This manual, designed to be used with a video tape, provides information for conducting a workshop to familiarize educators with the Educational Resources Information Center (ERIC). Objectives of the workshop include: (1) to develop an understanding of the contents and structure of the ERIC database; (2) to develop an understanding of ERIC as a valuable tool for local school staff; (3) to develop an initial understanding of search procedures; and (4) to motivate participants to become users of ERIC. The workshop is designed to take about 1 hour and 15 minutes, but could be modified for shorter periods of time. The first section of the workshop consists of a 12-minute video demonstrating how teachers and students use the ERIC database. In the second section, the presenter reviews the handouts, which introduce the ERIC database and the paper copy publications. Participants are led through a brief search of the database to understand how the database is organized. This section also explains the functions of the ERIC clearinghouses and the services they provide. The final section of the workshop includes demonstrations of ERIC searches on CD-ROM (compact disc, read-only memory). (LP)
TRAINERS MANUAL

A WORKSHOP ABOUT for ERIC
The Education Information Resource

Clearinghouse on Rural Education and Small Schools
MANUAL FOR ERIC AWARENESS WORKSHOP

by
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and
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June 1991

ERIC Clearinghouse on Rural Education and Small Schools
Appalachia Educational Laboratory
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INTRODUCTION

The Educational Resources Information Center (ERIC) is the largest collection of educational information in the world. It is a valuable resource for anyone interested in or engaged in education. It is particularly valuable to educators in local schools who need to keep current regarding research and other information in education, but have limited access to the professional literature. The goal of this workshop is to acquaint local educators with ERIC and to help them realize its value to their work.

This workshop is designed to be used in schools that have ERIC on CD-ROM. CD-ROM (Compact Disk-Read Only Memory) provides access to the ERIC database for all schools because it is relatively inexpensive and easy to use.

Workshop Objectives

The objectives of this workshop are:

• to develop an understanding of the contents and structure of the ERIC database
• to develop an understanding of ERIC as a valuable tool for local school educators
• to develop a beginning understanding of search procedures
• to motivate participants to become users of ERIC

Materials Needed

Minimum hardware required:

• 1/2" VHS videocassette recorder or playback unit
• Monitor
• Overhead projector
• Screen

NOTE: A computer with attached CD-ROM player and a device to project the computer images on a screen are preferred, but not essential.

• CD-ROM Hardware
• ERIC software installed on CD-ROM prior to workshop
• A videotape and camera-ready masters for handouts and transparencies are included with the workshop package. The masters are used to prepare handouts that are bound into a booklet that serves as a reference for participants as they begin to use ERIC. The booklet should be prepared in at least two colors of paper to help participants and presenters refer to the different sections during the workshop. The manual includes information regarding updating or adapting each page.

The masters can also be use to prepare overhead transparencies that presenters can use to highlight portions of a page and to help participants identify each page as it is being discussed.

Presenter

The presenter should be a user of ERIC. A good presenter is a salesperson regarding the concepts, materials and processes being presented. If one is an enthusiastic user of ERIC, the task of motivating participants to become users is assured.

The presenter needs to read through and become familiar with this manual. Then prepare the transparencies and handout booklet and practice the narrative.

Participants

Everyone who considers himself/herself an educator, or highly interested in education, should be considered for this workshop. There is something for everyone—even parents and students! ERIC provides a comprehensive coverage of education and is not restricted to "academic" subjects. For example, documents and journal articles about cheerleading, physi-
Introduction

cal education, driver education, and the arts are included in the database.

Overview of the workshop

The workshop is designed to take about one hour and fifteen minutes. However, it could be shortened by omitting portions of the handout booklet, bypassing the opening videotape, or doing a brief demonstration of the search procedure. The following is an outline of the sections of the workshop:

Part I—Video of ERIC in Local Schools. The presenter is introduced and the materials and procedures are reviewed for the participants. A 12-minute videotape shows how students and teachers use the ERIC database. The videotape emphasizes the value of ERIC as a tool for improving curriculum, instruction, and administration.

Part II—Learning about ERIC. In this section of the workshop, the presenter reviews each page of the handout booklet. The first few pages introduce participants to the ERIC database and the paper catalogs. Participants are led through a brief paper search to provide an understanding of how the database is organized. This section also examines the functions of the ERIC clearinghouses and the services they provide.

Part III—Demonstration of Searching. The final section of the workshop is a demonstration of ERIC on CD-ROM. Several searches are done to illustrate that the database contains information of interest to all educators. This demonstration also shows how easy it is to conduct searches.

Evaluation

Evaluation should be an integral part of every educational activity. Workshop evaluation should measure the degree to which the objectives have been attained. The last page of the camera-ready masters is an evaluation form for this workshop. The form is based on the objectives listed in this manual and includes a place for general comments. Use of the form will provide information that may be used to improve the workshop over time.

How to use this manual

This manual includes a replication of the participant's booklet with suggestions added for the presenter. When possible, the information for the presenter is found on the page facing the appropriate booklet page. Each page of notes contains the narrative to accompany the page, suggestions for adapting the page to specific audiences, and considerations for keeping that page up-to-date.

The narrative often includes references to numbered highlights. The highlights are marked with a numbered arrow on the booklet page. In some cases, the narrative does not refer to a page in the booklet, but to some other activity such as viewing a videotape or searching the ERIC database. The beginning presenter may want to read the suggested narrative word-for-word. After a few workshops, the narrative can be paraphrased or adapted to one's personal style.
After introducing yourself, your organization, and co-presenter (if any), proceed with the introduction of the videotape as suggested in the following narrative:

NARRATIVE

Several high school libraries have been using ERIC on CD-ROM with rather exciting results. We are going to view a videotape that illustrates how students, teachers, and administrators have used ERIC in their schools.

Note to presenters: If you are presenting to a very remote school, you may want to announce before the video is shown, that the terms “remote” and “isolated” mentioned in the video may not mean the same as remote and isolated in their present setting.
PART II—
Learning About ERIC

After the video has been shown, you may ask for comments or questions concerning what they have seen. It is likely that little will be said and you can move into the second part of the presentation.

Begin the second section of the workshop by asking participants to turn to the first page in their booklet. As you turn the page, the suggested narrative is found on the page opposite that page in your manual.
The following two pages provide statistics regarding the operation of the ERIC system. Some of the figures in the right-hand column at the top are particularly important.

**Highlight #1.** The ERIC database contains resumes of documents of various kinds. An average of 25,000 documents are evaluated annually by the clearinghouses in the system. About 12,500 are added to the database each year. Over 300,000 are presently in the system.

**Highlight #2.** The database also includes journal articles. The articles in over 760 educational journals are regularly evaluated by the clearinghouses. Most of you probably did not realize that there were that many education journals in the world! About 1700 articles are entered into the database each month and over 390,000 journal articles are presently included in the ERIC database.

**Highlight #3.** All told, there are nearly 700,000 documents and journal articles presently in the ERIC database. It is the largest educational information database in the world. As a matter of fact, it is used extensively by educators throughout the world. ERIC/CRESS receives requests for information from numerous countries around the world. Canada, England, Australia, and New Zealand are frequent clients of ERIC/CRESS.

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**Adapting or updating this page:**

Annual updates of all Ready References may be obtained from ACCESS ERIC at the address shown later in this booklet.
ERIC Fact Sheet

I. Database Building

A. Documents
   1. Documents Evaluated Annually for Possible Addition to ERIC Database
      25,000
   2. Documents Added to ERIC Database (Resources in Education file)
      a. Monthly (Average)
      b. Annually (Current Level)
      c. To Date (1966 through December 1989)
      1,025
      12,500
      302,187
   B. Journal Articles
      1. Journal Titles Covered (i.e. regularly analyzed for education-related articles)
      762
      2. Journal Articles Added to ERIC Database (Current Index to Journals in Education file)
         a. Monthly (Average)
         b. Annually (Current Level)
         c. To Date (1969 through December 1989)
         1,500
         18,000
         394,599
   C. Total Accessions in ERIC Database (1966-1989)
      696,786
   D. Organizations Contributing Documents to ERIC
      1. Total to Date (1966-1989)
      4,320,000
      2. Active Within Last Five Years
      12,000
      3. Standing Acquisition Arrangements
         (Organizations Automatically Sending ERIC Their Documents)
         1,250

II. Document Delivery

A. Microfiche Production Activity
   1. Titles Microfiched
      a. Monthly (per RIE issue)
      b. Annually
      1,000
      12,000
   2. Microfiche Cards per Title (Average)
      1.4
   3. Microfiche Cards Delivered per Subscriber
      a. Monthly (per RIE issue)
      b. Annually
      1,400
      16,500
   B. Sales Activity (from EDRS)
      1. Standing Order Subscriptions for ERIC Microfiche
      820
      2. Microfiche Cards Sold Annually (in 1989)
         a. Standing Order Subscriptions
         b. Back Collections
         c. Collections by Clearinghouse
         d. On Demand Orders
         14,951,312
         4,308,816
         114,069
         22,266
         19,394,463
   3. On-Demand Document Orders Processed Annually
      (Microfiche or Paper Copy)
      12,000

* Many of the statistics reported here are constantly changing and therefore have been rounded.
This page provides additional statistics that you may want to examine at your leisure.

