Identifier representing one of the major concepts contained
in a bibliographic citation. Major terms appear in the published subject
indexes; all other indexing terms are, by definition, "Minor." In order to
restrict the size of published indexes, no more than five (5) major Descriptors
and two (2) major Identifiers or six (6) major Descriptors and one (1) major
Identifier, may be assigned to any citation. A Descriptor or Identifier is
Major or Minor only in the context of the particular citation where it is being
used (i.e., it is not inherently major or minor).

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MANUAL SEARCH

Examination by hand of the annual, semi-annual, and monthly issues of Resources in Education and Current Index to Journals in Education for information.

MICROFICHE

A 4" by 6" (105mm x 148mm) flat sheet of film, containing reduced images of document pages. ERIC prepares microfiche for all Level 1 and 2 documents announced in RIE, using the COSATI/NMA standard (24X reduction; 98 frames in a 7 x 14 grid). Microfiche may be made of silver, diazo, or vesicular film. A microfiche reader or reader-printer is required to read the page image.

MINOR TERM

A Descriptor or Identifier assigned to a citation and appearing in the printed Resume and in the machine record, but not in the published subject indexes.

NARROWER TERM (NT)

A Thesaurus cross-reference used to indicate hierarchical relationships among Descriptors. Narrower terms represent concepts totally included within a broader conceptual class (represented by another Descriptor). For example, ALGEBRA is considered an NT of MATHEMATICS. Because they are Descriptors, NTs are indexable and searchable. The indexable NT achieves ERIC's goal of "subject-specific" indexing. Its mandatory reciprocal is the "Broader Term."

NATIONAL INSTITUTE OF EDUCATION (NIE)

Created by Congress in 1972 "to help solve or alleviate critical problems in American education", NIE has the responsibility for the conduct of federally-funded educational research. The ERIC system is funded by NIE.

ONLINE

An "online" function is performed with the user in direct contact with the computer, interacting in real time. Contrasted to "offline," where the user submits the job into a queue to be run (and delivered) at some future date.

ORYX PRESS

A commercial printer located in Phoenix, Arizona (2213 North Central at Encanto, 85004). Has been the CIJE and ERIC Thesaurus publisher since 1979. (See also "CIJE Publisher").

PAPER COPY (PC)

A paper reproduction in standard 8½" x 11" format of an original document. All Level 1 documents announced in RIE are available from EDRS in paper copy. (Formerly referred to as "Hard Copy.")

POSTINGS

A postings count in the Thesaurus of ERIC Descriptors and Identifier Authority List indicates the number of times each term has been assigned to documents and journal articles in the database.

PRECISION

Percentage of retrieved items that are relevant to the search topic. A high precision search retrieves much relevant material, but fewer non-relevant items.

PRICE CODE

A code is assigned to an RIE accession that can be translated into its Paper Copy and Microfiche price if purchased from the ERIC Document Reproduction Service (EDRS), e.g., "PC01/MF01". An up-to-date translation table appears in every issue of RIE. By not putting actual prices in its database, ERIC avoids the need to update the entire backfile every time there is a price change.

PUBLICATION TYPE (PUBTYPE)

A data element intended to characterize the form of the document (e.g., journal article, dissertation, speech, etc.), as contrasted to its subject matter. Thirty-five (35) types are distinguished in the present ERIC scheme.

PUBLICATION TYPE INDEX

Found in RIE, this index lists document titles and ED numbers under the publication types (e.g., Descriptive Reports, Directories, or Statistical Data) that have been assigned to them to characterize their form or organization, as contrasted to their subject matter.

RECALL

Percentage of relevant items in the file that are retrieved by the search. A high recall search is formulated when the requestor needs everything on the stated topic.

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RELATED TERM (RT)

A Thesaurus cross reference used to indicate any close conceptual relationship among Descriptors other than the direct class/subclass relationship described by Broader Terms and Narrower Terms. Related terms may be close in meaning, may have the same Broader Term, may be related in usage or application, may have a part-whole relationship, and so on. An RT's reciprocal is another RT.

RESOURCES IN EDUCATION (RIE)

A paperbound monthly (12 issues per year) abstract journal that announces documents dealing with all aspects of education, e.g., research reports, program descriptions, instructional materials, etc. Approximately 15,000 documents are announced annually. RIE consists of a resume section of document abstracts and index sections consisting of separate Subject, Author, Institution, and Publication Type indexes. Paperbound/semiannual indexes are printed by GPO, which functions as the printer and subscription agent for RIE. An annual hardbound cumulation of both resumes and indexes is available from the CIJE publisher.

