INTENDED TO PRESENT INFORMATION ABOUT THE ACTIVITIES AND USE OF THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) SYSTEM THAT ARE AVAILABLE THROUGH THE ERIC CLEARINGHOUSES, THIS REPORT BRIEFLY DESCRIBES THE VARIETY OF ACTIVITIES, METHODS, AND SERVICES THAT ARE EMPLOYED IN THE DISSEMINATION OF THE SYSTEM'S EDUCATIONAL INFORMATION. AFTER A BRIEF BACKGROUND DESCRIPTION, SPECIFIC SECTIONS DEAL WITH THE FOLLOWING TOPICS: STANDING ORDER CUSTOMERS; ACQUISITION AND SELECTION OF DOCUMENTS; RESOURCES IN EDUCATION (RJED); CURRENT INDEX TO JOURNEYS IN EDUCATION (CIE); INFORMATION ANALYSIS PRODUCTS; ACTIVITIES WITH PROFESSIONAL ASSOCIATIONS; WORKSHOPS; USER SERVICES; JOURNAL ARTICLES; INFORMATION BULLETINS; COMPUTER SEARCHING; INFORMATION CENTERS; AND TECHNICAL ASSISTANCE ACTIVITIES. THE REPORT CONCLUDES WITH AN IDENTIFICATION OF THE MANY CHANGES THAT HAVE TAKEN PLACE IN THE SYSTEM WITHIN THE PAST TWO YEARS, AS WELL AS WITH A LIST OF SOME OF THE STUDIES OR ACTIVITIES FOR SYSTEM IMPROVEMENT THAT ARE UNDER WAY OR SCHEDULED FOR IMPLEMENTATION IN THE NEAR FUTURE.
Dissemination of Educational Information

through the

Educational Resources Information Center (ERIC)

Robert E. Chesley
Head, ERIC

March 6, 1979
Dissemination of Education Information through the Educational Resources Information Center (ERIC)

ERIC was established as a national educational data base in 1966. In the past thirteen years it has become widely recognized both nationally and internationally as the preeminent source for locating and acquiring a wide variety of educational documents.

ERIC is a nationwide information network for education. Its mission is to gain bibliographic control over documents and journal articles in the field of education, to announce their availability and to make the documents widely accessible to researchers, teachers, administrators, policy makers, librarians, students, and the lay public.

The questions frequently arise, "How many people use ERIC and how many times is ERIC used each year?" A study by Bernard Fry was published in 1972 entitled, "Evaluation Report of ERIC Products and Services." This study answered some questions about the use of ERIC; however, recent data are not available and answers to other questions about ERIC use are lacking completely. At present a study is under design within the Dissemination and Improvement of Practice Program (DIP) at the National Institute of Education (NIE) which will gather current data on this topic. This paper is intended to present information about the activities and use of the ERIC system.
that is available through the ERIC clearinghouses.

The ERIC system consists of a network of sixteen subject-area clearinghouses which acquire and catalog documents for announcement in the abstract journal *Resources in Education* (RIE) as well as provide other user services; a central processing facility where documents are received and where centralized processes are performed; an ERIC Document Reproduction Service (EDRS) which films documents and produces microfiche for sale; a contractor (DRIYX PRESS) which publishes *Current Index to Journals in Education* (CIJE); The Government Printing Office which produces RIE; and a Central ERIC management team within NIE which manages the contracts and sets policy for the system. For this network of clearinghouses there are quantitative data available concerning acquisitions, products, activities and use. It should be noted that the use of ERIC directly through the Clearinghouses is a small fraction of its use in the nation as a whole. For example, the ERIC system, for which data are presented, represents only 0.38% of the 4500 sites where users have access to RIE. Similarly, public access and use of actual microfiche documents through the ERIC system represent only 2.5% of the 675 organizations which have standing orders for all of the microfiche that are produced. Thus, the figures cited represent far less than the actual usage of ERIC.
STANDING ORDER CUSTOMERS

