DOCUMENT RESUME

ED 047 166                          24                        AA 000 659

AUTHOR          Carter, Launor F.; And Others
TITLE           Report of the ERIC Management Review Group.
INSTITUTION     National Center for Educational Communication
                (DHEW/OE), Washington, D.C.
BUREAU NO       BR-0-8077
PUB DATE        20 Oct 70
NOTE            32p.; In fulfillment of Order No. 0-8077

EDRS PRICE      EDRS Price MF-$0.65 HC-$3.29
DESCRIPTORS     *Administrative Policy, Centralization,
                *Clearinghouses, *Contracts, Educational Objectives,
                Information Dissemination, *Management, *Performance
                Specifications, Systems Analysis

ABSTRACT
                The mission of the ERIC Management Review Group was
to examine the practices and procedures used by Central ERIC
Management in their guidance and management of the 19 ERIC
clearinghouses. The major topics covered in this report are:
recommendations; the role of the clearinghouses; the bibliographic
and documentation function; the interpretation and analysis function;
development of relationships with "Linkage Organization"; direct
services by the clearinghouses; support for emerging areas of
interest; and ERIC Clearinghouse management. Appended is a list of
Review Group Members. (LS)

In Fulfillment of Order No. C-8077

REPORT

OF THE

ERIC MANAGEMENT REVIEW GROUP

October 20, 1970

1

REPORT OF THE ERIC MANAGEMENT REVIEW GROUP

I. INTRODUCTION

The mission of the ERIC Management Review Group was to examine the practices
and procedures used by Central ERIC Management in their guidance and manage-
ment of the 19 ERIC clearinghouses.  We were also to comment on the organi-
zation and operation of the clearinghouses themselves.  Primarily, we
were concerned with the policies that had been set up by the Central ERIC
Management Group in defining their relationship with the clearinghouse
directors and with the reports and management procedures which were being
followed.  The review group was not asked to examine the management of the
central ERIC facility as it relates to the activities of central process-
ing, the computer operations of Leasco, or the microfiche and hard-copy
production activities of NCR.

Similarly, it was not a part of the mission of the Review Group to examine
larger questions such as the role of ERIC in the general education infor-
mation network nor to evaluate the role which ERIC products play in the
general information system of educational practitioners.  Inevitably, the
Group was drawn into discussions regarding these larger roles and, as
appropriate, comments will be made on these roles as they relate to manage-
ment problems.

Almost inevitably the report of a review group highlights possible short-
comings or areas needing attention.  This report is no exception.  But we
would be remiss if we did not express our appreciation of the very real
achievements of the ERIC system and those responsible for developing it.  A
system has been developed which contributes greatly to the needs for educa-
tional communication.  The Director of the National Center for Educational
Communications, the Director of ERIC, and his staff were most cooperative
and helpful in supplying information, in discussing problems, and in
interacting with the Review Group in a frank and positive manner.

This report is organized as follows:

o

## II. RECOMMENDATIONS

Recommendations and suggestions are mrde at various points throughout the
report.  In this section they are brought together for easy reference.
At times their summary character may reflect too dogmatic a position or
too simple a treatment since they are separated from the context which,
hopefully, gives them clarity and qualification.  The major recommendations
of the Management Review Group follows:

1. Central ERIC Management should clarify the relative emphasis to be
placed on serving users wjtn widely differing needs.  If the primary
audience for ERIC products is those practitioners in state and local
education agencies, this should be clearly stated as guidance to
clearinghouse directors.  (See pages 7 - 9, 19, 20, 27, and 28.)

2. Central ERIC should issue guidelines to clearinghouse directors
regarding the content, intended audience, format, and level of
analysis and writing of interpretive reports.  (See page 18 - 21.)

3. Central ERIC Management should examine the relative value of the
report literature, curriculum  and teaching materials for inclusion
in ERIC.  The present inclusion of primarily the report literature
no longer seems justified in view of the apparent emphasis on ERIC's
service to practitioners.  (See pages 16 - 17.)

4. It is our understanding that the Central ERIC Management does not
place a high priority on the rendering of direct services by clearing-
houses.  In view of the large number of requests made for such services,
it is suggested that this position be reevaluated, particularly by a
careful analysis of the linkage between the ERIC system and the ultimate
users.  (See page 22 ff.)

5. While recognizing the quality of the ERIC production system, there
does not seem to be sufficient emphasis on the "marketing" of ERIC

4

services; that is to say, the resources available through ERIC need
to be actively and vigorously brought to the attention of potential
user groups.

6. It is suggested that guidance to clearinghouse directors should be
made explicit, in writing, perhaps through a series of policy guidance
documents. (See pages 27-28.)

7. Central ERIC Management should review, clearinghouse by clearinghouse,
the wide variation between clearinghouse functions as revealed in FY 69
expenditures (and presumably in similar FY 70 figures) to determine if
they are consistent with the policies and guidance that may result from
the previous recommendations. (See pages 9-10.)

8. Central ERIC Management has a well formulated management plan as
it relates to clearinghouses. It is recommended that a detailed
examination be made, clearinghouse by clearinghouse, of the extent
to which the administration of the plan has been followed year by
year. (See pages 23 and 24.)

9. Preliminary information suggests that a considerable savings might
be made through centralization of the more routine aspects of document
processing. The Central ERIC Staff should study this possibility to
see if savings would actually be realized and how centralization would
impact on related clearinghouse activities. (See page 18.)

10. Central ERIC should study present practices regarding the criteria
for selecting material, bibliographic format, characteristics of
abstracts, etc. to assure that ERIC practices are maximally compatible
with other information resources frequently used by libraries and
information centers.

11. Central ERIC Management should sponsor studies of the criteria to maximize the utility of various report areas as a means of obtaining guidance regarding the extent that ERIC should sponsor information activities in these several areas. (See pages 12 - 16.)

12. The National Center for Educational Communications should have a plans and analysis capability and associated resources which allow for prompt response to rapidly developing areas of interest. (See pages 22 - 23.)

13. It is recommended that the expressed intent of Central ERIC should be to continue individual clearinghouses on at least a three-year basis, provided there is satisfactory performance and funding and priorities permit. (See pages 25 and 26.)