The next page in your booklet lists the types of publications you will find in the ERIC database.
III. Publications
A. ERIC Clearinghouse Publications (all types) (1967-1989) 5,472
B. ERIC Digests (Highlights and syntheses of research findings on major topics)
   1. Total ERIC Digests (through 1989) (Increase Approx. 160/yr.) ~850
   2. ERIC Digests Available Online 318
C. Abstract Journals
   1. Subscriptions to Resources in Education (RIE) 2,000
   2. Subscriptions to Current Index to Journals in Education (CIJE) 1,800

IV. User Services
A. Subscriptions to ERIC Magnetic Tapes 40
B. ERIC Information Service Providers
   1. Offering Access to ERIC Microfiche Collections and Other Services
      a. Domestic 791
      b. Foreign 114
      Total 905
   2. Offering Computer Searches of ERIC Database 500
C. Inquiries/Questions Answered Annually
   1. ERIC Facility 3,000
   2. Clearinghouses (16) 115,000
D. ERIC on CD-ROM Subscriptions (All Vendors!)
E. ERIC Online Searching Usage (Connect Hours — All Vendors) ** ~1500
** ~100,000

V. Authority Lists
A. Thesaurus of ERIC Descriptors
   Total Vocabulary Terms (as of 11th edition, 1987) 9,459
B. Identifier Authority List
   Total Identifiers (as of June 1987) 41,149
C. Institutional Source Directory (Complete)
   Organizations/Institutions that have Contributed Documents to the ERIC Database
   (as of December 1988) 29,647
D. Other Authority Lists
   a. Languages 168
   b. Geographic Locations 217
   c. Publication Types 38
   d. Government Levels 5
   e. Target Audiences 11

** Includes DIALOG, BRS, ORBIT, and Foreign Vendors
Highlight #1. **Note 010—Books.** Most people do not realize that the descriptions of some books are included in the database. Did you ever try to find a copy of a book, only to find that it was out-of-print? ERIC staff is trying to encourage book publishers to allow ERIC to announce books and note where they are available and how much they cost. When the book is out-of-print, it could then be copied to microfiche and be made available just like any other ERIC document. This would not threaten the profit of any author or publisher and would help advertise the book. Some publishers are beginning to cooperate.

Highlight #2. **Notice code 052—Teaching Guides (for teachers).** Most people do not realize that there are hundreds of teaching guides in the ERIC system. Can you guess how many have been entered into the system during the past 8 years?

(At this point, invite participants to guess and make note of the numbers. You will search the database later to find the correct number.)

Highlight #3. **Code 055—Non-teaching guides** for a range of persons—INCLUDING PARENTS. Not many people realize that ERIC includes educational documents that address the concerns of parents.

Highlight #4. **Code 131—Bibliographies.** ERIC is a good source of bibliographies which include ERIC as well as non-ERIC documents.

Highlight #5. **Code 143 identifies Research and Technical Reports.** Unfortunately, most educators think that this is the sole content of the ERIC system. Note that this is only one of the 37 different types of documents in the database.

Highlight #6. **Notice Code 160—Tests, Evaluation Instruments.** In addition to discussion of various types of tests, there are actually evaluation instruments of various kinds included in ERIC. If you are planning a project that needs evaluation of results, ERIC can be a source of very real help.

This is a good time to discuss one reason for some of the criticism

Please turn to page 12
<table>
<thead>
<tr>
<th>Code</th>
<th>Publication Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>010</td>
<td>BOOKS</td>
</tr>
<tr>
<td>010</td>
<td>COLLECTED WORKS</td>
</tr>
<tr>
<td>020</td>
<td>General</td>
</tr>
<tr>
<td>021</td>
<td>Conference Proceedings</td>
</tr>
<tr>
<td>022</td>
<td>Serials</td>
</tr>
<tr>
<td>030</td>
<td>CREATIVE WORKS (Literature, Drama, Fine Arts)</td>
</tr>
<tr>
<td>040</td>
<td>DISSERTATIONS/THESIS</td>
</tr>
<tr>
<td>040</td>
<td>Undetermined</td>
</tr>
<tr>
<td>041</td>
<td>Doctoral Dissertations</td>
</tr>
<tr>
<td>042</td>
<td>Masters Theses</td>
</tr>
<tr>
<td>043</td>
<td>Practicum Papers</td>
</tr>
<tr>
<td>050</td>
<td>GUIDES</td>
</tr>
<tr>
<td>050</td>
<td>General (use more specific code, if possible)</td>
</tr>
<tr>
<td>051</td>
<td>Classroom Use</td>
</tr>
<tr>
<td>052</td>
<td>Instructional Materials (For Learner)</td>
</tr>
<tr>
<td>052</td>
<td>Teaching Guides (For Teacher)</td>
</tr>
<tr>
<td>055</td>
<td>Non-Classroom Use (For Administrative &amp; Support Staff, and for Teachers, Parents, Clergy, Researchers, Counselors, etc. in Non-Classroom Situations)</td>
</tr>
<tr>
<td>060</td>
<td>HISTORICAL MATERIALS</td>
</tr>
<tr>
<td>070</td>
<td>INFORMATION ANALYSES (State-of-the-Art Papers, Research Summaries, Reviews of the Literature on a Topic)</td>
</tr>
<tr>
<td>071</td>
<td>ERIC Information Analysis Product (IAP's)</td>
</tr>
<tr>
<td>072</td>
<td>Book/Product Reviews</td>
</tr>
<tr>
<td>073</td>
<td>ERIC Digests (Selected) in Full Text</td>
</tr>
<tr>
<td>080</td>
<td>JOURNAL ARTICLES</td>
</tr>
<tr>
<td>090</td>
<td>LEGAL/LEGISLATIVE/REGULATORY MATERIALS</td>
</tr>
<tr>
<td>100</td>
<td>AUDIOVISUAL/NON-PRINT MATERIALS</td>
</tr>
<tr>
<td>101</td>
<td>Computer Programs</td>
</tr>
<tr>
<td>102</td>
<td>Machine-Readable Data Files (MRDF)</td>
</tr>
<tr>
<td>110</td>
<td>STATISTICAL DATA (Numerical, Quantitative, etc.)</td>
</tr>
<tr>
<td>120</td>
<td>VIEWPOINTS (Opinion Papers, Position Papers, Essays, etc.)</td>
</tr>
<tr>
<td>130</td>
<td>REFERENCE MATERIALS</td>
</tr>
<tr>
<td>131</td>
<td>Bibliographies/Annotated Bibliographies</td>
</tr>
<tr>
<td>132</td>
<td>Directories/Catalogs</td>
</tr>
<tr>
<td>133</td>
<td>Geographic Materials/Maps</td>
</tr>
<tr>
<td>134</td>
<td>Vocabularies/Classifications/Dictionaries</td>
</tr>
<tr>
<td>140</td>
<td>REPORTS</td>
</tr>
<tr>
<td>140</td>
<td>General (use more specific code, if possible)</td>
</tr>
<tr>
<td>141</td>
<td>Descriptive (i.e. Project Descriptions)</td>
</tr>
<tr>
<td>142</td>
<td>Evaluative/Feasibility</td>
</tr>
<tr>
<td>143</td>
<td>Research/Technical</td>
</tr>
<tr>
<td>150</td>
<td>SPEECHES, CONFERENCE PAPERS</td>
</tr>
<tr>
<td>160</td>
<td>TESTS, EVALUATION INSTRUMENTS</td>
</tr>
<tr>
<td>170</td>
<td>TRANSLATIONS</td>
</tr>
<tr>
<td>171</td>
<td>Multilingual/Bilingual Materials</td>
</tr>
</tbody>
</table>
of the quality of documents that may be found in the system. Teachers may find very technical research reports of little value and think the system is full of useless information. On the other hand, researchers may find teaching guides of little value and judge the system to be full of garbage.

WHAT IS THE ERIC DATABASE? The ERIC database is composed of descriptions of documents and journal articles in a form called “resumes.” Each resume contains indexing information that helps you find what you need in the database and abstracts that help you decide if you want to locate the document or journal article for more in-depth reading.

Have you ever filed a piece of information—only to forget how you filed it? In a sense, you lose things if they are not properly filed. Can you imagine how easy it would be to lose something in a collection of approximately 700,000 pieces of information! To avoid this problem, the ERIC organization has developed a controlled vocabulary consisting of over 5,000 descriptors. A descriptor is a key word that has been identified by the ERIC organization as “descriptive” of the content of the document or journal article. This controlled vocabulary is published in a Thesaurus that is used by indexers as they prepare the resumes.

A copy of the cover page of the Thesaurus may be found on the next page of your booklet.

COVER OF THESAURUS

The primary method of retrieving information from the database is by typing into the computer one or more of these descriptors and letting the computer search for documents and journal articles to which the descriptor(s) have been assigned. By using descriptors found in the Thesaurus, you are more likely to find all of the information related to your topic because those descriptors were used by indexers to “file” that information.

Examine the next page in your booklet which is a copy from the Alphabetical Descriptor Display section of the Thesaurus.
Thesaurus of ERIC Descriptors

12th Edition—1990

James E. Houston
Editor/Lexicographer
ERIC Processing and Reference Facility
ARC Professional Services Group

Introduction by

Lynn Barnett
Associate Director
Office of College/Employer Relations
American Association of Community and Junior Colleges
(formerly Associate Director, ERIC Clearinghouse on Higher Education,
The George Washington University)

ORYX PRESS
4041 North Central at Indian School Road
Phoenix, Arizona 85012-3397
Notice how many descriptors (in bold caps) there are for "TELEVISION."

The next page is from the Rotated Descriptor Display section of the Thesaurus.

Note to presenters: You may wish to select a page from the Thesaurus that contains a set of descriptors that may be more interesting to your particular audience. However, be sure that the Rotated Descriptor Display is related and the pair of pages illustrate the points being made here.
TELEVISION CURRICULUM

Jul 1966
CUE: 120 RIE: 188 GC: 400
SN Curriculum concerned with television, television production, etc. (Note: courses taught in this area are designated by a special number of 4 or more, this term not under a course note.)
BT Curriculum
RT Broadcast Industry
Television Production
Programming (Broadcast)

Television Programming
Use PROGRAMMING (BROADCAST)

TELEVISION LIGHTING
Jul 1966
CUE: 178 RIE: 28 GC: 410
UF Television Lights (1966-1969)
BT Lighting
Production Techniques
RT Television
Television Studios
Television Lights (1966-1969)
Television Lighting

Television Lighting Programs
Use TELEVISION LIGHTING

TELEVISION RESEARCH
Jul 1966
CUE: 742 RIE: 1032 GC: 810
SN Basic, applied, and developmental research conducted to further knowledge about program content, effect, and use of television (note: as of 1963) use as a major descriptor for examples of this kind of research - use as a major descriptor only as the subject of a document
BT Media Research
RT Programming (Broadcast)
Television
Television Surveys
Television Viewing

Television Surveys
Use TELEVISION SURVEYS

TELEVISION STUDIOS
Mar 1960
CUE: 12 RIE: 7 GC: 920
UF Video Production Centers
BT Facilities
RT Broadcast Reception Equipment Programming (Broadcast)
Telecommunications
Television
Television Lighting Video Equipment

TELEVISION SURVEYS
Jul 1966
CUE: 91 RIE: 255 GC: 810
SN Investigations of television viewing, viewing behavior, irrelevancy, etc. conducted to determine current status, trends, and/or norms - includes surveys of television viewers and producers (other than of official) use as a major descriptor for examples of this kind of survey - use as a major descriptor only as the subject of a document
BT Surveys
RT Television
Television Research
Notice that there are some descriptors with the term "TELEVISION" as the second word. If you were to use only the alphabetical display, you would miss such descriptors as "EDUCATIONAL TELEVISION."