RESUME

A compressed document description including cataloging, indexing, and abstracting data; a surrogate for the document itself. The term resume is used for this concept within the ERIC system; other systems describe their basic record variously as an abstract, digest, precis, brief description, announcement, record, etc.

RETRIEVAL

The process of identifying, locating, and securing information from a database.

RETROSPECTIVE SEARCH

An examination of the entire database for information on a given topic.

ROTATED DISPLAY

One of four arrangements or formats of the Thesaurus of ERIC Descriptors (the others being the Alphabetical Display, the Hierarchical Display, and the Descriptor Group Display). This display provides a permuted alphabetical index of all words that form Thesaurus terms, whether Descriptors or USE references. Complete terms for multi-word Descriptors are entered in alphabetical order by each word in the term.

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SCOPE NOTE (SN)

A brief note explaining the intended usage of a Descriptor or Identifier. Used to restrict usage or to clarify concepts that may have alternative meanings. Not intended as formal definitions. Scope Notes indicate how terms are (or should be) used in indexing. Scope Notes appear in the main Alphabetical Display of the Thesaurus.

SEARCH

A systematic attempt to identify documents with some well defined characteristics. Applies to both manual and computer retrieval efforts. (See also "Computer Search" and "Manual Search")

SEARCH INTERMEDIARY

The person who assists the requestor in defining the search topic through search negotiation, and performs the search online, thereby acting as the link between the search service and the requestor.

SEARCH NEGOTIATION

The method by which the searcher and the requestor discuss and define the topics to be covered in the search; the type, format, cost and amount of information desired; and the purpose for which the material is to be used.

SEARCH SERVICE

Organization such as a library, agency, or state department of education providing online searches to a specified clientele, often for a fee.

SEARCH STRATEGY

The logic of particular inquiry; the demands that a search makes on its potential output. A search strategy is usually exemplified by a series of index terms arranged in groups and interconnected by logical operators, e.g., (DRINKING) AND (ALCOHOLIC BEVERAGES). A record in a data set must meet the specifications of a search strategy in order to be an output of the search. Search strategies may be "tight" and geared for retrieval of a small number of highly relevant items, or they may be "loose" and geared for comprehensive output of anything that even touches on the subject.

SELECTIVE DISSEMINATION OF INFORMATION (SDI)

Alerting organizations or individuals to the existence of documents that deal with their areas of special interest. Usually based on a database or group of databases that are searched on a regular schedule conforming to their update schedule. The search for any one client/user is said to be based on a "profile" of that user.

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SET

Any group of things having some characteristic in common, e.g., the set of documents issued by the National Bureau of Standards.

SOURCE JOURNAL INDEX

A list of the journals covered by Current Index to Journals in Education (CIJE). Each journal is identified as to the clearinghouse responsible for it and as to whether it is covered comprehensively or selectively. Clearinghouses nominate additions to the list. The CIJE publisher maintains the list and prints it in each issue of CIJE.

STANDING ORDER CUSTOMERS (SOCs)

Subscribers to the ERIC microfiche collection. Subscriptions are on an annual basis and cost around $2,000 for some 14,500 titles (26,500 individual fiche cards), shipped to subscribers in monthly increments corresponding to the monthly issues of Resources in Education (RIE).

SUBJECT HEADING

In traditional library practice, a member of a controlled vocabulary of alphabetic index terms. Subject Headings tend toward pre-coordination and may be made more specific by "dashed" subdivisions, e.g., World War II--History.

SUBJECT INDEX

Found in RIE and CIJE, this index provides access to documents and journal articles by major descriptors and identifiers.

THESAURUS

A collection of words or terms. In the fields of library/information science, the thesaurus is used to classify, index, store, and retrieve information in a data bank. Thesaurus terms serve as labels; they are keywords or elements that are descriptive of the text or data being indexed. Thesaurus terms may be listed alphabetically, or they may be structured into hierarchies, specialized fields, or other sub-areas. A list of thesaurus terms accompanied by reference citations becomes an index.

THESAURUS OF ERIC DESCRIPTORS

A publication containing the basic vocabulary used by the ERIC system for the indexing of documents and journal articles. It contains approximately 5,000 indexable Main Terms and over 3,000 nonindexable USE references and

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[...faded text...] "read" terms. Scope notes (prefatals) or parenthetical qualifiers are provided for all sorts of terms. Hierarchical and other relationships among terms are indicated by the standard "Narrower Term," "Broader Term," "Related Term" notations. The Thesaurus is maintained and updated by the ERIC Facility, largely on the basis of inputs from the ERIC clearinghouses. It is published as an internal "working copy" by the ERIC Facility (usually annually) and commercially by the ORI publisher (usually periodically).