14. It is recommended that USOE establish an advisory group for the National Cent·· for Educational Communications. (See page 29.)

## III. THE ROLE OF CLEARINGHOUSES

### A. Relative Priority of Clearinghouse Activities

Since an evaluation of the management functions relative to the clearing-houses was one of the missions of the group, it was important for us to understand the role and operations being performed by the clearing-houses. We recognize that the several activities being undertaken by the clearinghouses have changed over time; originally the major emphasis was on report collection and bibliographic processing, while now increasing emphasis is placed on the analysis of the implications of these reports for educational activities. In trying to understand the evolving priority of functions at the clearinghouses we drew up a table which seemed to reflect the opinions of Central ERIC Management as to the relative emphases on the different activities being conducted by the clearinghouses.

. Table 1

FUNCTIONS AND PRIORITIES OF ERIC CLEARINGHOUSES

| Function | Priorities by Time Period in ERIC Histo | | |
|---|---|---|---|
| | Early | Present | Future |
| 1. Document Oriented Activities: | Highest | Middle | Tied for Middle |
| Acquiring/Abstracting/Classifying Journal Citations Developing Files of Local Interest | | | |
| 2. Interpretation and Analysis Activities | None | Highest | Highest |
| Preparing Special Reports Commissioning Interpretive Papers | | | |
| 3. Developing Linkages: | None | Tied for Lowest | Tied for Middle |
| Involving Professional Societies Sponsoring Special Seminars Summer Conferences Relating to Regional Information Centers | | | |
| 4. Direct Services: | None | Tied for Lowest | Lowest |
| Answering SEA and LEA Requests Services to Individuals Responding to Letters, Inquiries, Visits | | | |

As the table indicates, the early history of the clearinghouses, from the
time of their being founded and for a year or two thereafter, placed major
emphasis on the collecting of report documents and their analysis for entry
in the abstract service of ERIC, "Research in Education." As time went on,
the Central ERIC Staff recognized that the simple availability of an
abstracting and bibliographic service was not sufficient to have a
marked influence on practitioners and researchers in the education field;
therefore, priority shifted from the processing of report to the analysis
and interpretation of material contained both in RIE and in the published

literature.  While the documentation activities of the clearinghouses
were still important, the mechanical aspects of handling the report
literature had been well worked out and routinized.  The professional
directors of the clearinghouses were able to turn their attention to
more analytic and interpretive questions.  The Central Clearinghouse
Staff indicates that they now hope these trends will be further
emphasized, with the clearinghouses taking a still more active role
in interpreting the results of research, development, and innovative
practice throughout the education community.  In addition to analytic
reports, the importance of special seminars and the communication
aspects of professional societies, the role of regional and state
information centers are recognized and given emphasis.  It was sug-
gested that in the future the document-oriented processing activities
will, perhaps, be given a still lower priority in the overall operation
of the ERIC clearinghouses.

B. The Users of ERIC Products

In considering the function and priorities of the clearinghouses, it
became apparent that there was not a clear definition of who were the
prime users of clearinghouse services.  Probably in the early time
period the clearinghouses tended to be oriented toward the academic
researcher and those workers in the then recently established regional
development laboratories.  As time went on, it became evident that
there was a great need to broaden the role of the clearinghouses from
their emphasis on research reporting to an emphasis on overall
educational resources.  With this change in emphasis, there was a
corresponding change in the audience toward whom the ERIC clearing-
houses were oriented.

It now seems to be the belief of the Central ERIC Clearinghouse
Management that the ERIC system should be primarily oriented toward

serving the larger educational needs as represented by the requirements of the practitioners in the local and state educational agencies. This shift from a service oriented primarily to the researchers to one for the practitioner has resulted in a corresponding change in the role of the clearinghouse and the clearinghouse director. Generally, the researcher is satisfied if he has a system which makes available a bibliographic record of the existing literature. He wants to have a descriptive or evaluative abstract of the literature, as well as the appropriate bibliographic references. It is his mission to analyze this literature and condense it in accordance with his needs. On the other hand, the practitioner has quite different needs. Generally, he has neither the time nor the inclination to make a detailed study of all the relevant literature on a particular problem he may face in his day to day duties. Rather, he wants an authoritative and succinctly stated summary of the relevant knowledge, as well as an interpretation which will lead to wise action on his part.

The review group recognizes that the statement of a dichotomy, with the researcher on the one hand and practitioner on the other, is too simple and that their needs tend, to some degree, to overlap. Nevertheless, we gained the impression that the differing requirements of these two roles had not been recognized clearly when giving guidance to the directors of the clearinghouses. There seemed to be a feeling by some on the ERIC staff that traditional bibliographic services were important and a belief that this role of the ERIC clearinghouse should be emphasized and continued at a high level. But again, there was a recognition that the ERIC system must go beyond its document-processing activities and that its ultimate success would be judged by the influence it had on the everyday practice of the educational community. It is perhaps enough to simply state these points to lead to the suggestion that the Central ERIC Management is

somewhat conflicted regarding the relative emphasis that should be
plac.d on these roles  As a result, the guidance to the clearinghouse
directors may lack something in clarity.  Guidance should be given
in functional terms such as background needed to understand the
report, newness of topics to be covered, level of detail, style, etc.

## C. Difference in Emphasis between Clearinghouses

In considering the allocation of resources among the clearinghouses
and the way in which these resources were utilized within the clearing-
houses, the Review Group had available a detailed analysis of the ERIC
clearinghouse expenditures for FY 69.  This analysis showed that the
clearinghouses had received about $3 million in federal support in
FY 69 and that the average clearinghouse had received approximately
$175 thousand.  The figures detailed the way in which the clearinghouses
had used their resources in three major categories:  those related
to document acquisition, selection, and processing; secondly, those
activities related to the preparation of interpretation and analysis
reports, newsletters, bulletins, and other linkage work; and, thirdly,
those expenditures related to the overall management of the clearing-
houses, their training activities, advisory boards, and public relations.
As a general rule, approximately a third of the resources were devoted
to acquisition and processing.  Another third were devoted to analysis
and dissemination activities, and the remaining to administration and
special projects.  While these generalizations are true for the clear-
inghouses as a whole, we note wide variation from clearinghouse to
clearinghouse.  For example, in the area of document acquisition and
processing, one clearinghouse spent as little as 20% of its resources
on these activities, while another spent just over 55% on them.  In
the area of analysis, interpretation, and linkage work, one clearing-
house spent about 20% of its resources in this area, and another spent
almost 65% of its resources on these activities.  Similarly, one

clearinghouse seemed to have used as little as 10% of its resources on administration, advisory boards, and public relations, whereas another spent as high as 40%.