The computerized ERIC database, such as found in ERIC on CD-ROM, does not restrict searches to the descriptors, however. You can search by author, title, publication year, type of publication, or any other fields in the resume. You can also enter a word or phrase into the computer and the computer will search all words in the resumes and locate the ones in which that word or phrase is used. Thus, you need not be an expert in using the controlled vocabulary in the Thesaurus to retrieve information from the ERIC database.

Resumes for documents and journal articles differ in the kind of information they contain. Examine the sample resumes on the next page of your booklet.
COMMERCIAL TELEVISION
TELEVISION COMMERCIALS
TELEVISION CURRICULUM

EDUCATIONAL TELEVISION
TELEVISION EQUIPMENT Use VIDEO EQUIPMENT
FIXED SERVICE TELEVISION (1968 1980) Use EDUCATIONAL TELEVISION
INSTRUCTIONAL TELEVISION (1968 1974) Use EDUCATIONAL TELEVISION
INSTRUCTOR CENTERED TELEVISION (1968 1980) Use EDUCATIONAL TELEVISION
TELEVISION LECTURERS Use TELEVISION TEACHERS
TELEVISION LIGHTING
TELEVISION LIGHTS (1968 1980) Use TELEVISION LIGHTING
OPEN CIRCUIT TELEVISION (1968 1980) Use BROADCAST TELEVISION
OVERHEAD TELEVISION (1968 1980) Use TELEVISION
TELEVISION PROGRAMMING Use PROGRAMMING (BROADCAST)

PUBLIC TELEVISION
TELEVISION RADIO REPAIRERS
RADIO TELEVISION REPAIRERS Use TELEVISION RADIO REPAIRERS
TELEVISION REPAIRMEN (1968 1980) Use TELEVISION RADIO REPAIRERS
TELEVISION RESEARCH
TELEVISION STUDIOS
TELEVISION SURVEYS
TELEVISION TEACHERS
TELEVISION TECHNOLOGY Use TELEVISION
TELEVISION VIEWING

STORY TELLING
TELLING

TEMPERAMENT Use PERSONALITY
TEMPERATURE

CONCEPTUAL TEMPO
TEMPORAL PERSPECTIVE Use TIME PERSPECTIVE
TEMPORARY FACILITIES Use RELOCATABLE FACILITIES

WITHDRAWAL TRENDS Use WITHDRAWAL (PSYCHOLOGY)
TENES Use ENGLISH (SECOND LANGUAGE)
TELEVISION (1968 1980)

TELEVISION EQUIPMENT

TABLE TENNIS
TENNIS
TENNIS (1968 1980)

COMMUNITY TENSIONS Use COMMUNITY PROBLEMS
JOBS
TEMPORARY FACILITIES Use RELOCATABLE FACILITIES

TERMINUS
TERMINUS (1967 1978)

TERM PAPERS Use RESEARCH PAPERS (STUDENTS)
LONG TERM PLANNING Use LONG RANGE PLANNING

TERMINALS Use INPUT OUTPUT DEVICES
TERMINAL TERMINALS Use INPUT OUTPUT DEVICES
TERMINAL USERS
TERMINAL STUDENTS

TERMINATION OF PROGRAMS Use PROGRAM TERMINATION
TERMINATION OF TREATMENT

TERMINOLOGY Use VOCABULARY

INDEX TERMS Use SUBJECT INDEX TERMS

SUBJECT INDEX TERMS

TENURED FACULTY

TENURED TEACHERS Use TENURED FACULTY

TERM MEMORY

TERM PAPERS Use RESEARCH PAPERS (STUDENTS)
TERM PAPERS (1968 1980)

TEST ADMINISTRATION Use TESTING
TEST ADMINISTRATORS Use EXAMINERS
TEST ANALYSIS Use TEST THEORY
TEST ANXIETY
TEST BIAS
TEST BOOKS Use TESTS
TEST CHARACTERISTICS (PHYSICAL) Use TEST FORMAT
TEST COACHING
TEST CONSTRUCTION
TEST DESIGN Use TEST CONSTRUCTION
TEST FORMAT
TEST INTERPRETATION
TEST ITEMS
TEST LENGTH
TEST MANUALS
TEST NORMS
TEST RELIABILITY
TEST RESULTS
TEST REVIEWS
TEST SCORES Use SCORES
TEST SCORING MACHINES
TEST SELECTION
TEST TAKING SKILLS Use TEST WISDOM
TEST TAKING STRATEGIES Use TEST WISDOM
TEST THEORY
TEST TYPE Use TEST FORMAT
TEST USE
TEST VALIDITY
TEST WISDOM
TESTING

ADAPTIVE TESTING
COMPARATIVE TESTING
COMPUTERIZED ADAPTIVE TESTING Use ADAPTIVE TESTING and COMPUTER ASSISTED TESTING
COMPUTERIZED TAILORED TESTING Use ADAPTIVE TESTING and COMPUTER ASSISTED TESTING
CONFIDENCE TESTING
EDUCATIONAL TESTING
FLEXIBLE LEVEL TESTING Use ADAPTIVE TESTING
Notice the descriptors as well as the other information that can become key words to help you retrieve the information you need. Note particularly the following fields in the resumes:

**Accession Number (AN)**—this is important in finding the documents to read. The prefix "ED" identifies Educational Documents and the "EJ" identifies Educational Journal articles.

**Author (AU)**—some authors are authorities in a field and their articles may be important.

**Title (TI)**—check the title as well as the accession number when obtaining documents.

**Publication Year (PY)**—the age of the document or article may affect its value.

To this point, we have been looking at resumes. As you read the abstracts, you will probably need to see complete copies of documents and journal articles that interest you.

Most documents (ED citations) are available on microfiche—as noted in the videotape you watched earlier. The next page of your booklet contains a photocopy of a microfiche.
**Sample Document Citation (ED)**

<table>
<thead>
<tr>
<th>Accession No.</th>
<th>AN: ED266642</th>
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<td>Author(s)</td>
<td>Yanderplank, Robert</td>
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<td>Evaluating the Language Laboratory in Practice.</td>
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<td>MT: 13 p.; In: Practice and Problems in Language Testing 8, Descriptive Note Papers presented at the International Language Testing Symposium, of the Interuniversitare Sprachtestgruppe (IUS) (8th, Tampere, Finland, November 17-18, 1984); see FL 015 422.</td>
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<td>Abstract</td>
<td>AB: A study of the use of and attitudes about language laboratories focused on teacher perceptions of their speed, accuracy, and motivational capability and on the extent to which these characteristics are exploited in classroom use by teachers and students. Observers in four British schools of English rated details of language laboratory use in a total of 56 sessions. The laboratory sessions were rated for their relationship to the criteria job satisfaction, speed, and accuracy, characteristics assumed to be advantageous in the language laboratory. It was found that only 13 of the 56 sessions fully exploited the facilities and that those sessions had these common features: frequency of use (once a day or more often), teachers skilled in laboratory use, and well-trained and responsible students with machines fully under their control. It is suggested that the language laboratory's use and usefulness are limited only by the imagination, training, and willingness of the teacher. (MSE)</td>
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**Sample Journal Article Citation (EJ)**

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FROM RESUME TO DOCUMENT
MICROFICHE

A microfiche is a reduced copy on film of the pages of the document. As you can see, a microfiche reader or reader-printer is necessary to enlarge the image so the document can be read.

The next page in your booklet explains how you can get copies of documents and journal articles.
From Resume to Document Microfiche

The abstracts in the resumes help you find the documents that interest you. You must then find the microfiche that contain the text of the documents. Below is a photocopy of the document with the accession number ED 295 677. Note that it is #1 of 3 microfiche. In other words, all 263 pages of the document are on three microfiche. Most documents require only one microfiche to reproduce the entire document.
Note that you must use the accession number (ED citation) in order to get microfiche or paper copies of documents. A few documents are not available on microfiche because authors prohibit copying in order to protect their copyright. In such cases, the Availability field (AV) in the resume will indicate where to obtain copies.

If you must send to UMI for copies of journal articles, be sure to include the information needed for them to fill your order correctly.

We have been learning about the ERIC database and how it is organized. Let's now take a look at the ERIC organization and how it works. There is more to ERIC than a database.

The ERIC organization is composed of 16 clearinghouses and five other components. The next two pages in your booklet list the names and addresses of the clearinghouses as well as the other components.

NOTE TO PRESENTER: EDRS is a service provided by a firm with a contract with the U.S. Department of Education. Since the contract is periodically competed, you should check to see that the firm's name, address, and phone number are correct on this page.
How to Get Copies of Documents and Journal Articles

Research reports and other documents (ED citations).

Most documents are available in microfiche form at large public or academic libraries that have an ERIC collection. If such a collection is near you, you need only note the accession numbers of the documents you want and visit that library to view the documents with a microfiche reader. Many institutions also have microfiche reader-printers and can provide paper copies of documents for a small fee.

If no library near you has an ERIC microfiche collection, documents are available from the ERIC Document Reproduction Service (EDRS) in both microfiche and paper form. The price per document is based on the number of pages and is subject to change. The EDRS Price code field in the resume can be translated into an actual price with an order form available from EDRS at the following address:

ERIC Document Reproduction Service
Cincinnati Bell Information Systems Federal
7420 Fullerton Road, Suite 110
Springfield, Virginia 22153-2852
Phone: 1-800-443-ERIC

Journal articles (EJ citations).