As of January, 1979, there were 675 standing order subscribers to the monthly editions of ERIC microfiche. These subscribers may be categorized as follows:

- University libraries ......................... 77%
- State education agencies ....................... 6%
- Intermediate and local agencies ............ 10%
- Federal government ......................... 4%
- Other ........................................ 3%

Although EDRS fills orders each year for approximately 70,000 individual titles of ERIC documents in microfiche (37%) and paper copy (63%), it is through these standing-order customers at libraries and other agencies that the public has by far the greatest access to the information contained in the ERIC system. For example, one institution alone (San Mateo Educational Reference Center) duplicated over 160,000 ERIC microfiche in 1978.

ACQUISITION AND SELECTION

Documents for consideration for input to ERIC are acquired in a number of different ways: (1) clearinghouses have established linkages with over 123 professional associations in their respective scope areas in order to become aware of their documents; (2) general solicitation for documents is made through newsletters and other outreach activities; (3) specific solicitation for individual titles that have come to the attention of clearinghouse staff are made through professional contacts with the
field; (4) standing arrangements are made by clearinghouses with over 479 institutions, organizations and associations for documents; (5) the ERIC processing facility solicits and has standing arrangements with 161 government and international organizations for the regular acquisition of documents; and (6) unsolicited documents are forwarded to the system by individual authors. In this way the ERIC system acquires over 30,000 educational documents a year, of which approximately 16,000 are selected each year for input and announcement in RIE. Responsibility for selection rests with the individual ERIC clearinghouses. General system criteria specified in the ERIC Processing Manual (ED 092164) are overlaid with clearinghouse criteria pertinent to their subject matter areas.

Documents are announced monthly in RIE in one of three categories: both in microfiche and in paper copy format (74%); only in microfiche format due either to copyright restrictions or reproductibility problems that would prevent paper duplication (21%); and not available in either microfiche or paper copy but considered to be of such significance that they should be announced to the educational community (5%).

In all such cases availability and cost are cited.

RESOURCES IN EDUCATION (RIE)

Approximately 4500 agencies receive RIE. Subscribers are predominately college and university libraries, although professional associations and public libraries also subscribe.
Over 60 countries are represented on the subscription list.

CURRENT INDEX TO JOURNALS IN EDUCATION (CIJE)

Approximately 2800 libraries, agencies and individuals subscribe to CIJE which, as a monthly publication, announces and catalogs educational articles that have recently appeared in over 700 educational journals and periodicals. In one third of these journals all articles included are indexed and announced in CIJE.

INFORMATION ANALYSIS PRODUCTS

ERIC was established as a decentralized system primarily to capitalize on the subject matter expertise existing in various areas of the country. Clearinghouse management and personnel reflect this expertise. Through their contacts with their respective fields, with the user community in these fields, and with the help of advisory groups, clearinghouses are able to identify important topics in their scope areas. Each year they commission information analysis products which deal with these topics and with particularly significant priorities in their fields. These products range from extensive, annotated bibliographies to knowledge synthesis products which consolidate information on research and practice in these areas. Over 150 information analysis products have been produced each year for over ten years. They represent an important resource to the field of education because of the information needs they satisfy and the consolidation of the knowledge in the various areas which are represented.
Clearinghouses disseminate these products to key associations and educators, publicize them through appropriate professional journals and newsletters for sale through revolving fund accounts, and make them available in microfiche and paper copy through the ERIC system. In the past year over 150,000 copies of ERIC products were purchased by individuals in the field of education representing a user investment of over $270,000. Over 300,000 free copies of materials were disseminated.

ACTIVITIES WITH PROFESSIONAL ASSOCIATIONS

During 1979 ERIC will be represented at 118 meetings of professional associations. This representation is important to the continued flow of documents into the system as papers are collected and contacts are made to provide for acquisition of documents. Because clearinghouse personnel are recognized experts in their subject areas, they have been invited to make presentations at 80 of these meetings. Clearinghouses will also operate booths at 71 of the meetings in order to create further awareness of ERIC and its utility to educators.