These wide variations in level of expenditures could be accounted for by several factors. FY 69 was the first year in which such statistics had been accumulated and it is quite possible that the clearinghouses had different practices in allocating expenditures under different categories, and thus the wide variations are more a function of book-keeping than they are of the reality of expenditures. On the other hand, the Central ERIC Clearinghouse Staff indicated that they were aware of quite a degree of variation from clearinghouse to clearinghouse in the emphasis that is placed on the several functional activities. While there should not necessarily be great uniformity among the clear-inghouses, the existence of wide variations raises question as to the extent to which the clearinghouse directions were operating under common assumptions regarding the relative importance the Central Clearinghouse Staff places on these different activities. The Review Group sug-gests that the Central ERIC Clearinghouse Staff examine the FY 69 expenditures, and the FY 70 expenditures just now being collected, to see if they are in agreement with the relative emphasis being placed on expenditures and can rationalize the variations from clearinghouse to clearinghouse. It may be found that the several clearinghouse directors are following their idiosyncratic interpretations of guidance from central ERIC and that more uniform guidance is called for.

IV. THE BIBLIOGRAPHIC AND DOCUMENTATION FUNCTION

A. The Use of ERIC Materials

The Review Group did not have as one of its responsibilities an analysis of the functional utility or extent of utilization of the ERIC system. Nevertheless we were inevitably drawn to the question of the way in

11

which the ERIC bibliographic services are being used and the different
kinds of users. Most of the Management Review Group members have had
experience in the use of ERIC materials and some were in day-to-day
contact with these materials. In particular, three different members
described how they used ERIC materials.

In the San Francisco Bay area there is the Information and Dissemination
Center for Educational Materials supported by local school dist-icts.
One of the major resources available to this center is the various
ERIC materials. It is reported that these materials are used by the
dissemination center on a daily basis. For example, in February 1970
the Center had 55 individual requests which were satisfied by search of
the ERIC material. As a result of these searches, 850 microfiche and
about 350 photocopies were supplied to requesters. Had it not been for
the availability of the ERIC bibliographic resources, these requests
for service could not have been efficiently fulfilled.

Recently the New York State Education Department has started an
Educational Resource Information Center giving service to local educators.
Although this service was started only in January of 1970, by April
and May it was receiving monthly over 300 requests for services. Again,
these services were dependent on the ERIC materials being supplied
through the clearinghouses and the central ERIC system.

In a different area, information was collected regarding the use of
ERIC materials at the library of Teachers College, Columbia University,
New York City. Users of the system during one week were queried
regarding the reason they were using the materials and their educational
status. Of the 49 users, 40 were students, while four were researchers,
and five were outside visitors. Of these users, 19 were using the
system in connection with class assignments, 16 on term papers, nine
on dissertation searches, and the remainder on miscellaneous activities.

These examples are cited to give a feeling of the way in which the
ERIC bibliographic materials are being used through the country.
Without making an exhaustive evaluation, the Review Group is con-
vinced that the ERIC bibliographic materials form a very important
and useful resource which is critical to the operation of many infor-
mation services throughout the educational community.

## B. Consideration of the Criteria of Utility

As the amount of report literature in a given field becomes subject
to bibliographic control, a point is reached at which it becomes
prohibitively expensive to capture the last few documents.  In general,
the addition of each new document to a bibliographic service becomes
less and less cost-effective in terms of the incremental information
which is added to the base bibliographic file.  When a new subject area
is being developed, and bibliographic control is first being exercised,
the addition of new items of information adds considerably to the store
of total organized information regarding the subject, but as the file
becomes larger and the total amount of information becomes more definitive,
then the addition of any single new piece of information, on the average,
adds less to the total amount of information.  This point is made to show
the dilemma facing all bibliographic and information resource stores,
namely, the problem of how exhaustive and complete the system should
try to be.

Related to this is the question of where a particular store of infor-
mation is perceived as lying on the general curve mentioned above.  To
illustrate these points, several hypothetical figures have been drawn.
These figures are not based on empirical evidence but reflect the general
opinion of the Review Group regarding the shape of the curves for these
particular topics.  Figure 1 (page 15) shows the possible shape of the
relationship between the percent of the report literature covered and
the cumulative value of adding new reports for the two areas of tests,

measurements and evaluation and the area of the urban disadvantaged.
The curve for tests and measurement starts at a relatively low level.
This is because tests and measurements is a traditional subject in
education and there already exists a large literature both in book
and journal form.  Thus the addition of new material from the report
literature starts from a large base and each new report does not,
percentagewise, add a great deal to the overall store of information.
On the other hand, the area of the urban disadvantaged is relatively
new and rests on a much less secure theoretical and empirical foundation
than does the area of tests and measurement.  Thus the formation of a
new bibliographic store on urban disadvantaged starts out at a higher
utility level and likewise the addition of each new report adds more
to the total sum of information than does the addition of a similar
item in the tests and measurement area.  The importance of each
clearinghouse's information to the overall fund of information in
its specialty area differs depending on the level of sophistication
and the total am.unt of literature available in that particular
area.  It would be instructive to have curves similar to these for
all the areas covered by the clearinghouses.  No doubt there would
be some disagreement from authority to authority as to the nature of
these curves, but until there is reasonable understanding of the
intercept and slope of the curves, it will be difficult to develop
a rational position as to the emphasis that should be placed on the
bibliographic and document collection activities in the several areas
represented by the clearinghouses.