UNIVERSITY MICROFILMS INTERNATIONAL (UMI)

An organization in the business for many years of providing bibliographic control and document delivery for dissertations produced by domestic academic institutions, which also makes article reprints available for 65% of the journals indexed in CIJE. (300 North Zeeb Road, Ann Arbor, MI 48106)

USE REFERENCE

The USE reference indicates an equivalent relationship between terms in the Thesaurus. It is used to refer an indexer or searcher from a nonusable (nonindexable) term to the preferred indexable term or terms. Its mandatory reciprocal cross-reference is the UF term. For example, the Thesaurus entry "Manpower, USE LABOR FORCE" necessitates the reciprocal UF MANPOWER under the entry LABOR FORCE.

USED FOR (UF) TERM

A "Used For" term indicates an equivalent relationship between terms in the Thesaurus. The UF reference is a synonym or variant form of a Descriptor and is not used in indexing or searching. Its mandatory reciprocal is the USE reference. For example, the Thesaurus shows FOLKLORE to be a UF under the entry for FOLK CULTURE; therefore, FOLK CULTURE is to be "used for" FOLKLORE.

VENN DIAGRAM

A graphic method employing circles or ellipses to represent relations in logic between classes by the inclusion, exclusion, or intersection of these figures.

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Many of the entries in this Glossary are taken from the ERIC Processing Manual, Appendix B: Glossary of Terms, August 1982, prepared by the ERIC Processing and Reference Facility. Other sources used to find definitions are listed below:

Buchanan, B. A glossary of indexing terms. Hamden, CT: Linnet Books, 1976.

49

Markey, K., & Cochrane, P. A. (Ed.). Online training and practice manual for
ERIC data base searchers (2nd ed.). Syracuse, N.Y.: ERIC Clearinghouse on
Information Resources, 1981.

Meadow, C. T., & Cochrane, P. A. Basics of online searching. New York: John
Wiley, 1981.

Pugh, L., & Marchionet, W. L. Directory of ERIC search services. Bethesda, MD:
ERIC Processing and Reference Facility, 1981.

Spitz, C. A., & Sippl, C. J. Computer dictionary and handbook. Indianapolis,
Ind.: Howard W. Sams, 1972.

BIBLIOGRAPHY

General Information about the ERIC System

About ERIC. Washington, DC: U.S. Government Printing Office, 1982.

Brandhorst, T. (ed.), et al. ERIC processing manual. Rules and guidelines for the acquisition, selection, and technical processing of documents and journal articles by various components of the ERIC network. Washington, DC: U.S. Department of Education, National Institute of Education; Bethesda, MD: ERIC Processing and Reference Facility, 1981. (ERIC Document Reproduction Service No. ED 219 082, 788 pages)

Bernstein, D. L. Cost and usage study of the Educational Resources Information Center (ERIC) system. A descriptive summary. Rockville, MD: King Research, 1981. (ERIC Document Reproduction Service No. ED 203 953, 22 pages)

Hoffman, R. L. Searching ERIC by hand using the special indexes. 1981. (ERIC Document Reproduction Service No. ED 201 332, 46 pages)

McDonald, D. D., et al. Cost and usage study of the Educational Resources Information Center (ERIC) system. Final report. Rockville, MD: King Research, 1981. (ERIC Document Reproduction Service No. ED 203 952, 359 pages)

Pugh, E., & Brandhorst, W. T. Directory of ERIC search services. Bethesda, MD: ERIC Processing and Reference Facility, 1981.

Simmons, R. M. A library user's guide to ERIC. 1980 edition. Syracuse, NY: ERIC Clearinghouse on Information Resources, 1980. (ERIC Document Reproduction Service No. ED 192 781, 36 pages)

Wexler, H. All you have to do is ask. American Education, June 1981, 17(5), 23-27. (Reprint UMI: EJ 248 164)

General Information about Computer Searching

Adams, A. L. Planning search strategies for maximum retrieval from bibliographic databases. Online Review, December 1979, 3(4), 373-379.

Atherton, P. A., & Christian, R. W. Librarians and online services. White Plains, NY: Knowledge Industry Publications, 1977.

Bourne, C. P. DIALOG lab workbook (3rd ed.). Palo Alto, CA: Lockheed Research Laboratories, 1981.