If your local public or academic library does not have the journals listed in the resumes in which you have an interest, copies of most articles are available from University Microfilms International (UMI). Those articles available are indicated in the Availability (AV) field of the resume with the note “UMI.” The price is $15 for each article, if identified as an ERIC citation along with the accession number (an “EJ” citation). The order must be prepaid by cash or by credit card (either MasterCard or VISA). Indicate card number, expiration date, and, in the case of MasterCard, the Interbank ID number. Deposit accounts (minimum $200) are available. Lower prices are available to deposit account customers. Electronic ordering is also available at lower prices. Contact UMI for further information. Additional copies of the same article are $2.25 each.

Article copies are mailed within 48 hours of receipt of order. Be sure to include EJ number, author, title of article, name of journal, volume, issue number, and date for each article required. Order from:

UMI Article Clearinghouse
300 North Zeib Road
Ann Arbor, MI 48106
Phone: 1-800-732-0616
ERIC CLEARINGHOUSES AND OTHER COMPONENTS (Ready Reference # 6)

NARRATIVE

The first page of the clearinghouse listing provides a brief description of clearinghouse responsibilities. The scope notes under each address describe the area within education for which the clearinghouse is responsible.
The ERIC Clearinghouses have responsibility within the network for acquiring the significant educational literature within their particular areas, selecting the highest quality and most relevant material, processing (i.e., cataloging, indexing, abstracting) the selected items for input to the data base, and also for providing information analysis products and various user services based on the data base.

The exact number of Clearinghouses has fluctuated over time in response to the shifting needs of the educational community. There are currently 16 Clearinghouses. These are listed below, together with full addresses, telephone numbers, and brief scope notes describing the areas they cover.

**ERIC Clearinghouse on Adult, Career, and Vocational Education (CE)**
Ohio State University
Center on Education and Training for Employment
1900 Kenny Road
Columbus, Ohio 43210-1090
Telephone: (614) 292-4353; (800) 848-4815 Fax: (614) 292-1260
All levels of adult and continuing education from basic literacy training through professional skill upgrading. The focus is upon factors contributing to the purposeful learning of adults in a variety of life situations usually related to adult roles (e.g., occupation, family, leisure time, citizenship, organizational relationships, retirement, and so forth).

**ERIC Clearinghouse on Counseling and Personnel Services (CG)**
University of Michigan
School of Education, Room 2108
610 East University Street
Ann Arbor, Michigan 48109-1259
Telephone: (313) 764-9492 Fax: (313) 747-2425
Preparation, practice, and supervision of counselors at all educational levels and in all settings. Theoretical development of counseling and guidance, including the nature of relevant human characteristics. Use and results of personnel practices and procedures. Group processes (counseling, therapy, dynamics) and case work.

**ERIC Clearinghouse on Educational Management (EA)**
Syracuse University
Huntington Hall, Room 030
150 Marshall Street
Syracuse, New York 13244-2340
Telephone: (315) 443-3640 Fax: (315) 443-5732
All aspects of the governance—leadership, administration, and structure of public and private educational organizations at the elementary and secondary levels, including the provision of physical facilities for their operation.

**ERIC Clearinghouse on Elementary and Early Childhood Education (PS)**
University of Illinois
College of Education
805 W Pennsylvania Avenue
Urbana, Illinois 61801-4897
Telephone: (217) 333-1386 Fax: (217) 244-4572
All aspects of the physical, cognitive, social, emotional, educational, and cultural development of children, from birth through early adolescence. Among the topics covered are: prenatal and infant development and care; parent education; home and school relationships; learning theory research and practice related to children's development; preparation of early childhood teachers and caregivers; and educational programs and community services for children.

**ERIC Clearinghouse on Handicapped and Gifted Children (EC)**
Council for Exceptional Children
1920 Association Drive
Reston, Virginia 22091-1589
Telephone: (703) 620-3660 Fax: (703) 264-9494
All aspects of the education and development of persons of all ages who have disabilities or who are gifted, including the delivery of all types of education-related services to these groups. Includes prevention, identification and assessment, intervention, and enrichment for these groups, in both regular and special education settings.

**ERIC Clearinghouse on Higher Education (HE)**
George Washington University
One Dupont Circle, N.W., Suite 630
Washington, D.C. 20036-1183
Telephone: (202) 296-2597 Fax: (202) 296-8379
All aspects of the conditions, programs, and problems of colleges and universities providing higher education (i.e., four-year degrees and beyond). This includes: governance and management; planning; finance; inter-institutional arrangements; business and industry programs leading to a degree; institutional research at the college/university level; federal programs; legal issues and legislation; professional education (e.g., medicine, law, etc.) and professional continuing education.

**ERIC Clearinghouse on Information Resources (IR)**
Syracuse University
1787 Agate Street
Eugene, Oregon 97403-5207
Telephone: (503) 346-5043 Fax: (503) 346-5890
Preparation, practice, and supervision of counselors at all educational levels and in all settings. Theoretical development of counseling and guidance, including the nature of relevant human characteristics. Use and results of personnel practices and procedures. Group processes (counseling, therapy, dynamics) and case work.

**ERIC Clearinghouse for Junior Colleges (JC)**
University of California at Los Angeles (UCLA)
Math-Sciences Building, Room 8118
115 Hilgard Avenue
Los Angeles, California 90024-1564
Telephone: (213) 825-3931 Fax: (213) 206-8095
Development, administration, and evaluation of two-year public and private community and junior colleges, technical institutes, and two-year branch university campuses. Two-year college students, faculty, staff, curricula, programs, support services, libraries, and community services. Linkages between two-year colleges and business/industry/community organizations. Articulation of two-year colleges with secondary and four-year postsecondary institutions.
The second page of ERIC component listings will help you see the variety of topics and educational levels covered by the 16 clearinghouses. You will probably find more than one that deals with educational topics of interest to you.

At the bottom right of this page you will see the other components of the ERIC organization. Note, particularly, the listing for ACCESS ERIC. This is a group you can call if you do not know which clearinghouse relates to your particular interest. They also provide a number of other services for users of the ERIC database and publications.

Clearinghouses do more than just acquire documents and journal articles. On the next page of your booklet, a listing of clearinghouse functions is listed.

Note to presenters: It is important that this list be checked annually for up-to-date information regarding addresses and phone numbers. Also, new clearinghouses may be added or old ones deleted. ACCESS ERIC can help you keep this page current.
CLEARINGHOUSE FUNCTIONS

Clearinghouses have three main functions: database building, product development, and user services.

**Database building** is the primary function of each clearinghouse.

**Acquisitions** is the first step in database building. It involves soliciting documents from authors. The Acquisitions Coordinator at each clearinghouse contacts authors, institutions, and presenters at conferences to encourage them to submit documents to the clearinghouse.

**YOU** can be an ERIC author. On the next page of your handout you will see the reproduction release form that you must complete when you submit a document for consideration.

---

**NOTE TO PRESENTER:** A transparency of this page should be prepared and left on the projector while the functions of the clearinghouses are being discussed.
Clearinghouse Functions

Database Building
- Acquisitions
- Selections
- Processing
- Transmission

Product Development
- Digests
- Major Publications

User Services
- Searches
- Orders
The ERIC database depends upon educators like yourself to share their writings, curriculum guides, and research with other educators.

Selections is the next step in DATABASE BUILDING. Not all documents are accepted by ERIC. In most clearinghouses, about 30% of the documents submitted are rejected because of quality of print or quality of writing.

This is a good time to talk about quality. Some educators claim that ERIC contains a lot of garbage. The real problem is that ERIC includes all types of documents—curriculum guides for teachers and research reports for researchers. A search may locate some documents that do not meet your needs but may be of value to other ERIC clients. This is the reason that you must read the resumes in order to select those documents and journal article that will be useful to you.

Processing is the next step in DATABASE BUILDING. This means that the resumes for the selected documents and journal articles are prepared at the clearinghouse.

Transmission is the final step. The resumes prepared during the week are transmitted by computer to Washington where they receive final editing. They are then added to the ERIC database.

Product development is another function of the clearinghouses that you should know about. Each clearinghouse prepare syntheses of the literature regarding a particular topic within the scope of that clearinghouse. You will find them very timely and useful.

Digests are short syntheses of the literature regarding a specific topic of interest. The next page in your booklet is a sample of a catalog of digests.
I. DOCUMENT IDENTIFICATION

Title: ____________________________

Author(s): ________________________

Corporate Source (if appropriate): ______________________________

Publication Date: __________________

II. REPRODUCTION RELEASE

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche and paper copy (or microfiche only) and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

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TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

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III. DOCUMENT AVAILABILITY INFORMATION (Non-ERIC Source)

If permission to reproduce is not granted to ERIC, or if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents which cannot be made available through EDRS.)

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Printed Name: ____________________________

Organization: ____________________________

Address: ____________________________

Tel No: ______ Date: ______

EFF-53 (Rev 4/86)
Part II—Learning About ERIC

LIST OF DIGESTS

This particular list is from the ERIC Clearinghouse on Rural Education and Small Schools (ERIC/CRESS). This clearinghouse (as with most clearinghouses) does not charge for digests.

The next page of your booklet is the front page of a digest from ERIC/CRESS. You may want to read it all at your leisure.

Note to presenters: You may want to include a copy of a digest listing from a clearinghouse that is more relevant to the group to which you are presenting. Contact ACCESS ERIC or a clearinghouse of interest to the group for other publication lists. Also, check to see if the digests on the list are free. You may also want to provide several other digests that are not bound in the handout booklet.
**ERIC/CRESS Digests**

The digests listed below are available from ERIC/CRESS at no charge. To order, check(✓) the digest(s) you wish to receive and fill out the address form on the other side of this page.