Figure 2 represents another way of thinking about the bibliographic
materials available from any clearinghouse.  Figure 2 is a possible
representation of the relationship between the percentage of material
covered in the area of tests and evaluation and the cumulative value
of adding a new report as viewed from the perspective of several different

users.  If this representation is correct, it argues that the
practitioner, the student-scholar, and the researcher all receive
about the same amount of information through the addition of items
to a clearinghouse bibliography in this particular area.  This is
based on the supposition that the amount of literature in this area
is already quite great, is covered by a number of different bibliographic
and abstracting services and that the increment derived from any
particular item is not great for any of the user populations.
On the other hand, Figure 3 shows a quite different set of curves
for the area of urban disadvantaged.  The rationale behind these
curves is that for the researcher, the report literature in urban
disadvantaged is, relatively speaking, unsophisticated and unsystematized.
Many of the reports are not based on sound experimental or observational
material but rather are impressionistic and single case studies.  Thus
the researcher finds this material of limited value in his effort to
work in the field.  The curve shows that for each item added, on the
average, the researcher does not gain a great deal.  On the other hand,
for the practitioner who is faced with the problem of working in the
area of urban disadvantaged, the initial formation of a body of infor-
mation, as unreliable as it may be, is still his best source of infor-
mation and probably the only one to which he can turn.  Thus any material
is welcome and the addition of new items adds, relatively speaking,
more to his information about a particular topic.  The student-scholar
tends to fall between these two extremes.  He wishes to understand the
phenomena, to draw generalizations about it, and to be more detached
than does the practitioner who must take action.

A consideration of these figures emphasizes several points.  One is that
the bibliographic functions of the different centers vary considerably
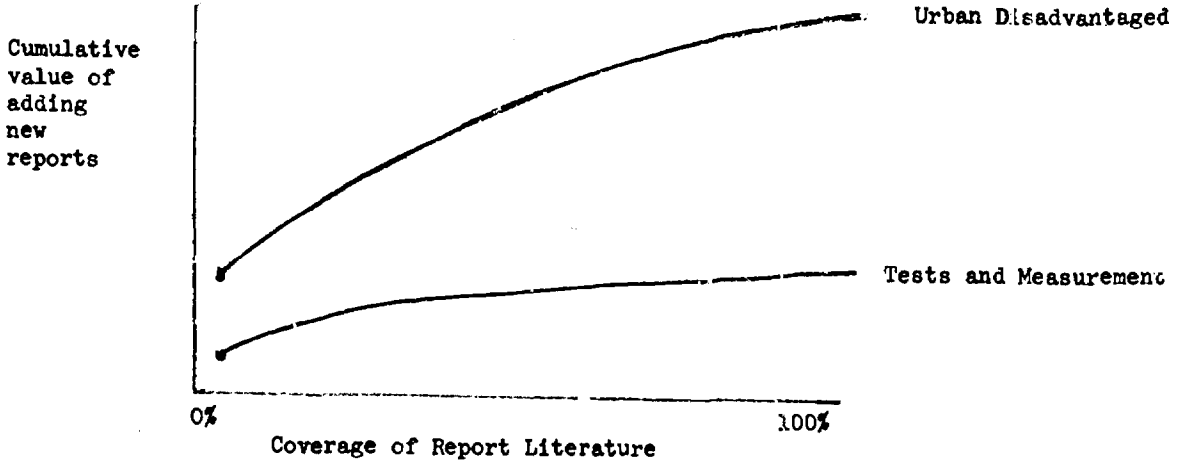in terms of their information utility, that this variation depends on

Figure 1

Cumulative
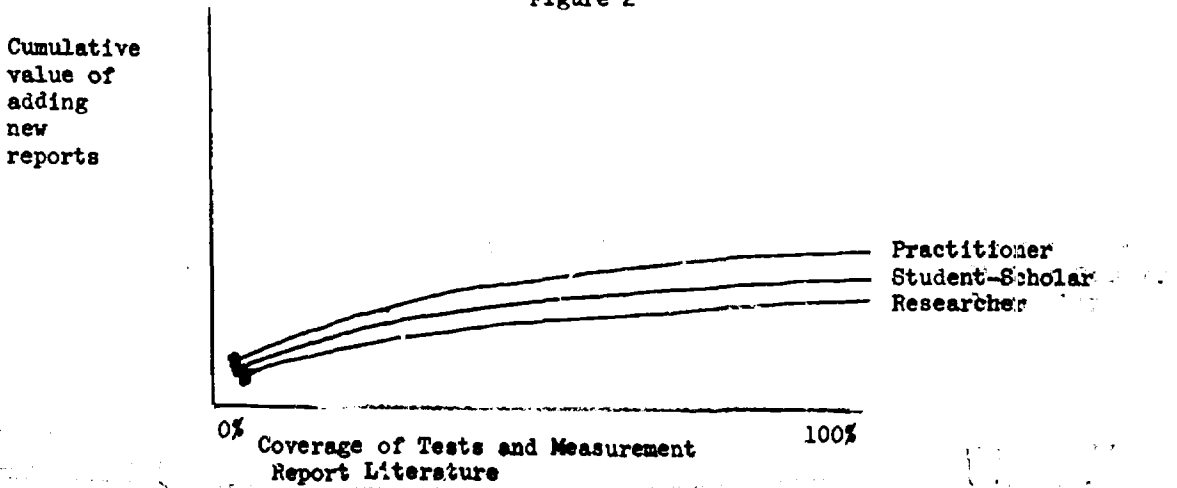value of
adding
new
reports

Urban Disadvantaged

Tests and Measurement

0%                                          100%
Coverage of Report Literature

Figure 2

Cumulative
value of
adding
new
reports

Practitioner
Student-Scholar
Researcher

0%                                          100%
Coverage of Tests and Measurement
Report Literature