WORKSHOPS

Clearinghouses also conduct workshops at meetings of professional associations, for special groups of educators, schools of education, librarians, and standing order customers for the ERIC microfiche.

Since standing order customers represent a unique linkage with the user community, this group has been singled out for
special attention in two of the past five years. Librarians and others who subscribe regularly to ERIC products have been trained, through workshops in 1975 and 1979, to create awareness of ERIC and provide assistance to their users. A small sample of libraries has recently estimated that they train approximately 800 ERIC users each per year, giving a total exposure to several hundred thousand ERIC users. In addition to 236 workshops attended by over 8,000 participants, primarily teachers and administrators, 23 workshops will be held in 1979 for representatives from over 600 standing-order libraries.

USER SERVICES

Although building the data base is the primary mission of clearinghouses, these clearinghouses are also open to the public who may seek assistance in solving educational problems through use of ERIC materials and search tools. Across the clearinghouses during the past year, there were over 19,000 visitors who utilized these services. Clearinghouses conducted over 4600 computer searches, most of them provided for users on a cost-recovery basis.

Other requests for assistance or information do not require the use of computer searches. Some of these requests for information may be answered by information analysis products or other off-the-shelf publications; some require manual searches for specific titles; and others are referred to more appropriate sources. In 1978 the system answered over 85,000
such individual inquiries from the educational community, many of whom were teachers and administrators actively engaged in the educational process.

JOURNAL ARTICLES

There are a large number of professional associations, both national and local, which serve educators across the country. They serve broad interest groups such as the American Education Research Association and the American Association of School Administrators as well as more specialized interest groups such as the American Association of Physics Teachers or the National Council of Teachers of English. Many of these associations publish journals through which they communicate with their membership, most of whom are practitioners in the country's school systems. Most of the ERIC clearinghouses have arrangements with many of these journals to provide copy for regular columns and for the announcement of ERIC products and services. Approximately 110 different educational journals regularly carry contributions and columns from ERIC clearinghouses. These journals are published at intervals ranging from monthly to semi-annually and reach a combined circulation of over 175,000 educators.

INFORMATION BULLETINS

In order to disseminate information about activities in their subject areas, clearinghouses maintain mailing lists for the purpose of publishing and distributing information
bulletins. Because the mailing lists consist of special interest groups, they represent an efficient form of "targeted" communication. During 1978 the 16 clearinghouses distributed 36 information bulletins to over 170,000 individual educators. This program of supplying targeted communications is in the process of being expanded, and in 1979 approximately twice as many information bulletins will be prepared, providing for even more effective communication through this dissemination mechanism which address the specialized interests of educators.

COMPUTER SEARCHING

ERIC was originally designed as a file which would have characteristics suitable for computer searching. With over 340,000 citations in RIE and CIJE, the computer is essential to perform comprehensive searches for specific subject matter. Over the years, computer searching has progressed from independent centers, mostly in universities, using batch-process searching on their own computers, to on-line interactive search services with sophisticated programs that permit searching of the entire resume, including abstracts, descriptors, and the identifiers. Although the major on-line search services provide access to many more files than ERIC (in one case over 100) ERIC is the most heavily used file.

The Directory of ERIC Computer Search Services published in November, 1978 lists 341 locations at which educators can have computer searches run of the ERIC files. However, the
The actual number of locations which conduct ERIC searches is significantly greater, numbering in the thousands, since the directory lists only those willing to provide services to outsiders, usually on a cost-recovery basis. It is estimated that the number of on-line computer searches of the ERIC file at four major vendors is now over 100,000 per year. This does not include the number of searches which are run at more than 50 other institutions which also subscribe to the ERIC computer tapes and have their own computer search capabilities.