**American Indian Education**
- * American Indian/Alaskan Native Learning Styles: Research and Practice. 1991
- The Case Method in Teacher Education: Alaskan Models. 1990
- Changes in American Indian Education: A Historical Retrospective for Educators in the United States. 1989
- Identifying Gifted and Talented Indian Students: An Overview. 1988
- Motivating American Indian Students in Science and Math. 1988
- Standardized Testing of American Indian Students. 1988
- Supporting Emergent Literacy Among Young American Indian Students. 1990
- Unbiased Teaching About American Indians and Alaska Natives in Elementary Schools. 1990

**Mexican American Education**
- Bilingual Special Education Is Appropriate for Mexican American Children with Mildly Handicapping Conditions. 1988
- A Brief History of Bilingual Education in Spanish. 1989
- Hispanic and Anglo Students' Misconceptions in Mathematics. 1989
- Improving the Science and Mathematical Achievement of Mexican American Students Through Culturally Relevant Science. 1988
- * Use of the Spanish Language in the United States: Trends, Challenges, and Opportunities. 1991

**Migrant Education**
- Classroom Strategies for Teaching Migrant Children About Child Abuse. 1988
- * Family Lives and Parental Involvement in Migrant Students' Education. 1991
- Migrant Students at the Secondary Level: Issues and Opportunities for Change. 1988
- Teaching the Abused Migrant Child: What's a Teacher to Do? 1988
- Undocumented Children in the Schools: Successful Strategies and Policies. 1990

**Outdoor Education**
- Outdoor Centers and Camps: A "Natural" Location for Youth Leadership Development. 1988
- Outdoor Education: A Directory of Organizations and Activities. 1990

**Rural Education**
- Adult Literacy Programs in Rural Areas. 1990
- Building Academically Strong Gifted Programs in Rural Schools. 1989
- Capital Outlay: Critical Concern in Rural Education. 1990
- Economic Support for Education in Rural School Districts. 1988
- The Impact of Rural Industries on the Outcomes of School in Rural America. 1989
- Interactive Distance Learning Technologies for Rural and Small Schools: A Resource Guide. 1987
- Nontraditional Education in Rural Districts. 1989

**Small Schools**
- Approaching Evaluation in Small Schools. 1988
- Proficiency-Oriented Foreign Language in the Small High School. 1989
- Small Schools: An International Overview. 1989
- Successful Instructional Practices for Small Schools. 1990
- What is the Effect of Small-Scale Schooling on Student Achievement? 1989

**Other**
- * School Completion 2000: Dropout Rates and Their Implications for Meeting the National Goal. 1991

**Briefs for Parents**

These typeset articles are ready to pasteup in your newsletter, newspaper, or periodical. Clearly and briefly, each article addresses an education topic of concern to parents. They are available free (limit one copy of each set per order). To order, check(✓) the set(s) you wish to receive and fill out the address form on the other side of this page.

**English Version**
- Preparing Rural Students for an Urban Environment. 1938
- * Recent Trends in Rural Poverty. 1991
- "Rural"—A Concept Beyond Definition? 1988
- Rural Student Achievement: Elements for Consideration. 1987
- Touching the Past, Enroute to the Future: Cultural Journalism in the Curriculum of Rural Schools. 1989
- Trends in the Reorganization or Closure of Small or Rural Schools and Districts. 1990
- Using Technology to Improve the Curriculum of Small Rural Schools. 1969

**Spanish Version**
- * School Completion 2000: Drop-out Rates and Their Implications for Meeting the National Goal. 1991

**1991 set of six articles**
- N/A
- 1990 set of six articles
- 1989 set of six articles
Notice that the language and format of the digest provides for quick and easy reading about the topic.

The next page in your booklet is the back of that same digest.

Note to Presenters: Consider using a digest that would be more relevant to the group to which you are presenting. However, the digest should be one that is included on the catalog of digests on the previous page of the booklet.
Recent Trends in Rural Poverty:  
A Summary for Educators

INTENDED PRIMARILY for educators and policymakers, this DIGEST summarizes recent information about poverty in rural areas. The discussion considers the recent growth in rural poverty and presents a profile of the rural poor. It also reports evidence about areas. The discussion considers the recent growth in rural poverty and presents a profile of the rural poor. It also reports evidence about areas.

Discussion is based on the distinction between metropolitan (urban) and nonmetropolitan (rural) areas. Briefly, metropolitan areas are closely integrated (by economic relations, communication, and transportation links) with central cities of at least 50,000 residents. Nonmetropolitan areas comprise everything else. The advantage of this definition is that it is commonly used by the U.S. Bureau of the Census.

Trends in rural poverty

Although poverty is a historical fact of life in many rural areas in America, by 1973 rural poverty seemed to be decreasing (Deavers & Brown, 1985). Many observers predicted better times. Nonetheless, throughout the decade, the most chronically poor counties in the nation continued to be located in nonmetropolitan areas (Deavers & Brown, 1985). In the 1980s hopes for better times dimmed. Studies showed that rising poverty and population loss were once again general features of rural life.

By 1986, the poverty rate in rural areas was 50 percent higher than the urban rate—18 percent versus 12 percent (O'Hare, 1988). In fact, the poverty rate for all nonmetro counties nearly equaled the poverty rate for central cities (18.6%), where urban poverty is most notable (O'Hare, 1988; Porter, 1989).

Rural poverty in the 1980s also seemed to be more deep-seated than urban poverty. It stayed higher, rose more rapidly during recession, and fell more slowly in the "recovery" period (O'Hare, 1988). Displaced rural workers were unemployed more than 50 percent longer than urban workers. When they returned to work, they were more likely than urban workers to take pay cuts and lose insurance benefits (Podgory, 1989). Rural residents were also prone to other conditions associated with poverty: malnutrition, substandard housing, poor health, and high rates of disabilities (Lazera, Leonard, & Kravitz, 1989; Shottland, 1988).

A profile of the rural poor

Recent analyses report characteristics that distinguish the rural poor from the urban poor (O'Hare, 1988; Porter, 1989; Shapiro, 1989; Shottland, 1988; Tickamyer & Tickamyer, 1987). These characteristics include, among others, employment status, family structure, and race.

Working but poor. In 1988, 62 percent of rural poor adults aged 18 to 44 worked at least parttime. Their earnings, however, remained under the poverty line (O'Hare, 1988). A recent national report based on 1987 data (Shapiro, 1989) noted some key facts:

1. Almost three of every four nonmetro poor family heads who were not disabled or retired worked for all or part of the year.
2. Nearly one of every four nonmetro poor family heads who were not disabled or retired worked fulltime, year-round.
3. About two of every three rural poor lived in a household where at least one household member worked during that year.
4. A large number of the rural poor looked for jobs but could not find them.
5. More rural poor family heads (including both two-parent and single-parent families) worked in 1987 in comparison to metro poor family heads.

The result is that a family with working parent(s) is about twice as likely to be poor in nonmetro as in metro areas. This relationship holds across all races and types of work (Shapiro, 1989). Despite their difficulty in finding work, the rural poor are more likely than the urban poor actually to work. Their wage levels, however, keep their families in poverty.

Two-parent households. In urban areas, the poor family is typically headed by a single parent (usually a woman). This pattern is, however, not typical among the rural poor. The majority (about 62%) of poor rural families are two-parent families. In these families, moreover, it is not unusual for both parents to work. Rural poor families that depend entirely on earned income (that is, families without public assistance or other nonwage income) are, unfortunately, the poorest (Shapiro, 1989).

Racial composition. The rural poor also differ racially from their urban counterparts. A much larger portion of the rural poor are whites than in urban areas. In rural areas, 71 percent of the poor are whites, whereas in central cities, 54 percent are whites (Porter, 1989). Racial minorities in rural areas, however, suffer more severely from poverty than their urban counterparts (O'Hare, 1988; Porter, 1989; Shapiro, 1989). Porter, for example, reports that 44 percent of rural blacks were poor in 1987, in comparison to 33 percent of urban blacks.

What causes rural poverty?

Some analysts believe that poverty—wherever it is found—is more a function of history and economic structure than of individual or group characteristics (for example, Tickamyer & Tickamyer, 1987). Studies of rural economies tend to support this view.

The rural economy is, in general, characterized by a number of features (Deavers & Brown, 1985; O'Hare, 1988). They include:

- dependence on natural resources,
Notice the list of references. The references are often most useful if you want to study the topic of the digest in more depth. Many of the references include ERIC accession numbers. Other references are books and other materials that have not been entered into the ERIC database.

The next page in your handout is a catalog of major publications from ERIC/CRESS. Note that they are organized by specific interests within the scope of the clearinghouse.
• a narrow industrial base in a given locale, and
• emphasis on low-skill labor.

In fact, agriculture is no longer the largest employer in rural areas. Routine manufacturing industries now tend to be the largest employers (for example, plants that process raw materials, light assembly plants, and branch plants of national firms).

These developments pose two problems. First, specialization makes rural economies less "elastic" than urban economies. This means that rural areas tend to suffer more from recession and benefit less from recovery than urban areas (Deavers & Brown, 1985; O'Hare, 1988). Second, because routine manufacturing is based on low-skill labor, manufacturers are tempted to leave rural areas for foreign countries, where wage rates are much lower (Deavers & Brown, 1985; O'Hare, 1988).

Structural conditions also affect the responses of individuals in two ways not reflected in official unemployment rates. First, displaced workers may cease to look for work. Second, they may accept part-time work in lieu of full-time work. These trends are, according to Shapiro (1989), major contributors to recent increases in rural poverty. Shapiro suggests that a long-term trend of declining employment prospects may have already begun in rural America. Reid (1990) reports that the major limit to rural economic growth is lack of demand for a highly educated work force, not a shortage of workers to fill existing jobs.

When growth does come to rural communities, however, its benefits to the poor are questionable. Most new jobs are low-paying or minimum-wage jobs (Reid, 1990). Further, rural workers in service occupations have the highest poverty rates. This is a vexing fact, since the service industry is the part of the rural economy most likely to grow in the future (O'Hare, 1988).

The role of education

Some analysts believe lack of human capital is a major cause of rural poverty (Summers, Bloomquist, Hirschi, & Shafter, 1986). An educationally disadvantaged labor force in rural communities is likely neither to attract outside investment nor to launch new economic development efforts of its own.

Amount of education, however, cannot alone account for the differences in poverty rates between urban and rural areas. Although differences in rural and urban school graduation rates have narrowed over the last decade, the poverty gap has grown larger (Reid, 1990; Shapiro, 1989). In fact, the largest poverty gap between urban and rural populations is among those with more education, and the smallest is among those with the least education (O'Hare, 1988; Shapiro, 1989). This situation is an incentive for the better educated to leave rural areas. Migration from rural areas has always been led by the better educated (O'Hare, 1988; Reid, 1990).