Figure 3

Cumulative
value of
adding
new reports

Practitioner

Student-Scholar

Researcher

0%                                          100%
Coverage of Urban Disadvantaged
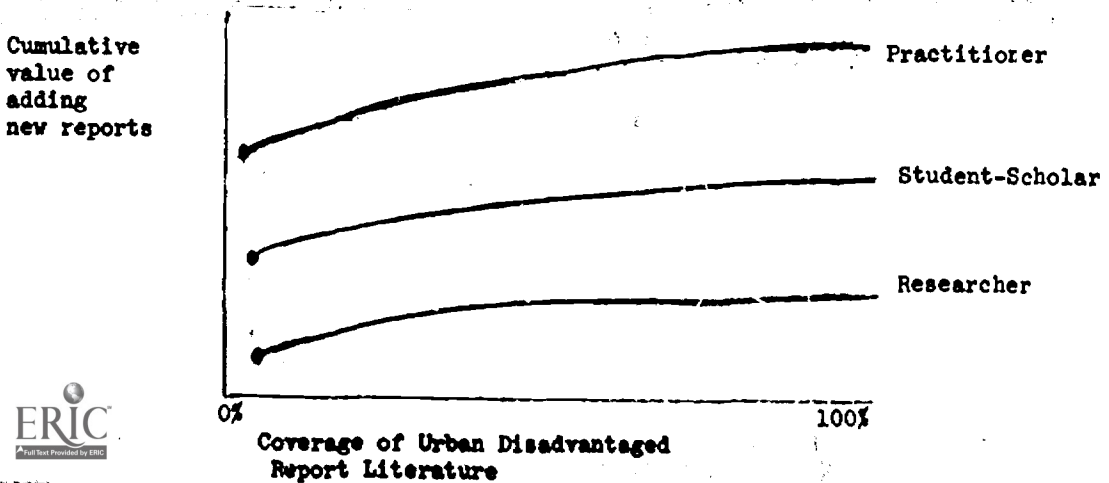Report Literature

.16

a number of factors, but particularly on the state of knowledge, under-
standing, and documentation in any particular field. Second, the
importance of establishing a large ERIC data base differs considerably
from field to field. This variation depends on a number of things,
but particularly on the status of the field, its general support
institutions, the level of development of theory in the field, and
general ability of educators to deal with problems in the area. Third,
the curves emphasize that the importance of the ERIC data base varies
depending on the user. In some areas researchers will find much less
incremental value in adding material to the data base than will
practitioners.

The fourth factor to be considered relative to the curves revolves around
the coordinates at which the present ERIC file stands in the distri-
bution of coverage of the literature. For example, it is conceivable that
in the area of tests and measurement the literature is at a 75% coverage
point, whereas in the area of the urban disadvantaged it is only at a
10% coverage point (or perhaps the percentage should be reversed). The
ERIC management should have a perception of where each clearinghouse
stands relative to this question and thus be guided by the relative
emphasis that should be placed on bibliographic activities at the
several clearinghouses. Probably not too much emphasis should be
placed on the exact shape of the curves presented here. They do
represent, however, a method whereby the ERIC management could examine
the relative importance of the literature being processed by the
several clearinghouses.

C. Source of ERIC Documents

The above leads to the question of the source of the documents that
are covered in the ERIC bibliographic system. It is reported that
the RIE portion of the system receives about 15% of its documents from

17

mandatory sources; that is to say, from reports which are generated
as the result of studies sponsored by the Federal Government and
which are required to be reported in ERIC. The other 85% are either
volunteered to the ERIC clearinghouses directly or the ERIC clearing-
houses have established relationships with authors and professional
organizations which know that they would like to receive report
literature. It is reported that of the 85% volunteered to the ERIC
clearinghouse, editors screen the material and reject about two-thirds
as either being of local interest or of being repetitive of material
already contained in RIE. It should be noted that the clearinghouses
do not abstract and enter into the RIE file material which appears in
the regular journal literature; rather, citations are entered in CIJE,
which ERIC sponsors, and is published through a commercial organization.

Central ERIC should consider the quantity and quality of material enter-
ing and being retained within the ERIC system. As the data file grows
it will become excessively large for ease of handling. Similarly, some
material which entered the system in the beginning will become obsolete
or will have been replaced by later material. Consideration should be
given to dropping some material from the file. Likewise, it may become
desirable to partition the file by subject matter or some other functional
category. This would enable users to search a data base more nearly
tailored to their interests.

Another problem which needs to be considered is the basic nature of the
material to be included in the ERIC system. As has been mentioned, it
originally started with emphasis on the research literature. As the
system has evolved there has been more emphasis on the total resources
available in education rather than on just research. There needs to
be an examination of the question of the kind of material that should
be entered into ERIC. In addition to the research literature should
RIE contain reports on material regarding curriculum, or teaching

materials available in different subject areas?  In general, the
tendency ha- :en to limit ERIC to the report literature, but there
is a growin₀ ╷╷ling that this may be too narrow an orientation.

D. Centralized Processing

There is question regarding the desirability of centralizing much of
the processing that is now carried out at the several clearinghouses.
As the processing activities have become more and more routine it has
become increasingly feasible to centralize this portion of the ERIC
document work.  Under this scheme the documents would still be col-
lected by the several ERIC clearinghouses but much of the biblio-
graphic functions and the abstracting activities would be centralized
in one place.  It is suggested that such a centralization might sig-
nificantly decrease the cost of processing.  It is reported that the
costs of bibliographic and abstracting functions in the current ERIC
system average about $50 an item.  It has been suggested that some
other indexing and abstracting services are able to produce their
material at a significantly lower rate.  The Management Review Committee
did not have the resources to examine this question in detail but does
recommend that the ERIC central staff undertake an intensive examination
of the funds that might be saved through the centralization of process-
ing ₒctivities.  It should be emphasized that such a change does not
necessarily decrease the importance of the ERIC clearinghouse, since
many of the functions that might be transferred are of a routine
nature.  On the other hand, careful consideration needs to be given
to the extent to which savings would actually be achieved, and also
consideration needs to be given to the possibility that many activities
at ERIC clearinghouses may have a great interdependence.

V. THE INTERPRETATION AND ANALYSIS FUNCTION

Each ERIC clearinghouse generates products that summarize, review, and
synthesize the state of knowledge on topics within its area of interest.