Clark, W. B., et al. Introduction to computer searching using DIATOM--File 1. Third edition. Syracuse, NY: Syracuse University, School of Information Studies, 1982. (ERIC Document Reproduction Service No. ED 217 869, 81 pages)

Jensen, S. & Settel, [illegible] Database search Facts. Evaluation. Westlage [illegible],
Beaches Los Altos, CA: Database Services, [illegible].

Williams, M. E. et al. Computer-readable databases: A directory and data source book.
(A publication of the American Society for Information Science.) White Plains,
NY: Knowledge Industry Publications, 1982.

Searching the ERIC Database by Computer

Atherton, P. Online searching of ERIC: Executive summary of a five-part report with
a collection of recommendations and suggestions for redesign of the ERIC record
and online data base. Syracuse, NY: ERIC Clearinghouse on Information
Resources, 1979. (ERIC Document Reproduction Service No. ED 180 452, 41
pages)

Atherton, P. Online searching of ERIC: Impact of free text or controlled vocabulary
searching on the design of the ERIC data base. Syracuse, NY: ERIC
Clearinghouse on Information Resources, 1979. (ERIC Document Reproduction
Service No. ED 180 451, 235 pages)

Bourne, C., et al. Selected search subroutines for searching the ERIC data base with the Lockheed DIALOG Information Retrieval Service. Berkeley: University of California, Institute of Library Research, 1977. (ERIC Document Reproduction Service No. ED 140 870, 63 pages)

Clay, K. Searching ERIC on DIALOG: The times they are a 'changin'. Database, September 1979, 2(3), 46-67.

Folke, C. W. Getting something extra out of ERIC. Database, June 1982, 5(2), 62-65.

Knapp, S. D. BRS training workbook: An introduction to searching on the BRS system with practice exercises from the ERIC database. Revised. Scotia, NY: Bibliographic Retrieval Services, 1981.

Markey, K. Online searching of ERIC: Suggestions for improvement from the special project. Syracuse, NY: ERIC Clearinghouse on Information Resources, 1979. (ERIC Document Reproduction Service No. ED 180 475, 23 pages)

Markey, K., & Cochrane, P. A. ONTAP: Online training and practice manual for ERIC database searchers (2nd ed.). Syracuse, NY: ERIC Clearinghouse on Information Resources, 1981. (ERIC Document Reproduction Service No. ED 212 296, 181 pages)

Yarborough, J. A novice's guide to ERIC--the database of education. Online, July 1977, 1(3), 24-29.

Searching for Information on Specific Topics in the ERIC Database

Harrison, C. H. Information for education writers from ERIC. Princeton, NJ: ERIC Clearinghouse on Tests, Measurement, and Evaluation, 1977. (ERIC Document Reproduction Service No. ED 166 263, 8 pages)

LaBorie, T., & Halperin, M. The ERIC and LISA databases: How the sources of library literature compare. Database, September 1981, 4(3), 32-37.

Monteith, M. K. ERIC/RCS: Searching the ERIC system for materials on reading instruction for the mentally retarded. Journal of Reading, November 1981, 25(2), 172-176. (Reprint UMI: EJ 253 665)

Quezada, M. L., & Chabran, R. (eds.). So you need information about Mexican Americans? Let ERIC help. Las Cruces, NM: ERIC Clearinghouse on Rural Education and Small Schools, 1980. (ERIC Document Reproduction Service No. ED 187 507, 50 pages)

Sanders, J. E. Developing and implementing a computerized SDI service for educational administrators, 1978. (ERIC Document Reproduction Service No. ED 184 517, 146 pages)

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Sandoval, R. T. (ed.). How to search ERIC for American Indian materials. Las Cruces, NM: ERIC Clearinghouse on Rural Education and Small Schools, 1979. (ERIC Document Reproduction Service No. ED 168 762, 106 pages)

Smarte, L. Discovering special education resources: A workshop on ERIC and ECER. Reston, VA: ERIC Clearinghouse on Handicapped and Gifted Children, 1981. (ERIC Document Reproduction Service No. ED 209 851, 30 pages)

Smith, D. D., et al. Ideas from everywhere. Journal of Chemical Education, September 1980, 57(9), 664-665. (Reprint UMI: EJ 234 996)

Van Camp, A. Health science audiovisuals in online databases. Database, September 1980, 3(3), 17-27.

Wheeler, H. W. ERIC and equity: Using ERIC products for information and publications affirming gender equity. 1982. (ERIC Document Reproduction Service No. ED 219 076, 23 pages)