In the future, the growing effects of continued poverty may further endanger school improvement efforts in rural areas, for example, by eroding the tax base or demoralizing communities. Many rural schools are already struggling to provide adequate services to the current population of economically disadvantaged students.

Alternatives have, however, been proposed, and Reid (1990) speaks for many observers. He believes that rural schools should provide three things. These include better basic instruction to strengthen work force skills, serving as resources for solving local community problems, and participating directly in community development projects. Reid notes, however, that such a mission will require sustained effort to address substantial problems.

Conclusion

Poverty is a condition that puts students at risk of school failure. As a potential influence on the well-being of individual students from poor families, education is clearly important (Reid, 1990). On the other hand, the role of education in changing the structural features of rural poverty is clearly much more limited. Education is not likely to be a very direct way to remedy poverty in rural areas, though, as in Reid's analysis, a supportive role may be possible.

The analysts cited in this Digest have recommended—in the works cited—concrete changes in federal and state policies to address rural poverty. Some of these recommendations can involve educators in their professional roles, whereas others imply a need for the support of educators as informed private citizens.

References


Prepared by Gary Huang and Craig Howley, ERIC/CRESS, Charleston, WV
MAJOR PUBLICATIONS LIST

Major Publications are more detailed syntheses of the educational literature regarding particular topics related to the scope of the clearinghouse. These are usually larger works prepared by authors hired by the clearinghouse. The extra expenses are recovered by charging a small fee for each major publication.

User Services is the third function of clearinghouses.

Searches of the database are done upon request by most clearinghouses. Some charge for this service and others do not. The result of the searches are printed resumes of documents and journal articles that are retrieved.

Orders are received for digests and major publications and mailed to clients as they are received.

This concludes an overview of the functions and responsibilities of the 16 clearinghouses in the ERIC organization.

Note to Presenters: You should consider substituting a catalog of major publications from the same clearinghouse for which you provide the digest list and sample digest. It is also wise to check the clearinghouse of ACCESS ERIC to see that you have the latest catalog and prices.
**ERIC/CRESS Publications Order Form**

Please check ✔ your choices and fill out the address form at the bottom of this page.

### American Indian Education
- A Directory of Organizations and Activities in American Indian Education. Updated 1990. 35 p. $4.50
- Just Beyond Your Fingertips: American Indian Children Participating in Language Development. Sigmund A. Boldo; Doublet Hickman; Patricia L. Loughrin. 1987. 130 p. $9.95

### Mexican American Education
- Cornejo Language Series. Individually $2.00; Set of 2, $3.00
- Eliciting Spontaneous Speech in Bilingual Students: Methods and Techniques. Ricardo J. Cornejo; Alice C. Weinstein; Caryn Najor. 1983. 122 p. $2.00

### Migrant Education
- Migrant Students at the Secondary Level: Issues and Opportunities for Change. Frederic C. Johnson; Robert H. Level; Jeanette A. Moralee; Susan C. Morse; Marian K. Prokop. 1986. 104 p. $3.75

### Outdoor Education
- Outdoor Education Across America: Weaving the Web. Rita Yerkes. 1987. 91 p. $6.00
- Using the Outdoors to Teach Languages. Rebecca R. & Frederick A. Staley. 1988. 96 p. $5.50
- Using the Outdoors to Teach Mathematics. Milton R. Payne; Stephen F. Austin. 1985. 65 p. $5.50
- Using the Outdoors to Teach Social Studies. Cliffor Knapp. 1986. 95 p. $5.50

### Rural Education & Small Schools
- Directory of Organizations and Programs in Rural Education. ERIC/CRESS and NREA. 1990. $6.50
- Financing Rural and Small Schools: Issues of Adequacy and Equity. David S. Honeyman; David C. Thompson; R. Craig Wood. 1985. 65 p. $5.50

### Other
- ERIC for Teachers in Training: An Instructional Package for Professors. Craig B. Howley. 1989. 35 p. $10.00
- Overcoming Risk: An Annotated Bibliography of Publications Developed by ERIC Clearinghouses. Wendy Schwartz; Craig Howley. 94 pp. $10.50

### Address Form

All prices include shipping and handling. Digests and briefs for parents (listed on the back) are available free of charge. Discounts for multiple copies of one title are as follows: for 10-20 copies, subtract 5%; for 21 or more copies, subtract 10%. Fill out the order form below and return to Berma Lanham, ERIC/CRESS, P.O. Box 1348, Charleston, WV 25325.

- I have enclosed a check made payable to ERIC/CRESS in the amount of $____________ for the items checked on this order form.
- Please forward an Invoice in the amount of $____________ for the items checked.

Name
Address
Telephone

rev. 5/01
PART III
Demonstration of Searching

The last portion of the workshop is the demonstration of searching ERIC on CD-ROM.

If you do not have a computer with a CD-ROM and a device to project the computer screen for participants to see, you should use the narrative below to introduce the videotape and close the workshop session.

If you have the equipment for a live demonstration of a search, turn the page and proceed with the live search.

Introduction to Videotaped Search

NARRATIVE

Now that we know what ERIC is about and how the ERIC organization works, let's see how the ERIC database might relate to the work of local school educators.

We are going to view a videotape and, at the same time, refer to the remaining sections of our booklet.

The narrative on the video will explain each search and you will see the computer screen as the descriptors are typed. You will see how fast the CD-ROM accesses over seven years of input into the ERIC system. If you were to use the paper catalogs (the RIE and CIJE in the first video) you would have to examine a stack of catalogs over 15 feet high each time a word was typed into the computer.

Once a document is selected by the narrator on the video, he will refer to pages in your booklet. In this way, you will see how you search, select, and go to the final document. We can discuss the searches after the video, if you like.
Part III—Demonstration of Searching

After the Video

Do you have any questions or comments about the video?

You should go to the library as soon as possible and try to search for topics of interest to you. You are more likely to find documents and journal articles that are meaningful to you if you do your own searching. Your librarian can help you learn to use the system. Of course, if you do not have time to do your own searching, your librarian will see that your search is completed for you.

Doing a Live Search

The following is a collection of searches with accompanying dialogue that illustrate the value of ERIC on CD-ROM to local educators. ERIC is available on CD-ROM from Silverplatter and Dialog. Since the search software used by these producers differs, specific keystrokes are not provided. However, the descriptors and the boolean operators (and, not, or) used in the searches are correct. You should become familiar with the search procedures for the specific software you have so that you can display all or portions of the resumes as required. Also, you should run the searches using the most recent disc and change the narrative regarding the number of documents located in each step.

Imagine that you are a local administrator concerned about the disadvantaged youth in your school district. Let's search ERIC to see what is available regarding that topic.

DISADVANTAGED-YOUTH

There are 669 documents and journal articles related to this topic.

Manual for ERIC Awareness Workshop
That is certainly too many to read in the next week or so! As an administrator, you would be interested in what kind of strategies you might consider using to deal effectively with this type of individual. What educational strategies are available?

**AND EDUCATIONAL-STRATEGIES**

We now have 4 pieces of information that involve both disadvantaged youth and educational-strategies. Let's see what the accession numbers and titles are.

**Enter keystrokes required to display accession number and titles only.**

Note that the first resume has "EJ" prefix. This means that it is a educational journal article. The others have "ED" prefixes meaning that they are educational documents. The second document is a policy document and might contain some valuable ideas for an administrator. Let's take a look at the entire resume.

**Enter keystrokes required to display entire resume for ED 304 259.**

The remainder of the resume can be seen by scrolling the text.

**Enter keystrokes required to display the remainder of the resume.**

We have included a few selected pages from that document in your booklet. These are copies made from the microfiche on a reader-printer.

The first page is the resume for the document—exactly as you saw it on the computer screen. Note that the accession number is at the top left—ED 304 259. We see that it is a 1988 publication and has 32 pages. Notice that the descriptors "Disadvantaged Youth" and "Educational Strategies"—the terms we used in our search—have asterisks before them to label them as major descriptors. The abstract then tells you more about the document to help you decide if you want to obtain the entire document.

The next page is a copy of the title page.
Next is the Executive Summary. This will give a brief overview of the contents of the document.

The following two pages contain the Table of Contents to provide further information about the document.

The last page of the section is from the document itself to give you an idea of the kinds of information included. At the top you find some comments about how Grouping for instruction impacts disadvantaged youth. At the middle of the page, a section on Classroom testing and assessment and its effect on the disadvantaged. A few comments on Classroom climate can be found at the bottom.

Note to presenters: At this time the search should be cleared from the computer so that a new one can begin.
This report summarizes recent research about the effective education of poor minority students in rural areas. Significant barriers to high student performance are briefly discussed and research findings about strategies designed to overcome these barriers and to lead to high performance are reviewed. Solutions for educating disadvantaged students should not be flawed by a "remedial and cultural deficit mentality," with low expectations for performance of disadvantaged students. Research suggests a new vision for educating these students incorporating these aspects: (1) high expectations by the family, community, and school; (2) active participation by parents and community; (3) instruction in not only basic skills but in learning-to-learn and thinking skills; (4) cultural sensitivity and relevance in materials and teaching practices; and (5) new teaching and grouping strategies such as mastery learning, cooperative learning, and peer tutoring. The following public policy issues raised by this new vision are presented: (1) the need for new partnerships with business, industry, and labor; (2) new policy perspectives on the relationship between equity and excellence; (3) the nature of accountability expectations of the schools; (4) options for implementing the need strategies; (5) long- versus short-range perspectives on strategies for change; and (6) the need for continuing governmental support as well as mandates. The underlying theme of the report is that effective education of the disadvantaged is a major social and economic issue, not just an educational one. This report contains a 77-item bibliography.
TOWARD MORE EFFECTIVE EDUCATION FOR POOR, MINORITY STUDENTS IN RURAL AREAS: WHAT THE RESEARCH SUGGESTS

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November 1988

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Portland, Oregon 97204
TOWARD MORE EFFECTIVE EDUCATION FOR POOR, MINORITY STUDENTS IN RURAL AREAS: WHAT THE RESEARCH SUGGESTS

EXECUTIVE SUMMARY

This report summarizes recent research evidence regarding effective education of poor, minority students in rural areas. The report was prepared by staff at the Northwest Regional Educational Laboratory with developmental support from the Laboratory's Center on National Origin, Race, and Sex Equity.