Originally, ERIC management placed primary emphasis on the collecting
and processing of report literature. In recent years, however, the
emphasis has changed by placing priority on the production of interpretive
papers, state-of-the-art reviews, etc. In the last three years 234 annotated
bibliographies on selected topics have been produced by the clearinghouses.
During the same period 223 review and state-of-the-art papers have been
published. The emphasis on these reports is reflected in the increasing
number year by year. In FY 68 there were 32 review and state-of-the-art
papers; in FY 69 there were 81; and in FY 70 there were 110.

In producing this material the responsibility for its initiation and production
rests almost entirely with the director of the clearinghouse. It is expected
that because of his expertise in the various substantive areas he will be
alert to the topics which will be of greatest interest to his colleagues and
others using ERIC products. Generally, he will decide the topics to be
covered and the method to be used in obtaining the paper. Frequently he
will consult with his other colleagues at the clearinghouse or in the
educational institution where the clearinghouse resides. Frequently he will
also review his plans with his national advisory board. The Review Group
has the impression that while the Central ERIC Staff has indicated the
priority they place on the general production of interpretive and analysis
materials, it has remained largely to the discretion of the clearinghouse
director as to what materials will be produced, the audience for whom they
are intended, and the method by which they should be produced.

Although the Review Group did not make an extensive study of the process of
producing such reports, it is our general observation that sometimes these
reports are written by the clearinghouse director himself or in collaboration
with members of his staff. At other times, the director asks knowledgeable
professionals to produce reports on a particular subject. The clearinghouse
usually supports the author by preparing bibliographic material, in supplying
reports in its files, in giving secretarial support, and, at times, remunerates
the author by offering an honorarium. Apparently, what support and whether or

not an honorarium will be given and who will author the reports is almost
entirely at the discretion of the clearinghouse director.

In considering interpretation and analysis reports, the Review Group was
impressed by the degree to which the clearing⁺)use directors have been given
freedom to produce materials. While we believe it important that the
di.ectors be given freedom of expression in selecting appropriate topics
and choosing the authors of reports, we also feel that somewhat more specific
guidance should be given by the Central ERIC Clearinghouse Staff. Among the
questions we have in mind is "who is the audience for whom the reports are
intended?" It is our impression that considerable ambiguity exists regarding
this question. Some reports seem to be directed more toward the researcher
or university scholar than toward the practitioner. Some reports seem to
involve the reporting of original research while other reports are summaries
of the literature. It is our impression that the Central Clearinghouse Staff
intends these reports to be directed toward the practitioner in the field,
particularly toward the teacher, curriculum supervisor, or the school
principal, rather than toward the more scholarly or research-oriented person.
Whatever the intention, the clearinghouse central staff should give clear
guidance to directors on this point.

We were also struck by the fact that the various reports differ considerably
in format and level of content. Some reports we examined had no abstracts or
summaries. Some were carefully edited, printed on quality paper, and
represented very high quality products. On the other hand, others seemed
to be rather hastily formed, were mimeographed, and may not represent the
kind of product desired by the Central Clearinghouse Staff. Again, we would
suggest that the Central Clearinghouse Staff consider the question of format,
depth of analysis, quality of the report material, and expense judged
appropriate in producing the reports. The emphasis here is not to reduce
the freedom of clearinghouse directors in producing the reports they con-
sider important but rather to give the directors an understanding of the

attitudes of the Central Clearinghouse Staff as to the goals to be achieved
through the interpretation and analysis operation.

## VI. DEVELOPMENT OF RELATIONSHIPS WITH "LINKAGE ORGANIZATIONS"

The clearinghouses are placed in several different settings. Some of them
are operated by the professional association in the area covered by the
clearinghouse, while others are situated at universities or non-profit
institutions. There is a general feeling on the part of the Central Clearing-
house Staff that it is very important for the clearinghouses to develop
linkages with the appropriate professional organizations. This is done
through the appointment of executive officers or other officials from
professional organizations to the advisory councils of the clearinghouses.
It is also accomplished by having the clearinghouse regularly prepare
material for publication in the professional journals, where there is often
a regular column devoted to ERIC activities. At other times there are major
articles prepared by the ERIC clearinghouse director. While these activities
are considered highly important by the Central ERIC Staff, it is not apparent
that the clearinghouse directors have been given explicit guidance regard-
ing the relationships that should be established. Again, there needs to be
an appropriate balance between central guidance and the initiative and freedom
of the clearinghouse directors in establishing relationships to professional
organizations. The Management Review Group was not supplied with any specific
material on this subject, and thus is not in a position to make any specific
recommendations, except to recognize the importance that professional organizations
play as a communications media to professional educators.

Perhaps even more important is the relationship between ERIC services and
organizations and the many information resource centers which link to the
ultimate users of information. Increasingly, there are intermediate agencies
such as state education departments' information systems and regional
information services which are in direct contact with the practitioner.

These organizations frequently combine ERIC materials with those from other
sources to fill local needs.  The ERIC system is well organized to collect
and make available appropriate information, but activities associated with
assuring that the ultimate customer is served are not as well thought out or
organized.  This latter problem should continue to receive high priority
by the National Center for Educational Communications.

## VII. DIRECT SERVICES BY THE CLEARINGHOUSES

During FY 70 the ERIC clearinghouses are reported to have answered 56,351
direct questions which came to the clearinghouses by mail, by phone, or
through personal requests.  It is further reported that the majority of
these requests came from practitioners and educational decision makers
rather than from researchers.  This large number of requests means that
each clearinghouse dealt with about 10 such direct service requests each
working day.  Clearly, this service consumes resources which might other-
wise be used for bibliographic, document acquisition or interpretive
materials production.  The Review Group has the impression that the Central
ERIC Staff feels that these direct services detract from the major function
of the clearinghouses and should be of low priority.  Again, the Review
Group did not have the time or resources to investigate this question in
any depth, although it should be pointed out that the rendering of such services
certainly must enhance the degree of support the ERIC system receives
throughout the educational community.  The rendering of this service to
practitioners and educational decision makers would seem to be an important
function which apparently is not being adequately fulfilled elsewhere.  The
Review Group suggests that the Central ERIC Staff reexamine their position
on this question, and, having done so, give clear guidance to the clearinghouse
director.