INFORMATION CENTERS

Of the 658 subscribers to ERIC microfiche, not directly associated with the system, are a number of centers which specialize in providing comprehensive information in response to teacher's and administrator's requests. Among these centers are 34 State education agencies which have received NIE Capacity Building Grant awards to develop dissemination systems to provide information to educators. Although ERIC is not the only source of information used by these centers, it is the primary source used to provide information on the topics requested. ERIC has worked closely with State education agencies over a period of 10 years to help them provide information that satisfies the needs of their users. In addition to information centers run by State education agencies, a number of highly successful intermediate agencies also provide such services. Examples of these include the San Mateo
Educational Reference Center, San Mateo, California (SMERC),
Research and Information Services for Education, King of Prussia, Pennsylvania
(RISE), Merrimac Education Center, Merrimac, Massachusetts (MEC),
and the Area Cooperative Educational Services in New Haven,
Connecticut (ACES). These services provide high quality com-
prehensive information services in education and have amassed
a great deal of experience over the years in serving the needs
of educational practitioners. SMERC, one of the largest,
last year conducted over 25,000 computer searches of the ERIC
files, primarily for classroom teachers.

TECHNICAL ASSISTANCE ACTIVITIES

In recent years an increasing number of State education
agencies have initiated plans and activities to build their
own files of documents, practices and human resources. These
agencies have recognized the importance of designing document
files that will be compatible with the ERIC file. This design
permits similar search strategies and, to the degree the file
is compatible, exchange of data between files. For the past
eighteen months, ERIC has provided technical assistance at the
request of State agencies wishing to design ERIC compatible
files. States have expressed appreciation for this assistance
and have found it useful.
From its inception the ERIC system was designed to utilize technology and to make constructive changes for improvements without disrupting the basic nature and mission of the system. Some of these changes were designed to bring about more effective input into the system; others were in response to user needs to permit more effective utilization of the ERIC files. Briefly, changes within the past two years include:

- Workshops for standing order customers (SOCs)
- List of documents unavailable on microfiche provided to all SOCs
- All pages filmed in right-reading orientation on microfiche
- Increased quality control measures (has reduced problem documents by a factor of three)
- On-line (computer) ordering of documents from EDRS
- Computer searching in all ERIC clearinghouses
- Identifier clean-up to reduce "scatter" of uncontrolled identifiers
- Arrangements with professional associations for greater printing and distribution of information analysis products
- Free microfiche copy to contributing author
- Review and change of RIE format
- Increased solicitation of significant foreign documents
formal arrangements with major education groups and organizations for automatic acquisition of documents
Use of optical character recognition for input of data
New data fields: geographic origin, language of document and governmental level from which document originates
New Directory of ERIC Microfiche Collections
New Directory of ERIC Search Services
In addition to the changes which have already been made, a number of studies or activities for system improvement are under way or scheduled for implementation in the near future. Examples of these include the following:
  Vocabulary Improvement Project to review and revise descriptors used to access the ERIC system
  Bibliography of articles and studies about ERIC
  Directory of AIE and CDE subscribers
  New microfiche products:
    Monthly AIE in standing order collection
    Annual accumulations of AIE with annual indexes
    Cumulative Title Index
    Cumulative Author Index
    Cumulative Descriptor and Identifier Usage Report
  Revised publication-type codes allowing users to search by the type of document
  Publication-type index for AIE
Price codes in RIE to prevent retention of out-of-date prices

Slide-tape orientation to ERIC with visuals on color microfiche

Video-tape presentations of ERIC training material

Assembly of ERIC system materials for new standing order customers

Studies and projects with implications for ERIC:
   Technology study, to investigate how technology can be used to improve input and access to the system;
   Collection of user data;
   Acquisition-and-selection study, to improve acquisition techniques and selection criteria;
   Seminars on needs, technology and economics of information systems

SUMMARY

While ERIC is not used by all educators, the figures cited above indicate that it has had a large and significant use by the educational community. In the future, more activities are planned to provide better awareness and access to the ERIC file and to the information analysis products produced by the clearinghouses. In this way, information produced by researchers in educational laboratories, R&D centers, universities, and schools and classrooms can be made even more widely available to teachers and administrators of the nation in order to promote rational decisions for improving educational practice in the nation's schools.