After a brief review of some significant barriers to high student performance, the bulk of the report reviews research findings about practices that can overcome these barriers and lead to high performance by poor, minority students. These research findings call for a new vision for effective education of the disadvantaged. Earlier efforts were flawed by a "remedial" and "cultural deficit" mentality with low expectations of disadvantaged students.

The research now suggests that a dramatically different vision is called for, one which is manifested by: (a) high community, family, and school expectations for all students regardless of ethnicity or socioeconomic condition, (b) active community and parent participation and partnerships, (c) skillful instruction in basic skills, learning-to-learn skills and thinking skills, (d) cultural sensitivity and relevance in curriculum materials and teaching practices, and (e) new teaching and grouping strategies such as mastery learning, cooperative learning, and peer tutoring.

The report concludes with a discussion of major public policy issues raised by this new vision. Included in this review are new issues related to: (a) the need for new policy partnerships, (b) new policy perspectives on the relationship between equity and excellence goals, (c) the nature of accountability expectations of the schools, (d) optional policy strategies to help implement new schooling strategies, (e) long- versus short-range perspectives on strategies for change, and (f) the need for continuing policy support as well as policy mandates. Finally, the report suggests that the practices emerging from the research provide a highly important information base which policy makers and practitioners should use to implement the new vision of effective education for the disadvantaged.

The underlying theme of the report is that effective education of the disadvantaged is a major public social and economic issue—not just an educational one.
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2. Grouping for instruction. Research tells us that the way students are grouped can often have a major effect on student performance. Among key findings on grouping:

- Both high- and low-ability students do better academically in classes where the total group includes students with a wide range of academic ability. The impact is most positive for low-ability students.

- By contrast, only high-ability students benefit from homogeneous "ability" grouping where students at a similar ability level are kept together for long periods of time. In addition, there are harmful effects for low-ability students. Their engagement decreases when they are kept together for long periods of time.

Two grouping practices that are showing particularly significant performance results are "peer tutoring" and "cooperative learning" strategies. In peer tutoring, students are paired in a one-on-one relationship to reteach one another, to extend instruction, or to assist each other with tasks emerging from the instruction. In cooperative learning, small groups of four to six students with a cross-section of characteristics are formed to teach information and skills. The tasks they work on emphasize material already taught by teachers. Students assist one another with the task. Then each group receives a single grade for its performance, as well as an individual assessment of each student's contribution to the group.

In peer tutoring and cooperative learning, the individual student is judged in part by his/her contribution to the total team effort. Study after study has documented both improved achievement and improved classroom climate related to these strategies. One researcher (Levin, 1987) cites the peer tutoring approach, properly carried out, as one of the most cost-effective ways for improving the performance of disadvantaged students. Further, such cooperative student-on-student and team-structured groupings take advantage of many minority students' cultural backgrounds. Where "performance" by an individual may be construed as showing off or self-aggrandizement, group work supports striving for excellence.

3. Classroom testing and assessment. The decade of the 1980s has seen great public interest in testing students. While the reform movement of the early 1980s led to heightened schoolwide achievement testing of students across the country, researchers at the Laboratory (Siggins, Coridin, & Bridgeford, 1986) focused a great deal of attention on the kind of testing that happens in the classroom. They found teachers assess students' behavioral and interactional styles almost as much as they assess academic performance. For example, some research found that teachers tend to use cues such as the ways children sit, talk, listen, and respond to instructions to develop a framework for assessing students. For minority students, whose interactional expectations differ from those of the teacher, these assessments can be especially inappropriate or unfair.

Our researchers advocate expanded training of teachers to assess students appropriately and to be sensitive to the different styles of interaction conditioned by their home environments. As students are assessed much more often by their teachers in the classroom than they are by standardized tests, these research findings are particularly important for improving student performance.

4. Classroom climate. The climate of the classroom has an important relationship to student learning. Researchers have documented that a "safe and orderly" environment is a key feature of effective classrooms. We have already cited the necessity for the classroom to contain an atmosphere that respects the students' cultural backgrounds and heritage. Also important is a classroom environment where the students as well as the teacher respect and demonstrate "high academic expectations, warmth, concern for others, and respect of others." These features have been shown to enhance student achievement, particularly in classrooms with significant numbers of minorities and disadvantaged students.
Now imagine that you are a secondary teacher. Let's see what ERIC has for you.

SECONDARY-EDUCATION

There are 20,892 documents and journal articles for teachers in secondary schools. Imagine that you are a biology teacher and narrow the search to that topic.

AND BIOLOGY

We have now only 552 pieces of information about biology in secondary schools. We must narrow the search even further if it is to be of any value to us.

All science teachers are concerned about safety and emergency situations. This could be particularly serious in biology laboratories where one might come in contact with blood, sharp objects, and other dangers. Let's see if ERIC has any information on emergencies in biology.

AND EMERGENCY

We have 2 pieces of information regarding biology in secondary education and emergency. Let's look at the titles to see what is available.

Enter keystrokes required to display titles.

The Biology Laboratory Safety Manual (ED 306104) is exactly what we are looking for. Let's examine the resume to be sure it is what we want.

Enter keystrokes required to display entire resume for ED 306104.

A few pages of that document are included in the next colored section of your booklet.

The first page is, of course, the resume. Note that the first page of the abstract is a recommendation by the Center for Disease Control.
Part III—Demonstration of Searching

that schools have a biosafety manual.

The next page is the cover of the manual.

Next, includes the Table of Contents.

The last page lists eight Universal Precautions recommended by the Center for Disease Control. As a school administrator or local board member, I would certainly want my students protected by having such a manual in the hands of my biology teachers.

Note to presenters: At this time the search should be cleared in the computer so that a new one can begin.
ABSTRACT

The Centers for Disease Control (CDC) recommends that schools prepare or adapt a biosafety manual, and that instructors develop a list of safety procedures applicable to their own lab and distribute it to each student. In this way, safety issues will be brought to each student's attention. This document is an example of such a manual. It contains guidelines adapted from CDC guidelines for use in a school setting. Topics covered include: aerosols; chemical safety; decontamination; disinfection; waste disposal; teaching precautions; standard and special practices; universal precautions; and precautions for blood work. (CW)
Laboratory Safety

Adherence to safety procedures not only minimizes risk of infections in the laboratory, it is the students’ training for minimizing transmitting nosocomial infections in their future work environments. Most laboratory-acquired infections are probably transmitted by inhaled aerosols.

The Centers for Disease Control recommends preparing or adopting a biosafety manual. It is recommended that the instructor develop a list of safety procedures applicable to his or her lab and distribute it to each student. In this way, the issue of safety will be brought to the individual student’s attention.

Many of the following guidelines, applicable to teaching facilities, are adapted from CDC’s Guidelines*.

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CDC's Universal Precautions

1. Gloves should be worn when touching blood and body fluid, mucous membranes, and nonintact skin and when handling items or surfaces soiled with blood or body fluids. Gloves should be changed after contact with each patient.

2. Hands and other skin surfaces should be washed immediately and thoroughly if contaminated with blood or other body fluids. Hands should be washed immediately after gloves are removed.

3. Masks and protective eyewear or face shields should be worn during procedures that are likely to generate droplets of blood or other body fluids.

4. Gowns or aprons should be worn during procedures that are likely to generate splashes of blood or other body fluids.

5. To prevent needlestick injuries, needles should not be recapped, purposely bent or broken, or otherwise manipulated by hand. After disposable syringes and needles, scalpel blades, and other sharp items are used, they should be placed in puncture-resistant containers for disposal.

6. Although saliva has not been implicated in HIV transmission, mouthpieces, resuscitation bags, or other ventilation devices should be available for use in areas in which the need for resuscitation is predictable. Emergency mouth-to-mouth resuscitation should be minimized.

7. Health care workers who have exudative lesions or weeping dermatitis should refrain from all direct patient care and handling patient-care equipment.

8. Pregnant health care workers are not known to be at greater risk of contracting HIV infection than health care workers who are not pregnant; however, if a health care worker develops HIV infection during pregnancy, the infant is at risk of infection. Because of this risk, pregnant health care workers should be especially familiar with and strictly adhere to precautions to minimize the risk of HIV transmission.
If you were an elementary teacher at the primary grades, you would be interested in seeing what ERIC has to offer. Let's see what there is for primary education.

**PRIMARY-EDUCATION**

There are 3577 documents and journal articles for primary education. There certainly should be some valuable information among them.

We all recognize the need for hands-on science instruction. Let's see what ERIC contains regarding science experiments in the primary grades.

**AND SCIENCE-EXPERIMENTS**

Thirteen documents and journal articles deal with science experiments in the primary grades.

A major concern for today and the future is our understanding of energy. Let's see what ERIC has regarding science experiments about energy.

**AND ENERGY**

We find one document about primary education and science experiments and energy. Let's look at the resume.

Enter keystrokes required to display resume for ED 249082.

We see that it is a 1984 publication with 62 pages.

A few pages of that document are included in the next colored section of your booklet.

Again, the resume is found on the first page. The abstract describes how the manual is organized. Notice also the "Available From" note. You might want to order the guide from the California Extension Service rather than get a paper copy of the microfiche. The address is provided for you.

The next page is a copy of the cover.

Turn the page to see a list of objectives for this primary program.

On the last page, you will find an outline of the manual. Perhaps the topics and titles of some of the activities may motivate you to look at the entire document.

I am sure that this document would give primary teachers ideas for conducting experiments to promote an initial understanding of energy.