## VIII. SUPPORT FOR EMERGING AREAS OF INTEREST

From time to time new areas of educational interest arise at a more rapid

rate than had been anticipated or they do not easily fall within the domain
of one of the clearinghouses.  Recently the areas of "experimental schools,"
performance contracting, and voucher systems have been much discussed but
the ready availability of information about these areas has been slow to
be systematized.  Continually new areas will arise, frequently in poorly
defined form.  It is suggested that the National Cente· ·or Educational
Communications should, at a very early stage, be in a position to recognize
these emerging interests.  If this idea is accepted, it leads to the re-
quirement for a functionally defined responsibility for planning and analysis
within the Center.

In support of such an activity it might be wise to establish a general or
"current subjects" clearinghouse within Central ERIC.  Such a clearinghouse
could collect information in special or new areas, analyze it, issue
bibliographies, and generally act as a resource for those concerned with
new trends in education.  The material collected and processed by such a
clearinghouse would be of a different character than that usually handled.
Probably it would include newspaper clippings, material from popular magazines,
speeches by administrators and politicians, as well as items from more
traditional sources.

## IX. ERIC CLEARINGHOUSE MANAGEMENT

### A. Management Procedures

The procedures used in managing the ERIC clearinghouses have been
clearly described in a report by Mr. Marron. (1)  From this report it is
apparent that a number of management procedures are used, including
conferences, newsletters, progress reports, technical guides, and
formalized program planning and budgeting methods.  These procedures
seem to constitute a well-thought-out system of management.  For
example, the program planning and budgeting cycle has the following
major steps:

(1) Marron, H.  Management of a Decentralized Information System.
Journal of Educational Data Processing.  1970, 7, 68-73.

-24-

1. Four months prior to the anniversary date of a contract the particular ERIC clearinghouse is visited by the ERIC contract monitor. During this visit he examines the clearinghouse operation in some detail, assessing management control, efficiency, and overall adequacy of the processing plan. He also discusses with the director plans for the subsequent budget year.

2. Three months before the anniversary date a budget session is scheduled at the central ERIC facility in Washington, where appropriate Office of Education personnel and the senior personnel from the ERIC clearinghouse meet to discuss the plans and budget level for the forthcoming year.

3. Following the meeting in Washington a formal letter is sent to the clearinghouse director covering the items discussed in the review session. All problem areas are noted, and the clearinghouse director is invited to react to the points raised by the Central Clearinghouse Staff.

4. As a result of the preceding session and correspondence, the clearinghouse director prepares a formal proposal which is submitted by his sponsoring agency (university, professional organization, etc.) for the continuation of the work of the clearinghouse.

5. When the formal proposal has reached central ERIC, it is processed through the normal Office of Education budget review, contracts and fiscal offices in a routine fashion.

The above will give a feeling for the extent to which the Central ERIC Staff monitors and manages the operation of individual clearinghouses. The Review Group finds little to suggest in the way of improvement on

this statement of management procedures. (Except that the process
might well start earlier than four months before expiration of the
contract.) Some concern is expressed, however, regarding the extent
to which the ERIC staff is able to follow all of the steps mentioned
in the management plan. We have noted instances where site visits
appeared not to have occurred with the frequency specified or where
the formal reaction to proposals did not seem to be as specific or
definitive as the clearinghouse director feels would be most helpful
to him. The Review Group did not have available detailed information
regarding the actual number of site visits made, the actual extent of
central ERIC conferences with the directors or material showing the
evaluative results of these conferences. We consider this to be an
internal management matter which the Director of ERIC and his staff
will want to consider in depth. We would strongly suggest that the
Central ERIC Staff review on a case by case basis the extent with which
they have been able to visit each clearinghouse on an annual basis and
the extent to which they have been able to complete the other elements
of their management plan. It is very important that the clearinghouse
directors receive clear, consistent, and properly timed guidance in
writing.

## B. Contract Matters

Another issue which was discussed by the Review Group dealt with the
nature of the contract entered into between the government and the
sponsoring institution. It is appreciated that because of the nature
of the funds and the work being performed, a contract is a proper
instrument rather than the grant mechanism. While it is important
that the statement of work in the contract be relatively precise in
defining the work to be done by the clearinghouse, it should also be
recognized that the Office of Education is contracting for a professional
service with an educational or professional institution and sufficient
leeway should be given to allow the director to exercise considerable

professional judgment in the conduct of the work. While the contracts
are formally on a year-to-year bas: :, it is the Review Group's opinion
that there should be an understanding developed with each of the clear-
inghouses regarding the relative permanency of the clearinghouse, pro-
viding that adequate funds are available to continue the areas in
which the clearinghouse exists. When a clearinghouse is first
established, it would seem reasonable that, for most fields, there
be an understanding that the clearinghouse will be maintained for at
least a three-year cycle, with the expectation that it would be con-
tinued if performance were satisfactory. In certain stable or basic
areas one might expect that the clearinghouse would continue operation
at a given institution for a longer period--perhaps a five-year cycle.
No matter what the length of the understanding, the sponsoring institution
should be given at least a year's notice if there is an intention to
discontinue a clearinghouse. This length of time seems only reasonable
in view of the fact that most of the clearinghouses are at academic
institutions where yearly appointments tend to be the mode for employ-
ment contracts. It should be kept in mind that unless a reasonable
continuity is maintained, it will be difficult to attract well-qualified
directors and, if this is not done, the quality of the clearinghouse will
suffer. This becomes particularly important as the emphasis of clear-
inghouse products shifts from predominantly bibliographic to more analytic
and interpretive activities.

There was some feeling on the part of members of the review committee
that, at some institutions at least, the ERIC clearinghouses did not
seem to be deriving appropriate benefits from the overhead being paid
to the institution. It was noted that in several cases the clearinghouses
seemed to be housed in substandard or very crowded conditions. There
was a general feeling that the Central ERIC Clearinghouse Staff should
review with appropriate university authorities the extent to which
overhead funds were being used to properly support clearinghouse
operations.

## C. Guidance to Clearinghouse Directors

The Review Group considered at some length the kind of guidance that should be given to clearinghouse directors. It must be remembered that the 19 separate clearinghouses are part of a system serving the education community. As such, the directors of the clearinghouses need to have an appreciation of the overall goals the Central ERIC Staff is trying to achieve in the operation of the total ERIC system. The review committee feels that there may be a need for central ERIC management to clarify several matters in giving guidance to clearinghouse directors. Among the items we have in mind are questions such as the audience which is intended as the primary focus for the ERIC system. We have the feeling that when the ERIC system was first established its target audience was thought of as being largely a research-oriented group. As USOE priorities and goals have changed, the audience which USOE management believes should be the target audience for the ERIC system may have shifted quite considerably to emphasize the educational practitioner and the state and local educational agencies. If this is, indeed, the intent of the Office of Education management, this guidance should be clearly transmitted to the ERIC clearinghouse directors, and their performance should be judged in terms of such guidance.

Along the same vein, it is the Review Group's observation that the relative emphasis of clearinghouse activities has shifted from an emphasis on bibliographic activities to one giving high weight to interpretive and review articles and to linkage with the practicing educational community. If this is indeed the fact, we would wonder to what extent this has been made clear to ERIC clearinghouse directors. Is there a policy guidance series of publications which cover matters of this nature; are such changes in policy transmitted in a suitable fashion? It is our general feeling that overall policy guidance should be written and made quite explicit so that the directors have little

doubt as to the direction the overall ERIC system is evolving. The
review committee would hasten to add that we believe it appropriate
for the central ERIC management to make their policies and guidance
clear to the ERIC clearinghouse directors, but at the same time the
central management should give directors considerable latitude with
respect to the operation of the clearinghouses, although guided by these
general policies.

D. Policy Regarding Interpretive Reports

Continuing the above thought, we wonder regarding the extent to which
it is clear to ERIC clearinghouse directors the role to be served by
interpretive reviews and analysis material. To some extent we have the
feeling that the several directors have developed their own inter-
pretation as to the kinds and levels of reviews that are appropriate.
We found it helpful to think of the planning and production of inter-
pretive reviews in four separate stages. First, we believe there
should be a clear statement by central ERIC management as to what
audiences are considered most important for interpretive reviews and
analysis materials. Are these materials to be written primarily for
researchers, for university and college scholars, or for day-to-day
practitioners and administrators in the field? It is our general
feeling that this issue has not been resolved but that it should be,
so that the clearinghouses can follow the Office of Education guidance
in establishing priorities. Secondly, each ERIC clearinghouse director
will devote time to planning the type of material he will wish to
produce. Again, the question of audience becomes important. If the
material is to be developed for the research audience, the director
will undoubtedly wish to use certain consultants and plan to use
certain authors who would be quite different than those who would
be consulted or used if the audience is made up of general practitioners.
It is believed that at the planning stage the central ERIC management

will wish to review the plans of the several directors regarding the
interpretive material and analyses which they intend to produce in
each contract period. The third area deals with the actual production
of the material. At times it appears that interpretive reviews are
written by the ERIC clearinghouse director himself, at other times
by scholars in the field, much on the order of a journal article. At
other times they are commissioned and written with either a research
or practitioner audience in mind. The level of the audience, the kind
of editorial assistance being used, the format in which the material is
presented, and identification with the ERIC system are all important
and general guidance should be given by the Central ERIC Staff.
Finally, once the material is produced and distributed it should be
evaluated. It would seem that an appropriate part of the duties of
the director of the clearinghouse is to institute a formal evaluation
of the extent to which the material that has been produced by the
clearinghouse meets the guidelines for such materials. On a selective
basis, such evaluations should be undertaken formally, but it would
seem appropriate that informal evaluation be undertaken for every
product.

E. Policy and Advisory Group

Early in the history of the management of the ERIC clearinghouses it
became apparent that it would be advisable to form national advisory
councils for each clearinghouse. It is felt by many directors that
the advisory council has been an important adjunct in their management
of the clearinghouse operation. The Review Group suggests that USOE
consider the desirability of forming a similar advisory group for the
National Center for Educational Communication. It is our feeling
that a policy and advisory group might serve as an important link
to other information systems, to ERIC users, to the educational
community, and to the agencies supporting the educational communi-
cations effort. We believe that such an advisory and policy group

might include among its members several individuals representing
the users groups toward whom the ERIC system is directed.
Similarly, two or three ERIC clearinghouse directors might
appropriately be members of the group. Representatives from several
national or regional information systems should be considered. It
is felt that such an advisory group should not be large, but rather
should be small enough so that a vei; informal and intimate working
relationship could be established. Perhaps quarterly or semiannual
meetings would be appropriate. Basically, it is our feeling that it
would be helpful to the overall communication effort of the Office
of Education if an advisory group were available to assist in the
formulation of overall policy for the guidance of this very important
communications effort.

APPENDIX - REVIEW GROUP MEMBERS

Dr. Launor F. Carter (Chairman)
Vice President and Manager,
Public Systems Division
System Development Corporation

William D. Coats
Director, Educator Feedback
Center and Associate Professor
of Educational Leadership
Western Michigan University
Kalamazoo, Michigan

W. E. Ellis
Director, Office of Research
South Carolina State Department
of Education

Sidney Forman
Professor of Education and
Libraries
Teachers College
Columbia University

Frank W. Mattas
Director
Bay Region Education Resources
Center, San Mateo County
Office of Education
Redwood City, California

Samuel A. Rosenfeld
Chief, Information Sciences Branch
Director Mathematical Sciences
Research Program, National Aeronautics
and Space Administration

Sherman Ross
Division of Behavoral Sciences
National Research Council

Paul D. Hood
Director, Communication Program
Far West Laboratory for Education
Research and Development

Alvin G. Skelly
Executive Vice President
Council of the Great City Schools

Carl E. Wedekind
Director of Education
Research
New York State Education Departme

Philip Wright
Director
New England Research App¹
Center
University of Connectic