Manual for ERIC Awareness Workshop
An energy education program at the primary level should help students to understand the nature and importance of energy, consider different energy sources, learn about energy conservation, prepare for energy related careers, and become energy conscious in other career fields. The activities charts, readings, and experiments provided in this nine-section manual are designed to meet the objectives of such a program. The materials in the first five sections focus on: (1) the nature of energy; (2) uses of energy; (3) non-renewable energy and pollution; (4) energy conservation; and (5) solar energy. The next four sections provide experiments dealing with solar energy, insulation to conserve energy, wind to produce energy, and water to produce energy. Procedures and instructional strategies are provided when applicable. (JN)
ENERGY ACTIVITIES

FOR THE PRIMARY CLASSROOM

COMPiled BY: BLUE TIERNEY

PRODUCTION ASSISTANCE: Ivy Toanu, Bonnie Cornwall
Irene Banks, Kim Ortiz

FOR: THE EL DORADO COUNTY ENERGY PROGRAM
EL DORADO COUNTY OFFICE OF EDUCATION

FUNDING FROM: California Energy Extension Service

"PERMISSION TO REPRODUCE THE MATERIAL HAS BEEN GRANTED BY Bonnie Cornwall"
TO THE EDUCATIONAL RESOURCE INFORMATION CENTER (ERIC)."
Objectives of an Energy Education Program at the Primary Level

1. To enable students to understand what energy is.
2. To enable students to understand the importance of energy.
3. To prepare students to consider different energy sources.
4. To provide information about conservation.
5. To prepare students for energy related careers and to become energy conscious in other career fields.

"I have been teaching science programs for children for the past twelve years. During this time I have discovered or developed a number of effective energy activities for primary classes. This packet includes my outline for Energy Education at the primary level and sample activities, charts and readings. Those activities that were "discovered" are noted in the back under references."
My Primary Energy Program Outline

I. WHAT IS ENERGY?

Use the following activities to introduce the concept of energy:

- Energy Is . . .
- Finding Energy
- Be Energy
- Energy Transfer
- Hamburgers and Food Chains
- Energy Pyramid
- Poor Old Lady
- Untangle This Web
- Food Web Story
- Make a Local Food Web

II. HOW DO WE USE ENERGY?

Use the following activities:

- We Need Energy To . . .
- Electrical Appliances
- What If?

III. ENERGY PROBLEMS: NON-RENEWABLE AND POLLUTION

1. Most of the energy that we use comes from non-renewable sources. Use the following activity to help students understand the concept of non-renewable:
   - Trees' Energy
   - Presto, Chango . . .

2. Energy use can cause pollution. Use the following activities:
   - Catching Pollution
   - Car Exhaust
   - Every Person's Air

IV. CONSERVATION

1. YOU can help save valuable energy resources by using less energy. Use the following activity:
   - Class Conservation List

2. It takes a lot of energy to produce consumer goods. Use the following activity:
   - "Hidden" Energy Use
Part III—Demonstration of Searching

Note to presenters: At this time, clear the search from the computer so that a new search can begin.

NARRATIVE

The ERIC database contains many curriculum guides for teachers. How many do you think have been entered into the database during the past seven years? Let’s find out by pulling up documents with the number assigned to teaching guides—52. This number is from the list of document types noted earlier in your handout.

**DTN=52**

Are you surprised that there are 22,085 teaching guides available? Of course, not all of them will relate to the subject or level of instruction for all teachers. However, most teachers will find guides that will be of value to them.

A major problem that society and education is faced with is the problem of substance abuse. Let’s see what teaching guides are available on that topic.

**AND SUBSTANCE-ABUSE**

Are you surprised that there are only eight curriculum guides addressing the problem of substance abuse? We must realize that educators have been developing teaching guides for substance abuse only in recent times. They are just now getting into the ERIC database. I am sure that we will find many more in the ERIC database in the near future.

Everyone agrees that education regarding substance abuse must start early. Let’s give the database a challenge and see if there is a teaching guide for kindergarten.

**AND KINDERGARTEN**

There are 2 teaching guides related to substance abuse and kindergarten. Let’s look at the citations.

Enter keystrokes to display the citation form of the document.

Note that we asked for the bibliographic citation. This is a very accurate citation and used by many scholars to check their bibliographies.

The first is a 31 page document. The second is a state curriculum of over 1,000 pages. Let’s take a look at the resume of the first (ED 299185) because it may be more relevant to the local teacher.
Part III—Demonstration of Searching

Enter keystrokes required to display entire resume for ED 299185.

We see that it is a 1988 document from New York. Turn again to the handouts to see the resume and selected pages from the guide.

As you might guess, we have included segments of that document in your booklet.

The resume is on the first page of the next colored section. The next page is a copy of the cover of the manual.

The table of contents is on the next page. The titles of the themes gives you an idea of the structure of the program.

The next page provides a background for the program. Anyone interested in a substance abuse program for the early years would find this section very useful.

On the next page we find the Purpose, Objectives, and Target Population. This information not only gives us an idea of what the program intends to do, but provides teachers with suggestions if they design their own programs.

The Curriculum Design is on the next page. Again, this might provide ideas for developing a local program.

The final page contains more information about the contents and activities of the program.

The curriculum guides found in the ERIC database may be most valuable because of the ideas they offer to teachers. It is doubtful that a guide could be used in its entirety as a substitute for a locally developed guide. Rather, those found in ERIC can provide content and structure ideas for developing guides and lesson plans. Sometimes a single idea from a guide may make an ERIC search a worth-while activity.

Note to presenters: Turn to the manual page following the sample.
PAGES NOTED ABOVE.
Based on the premise that educators can make a significant difference in children's lives, this preschool and kindergarten substance abuse prevention curriculum guide informs teachers about basic prevention concepts and provides a plan for integrating these concepts within the context of an early childhood education program. The curriculum is designed around four prevention theme units of self-awareness, decision-making, healthy living, and communication. Each theme is used as the nucleus of activities included in the instructional areas of: (1) language development; (2) social living; (3) creative expression; and (4) mathematics, science, and health. This booklet contains four specific class activities, each representing an instructional area, in each of the theme units. A list of related children's books is provided with most activity sheets, and drawings are included. (JHP)
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BACKGROUND

Introduction

Substance abuse prevention requires more than providing basic information. It also includes teaching developmental level skills necessary for forming positive self-images, making good decisions, developing coping strategies and the formation of positive relationships in life. Although primary substance abuse prevention begins with the family, educators can have an important impact. The key to successful substance abuse prevention is to begin early. Early education is imperative.

The National Institute on Drug Abuse (1980) reports that children in fourth grade have some knowledge of the drug scene and a Weekly Reader survey (1983) showed that very young children (grade two) already feel peer pressure to drink alcohol and use other drugs. It, therefore, seems appropriate to look to the early years (as young as preschool) for the development of skills needed to deter the child from unhealthy habits in later grades. Although young children will not understand the effects of smoking marijuana, for example, they will understand about putting healthy or unhealthy things into their bodies and about keeping well. At an early age, it is important to instill positive concepts and develop skills needed for making good decisions, coping, and establishing good relationships.

Establishing a Base

The challenge to educators and parents is to try to keep children from using drugs in the first place. Educators have more influence in preventing children's future use and misuse than they think.

The development of a healthy self-esteem is important in the early childhood years so that older or grown children can cope with decisions when parents aren't around to make them. According to psychologist Erik Erikson (1983), an adult's self-esteem depends, to a significant degree, on the quality of his or her early childhood experience. Erikson's basic premise is that there is a central problem or tension that a child experiences at each stage of development. Resolution of the problem, at the appropriate stage of development, will better equip the child to cope when recurring problem situations emerge later in life.

A recent report by the National Institute on Drug Abuse (1980), highlights this finding: "Low self-esteem ....(was) found prior to the onset of drug use."

Student's with high self-esteem were reported to do better academically, more likely to make positive choices, respect the rights and feelings of others and were confident in their own feelings of self-worth. Confidence enables children to say no to alcohol and other drugs.

Erikson supports the correlation between academic achievement and self-esteem. "Children with superior intelligence but low self-esteem do poorly in school while children of average intelligence but high self-esteem can be unusually successful." 1

Curriculum Design

The Early Years Prevention Curriculum is designed around four prevention themes: (a) self-awareness, (b) decision making, (c) healthy living, and (d) communication. Each theme becomes the nucleus of the instructional areas, i.e., language development, social living, creative expression, and math-science/health. This design is shown in a visual schema (Figure 1) that identifies and highlights the interrelationship among the instructional areas relative to the core theme(s).

Figure 1 Thematic Design

**THEME 1**

- Language Development
- Creative Expression

**SELF-AWARENESS**

- Social Living
- Math-Science/Health

**THEME 2**

- Language Development
- Creative Expression

**DECISION MAKING**

- Social Living
- Math-Science/Health

**THEME 3**

- Language Development
- Creative Expression

**HEALTHY LIVING**

- Social Living
- Math-Science/Health

**THEME 4**

- Language Development
- Creative Expression

**COMMUNICATION**

- Social Living
- Math-Science/Health
Design and Activities

The Early Years Curriculum provides a sample of activities for each concept area listed in Figure 1. In each of the four prevention concepts there are four activities, i.e. one for language arts, social living, creative expression, and math-science/health. This organizational design not only makes the teacher aware of the basic prevention concepts but indicates where they can be integrated within the scope of the total curriculum.

The activities included are not meant to be the end product but rather a base upon which teachers can build and include the many activities that are already part of their early childhood program.

ALL ABOUT ME

WHAT SHOULD I DO?

SHARING & CARING

KEEPING HEALTHY
Part III—Demonstration of Searching

Note to presenters: If you have time, you may want to ask participants for topics they would like to see searched. In order to close use the following narrative.

NARRATIVE

You should go to the library as soon as possible and try to search for topics of interest to you. You are more likely to find documents and journal articles that are meaningful to you if you do your own searching. Your librarian can help you learn to use the system. Of course, if you do not have time to do your own searching, your librarian will see that your search is completed for you.
ERIC Awareness Workshop Evaluation Form

Name (optional): _____________________________________________________________

School Name: ________________________________

Assignment (subjects, grade level, position, etc.) ________________________________

Have you ever used ERIC before today?  _YES    _NO

1. Rate the workshop in terms of the following statements by circling the appropriate number:

   a. The amount of new information you gained about ERIC.

      1 2 3 4 5
      (low) (high)

   b. The value of the workshop as a motivator to use the ERIC system.

      1 2 3 4 5
      (low) (high)

   c. Your overall understanding of the ERIC search procedure.

      1 2 3 4 5
      (low) (high)

   d. YOUR OVERALL RATING OF THE WORKSHOP.

      1 2 3 4 5
      (low) (high)

2. What was the strongest feature of the workshop?

3. What was the weakest feature of the workshop?

4. Please describe how you plan to use the information gained from this workshop.