ABSTRACT

People who develop information into a consumable form seem at times to work in a vacuum, failing to consider the potential users. Some helpful tips for preparing documents for easy retrieval and use, based upon guidelines followed in the Educational Resources Information Center (ERIC) system, are presented. The three major areas of evaluation are content, readability and indexing. The most significant part of the selection process is judging the quality of document content. To make these judgments easier, report writers should state clearly objectives, hypotheses, methodology, conclusions, and recommendations. The second criteria, readability, refers to the physical makeup of the document. Authors should keep in mind that their products will be copied and disseminated as received, and that, as a general rule, each generation of copying represents a 10% loss in resolution. Documents processed for the ERIC system are abstracted and indexed by subject specialists. Whether or not an author provides an abstract or keywords, the least he must do is to be sure that all the usual bibliographic information is provided. A structured vocabulary is used for indexing, and terms are chosen so as to make the document readily retrievable by potential users. (Author/SJ)
PREPARING DOCUMENTS FOR USERS
WITH PARTICULAR REFERENCE TO ERIC

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It seems to me that people who develop information into a consumable form sometimes do so in a vacuum, an ivory tower, if you will. They fail to consider those who come after them seeking to avail themselves of the work that has been done.

Consequently, I propose to give you some tips for preparing documents so they can be retrieved and used. If some points sound more like pleas, so be it. A guiding principle for document preparers, is - Keep in mind that other people must be able to use the documents or the work they describe is lost.

I conceive of document utility as depending on three factors: content, readability, and indexing. In describing each factor, I'll be drawing on guidelines followed in the ERIC system. For those who are unfamiliar with ERIC, it stands for the Educational Resources Information Center, sponsored by the National Institute of Education, HEW. The ERIC data base consists mainly of report-type literature in the field of education. Most ERIC documents are available in microfiche or Xerox paper copy. People become aware of ERIC documents through abstracts in the GPO monthly publication Research in Education and by computer searches of the ERIC tapes. Further details about ERIC can be found in the brochure "How to Use ERIC".
The ERIC data base, like that of most information systems, is built up selectively. The most significant part of the selection process is judging the quality of document content. High priority is given to substantive contributions to the field, especially when based on well-designed experiments or on orderly collections of data. To make these judgments easier, report writers should state clearly objectives, hypotheses, methodology, conclusions, and recommendations. It is especially helpful to have them altogether in a well constructed preface.

In considering document quality, questions are asked, such as:

Does the document add to the knowledge base of the field?
Does the document provide an impetus for further research on action?
Does the document present a new treatment, idea, or application?

Documents which treat topics of general usefulness, especially those touching on current priorities, will likely be selected. This is all the more true if the presentation is clear, vigorous and relevant. On the other hand, documents will be rejected which are poorly written, have little substance, or contribute nothing meaningful; similarly, if documents make flagrant misuse of a technical device or procedure, fail to provide sufficient information for judging the adequacy of a study, or provide conclusions which are unsupported by the data, they will not be selected.

While qualitative judgment will always be somewhat imprecise, subject as it is to personal background and viewpoint, the author can do certain things to see that his reports meet the criteria. He can state his purpose and audience level forthrightly. He can provide a good abstract so people can quickly get the essence of his thinking in his own words. He can cite references and similar studies completely so people will know he's well documented.
This leads to the second area of document utility—readability. Here we are dealing with the physical makeup of the document. First and foremost, the document should be typed neatly, with the print dark enough to reproduce on a Xerox-type copier. If it's not, how can readable copies be made?! Again keeping the reader in mind, authors should be familiar with Basic U. S. Government Micrographic Standards and Specifications, revised edition, published by the National Microfilm Association in 1972, which prescribes the specifications generally followed in putting documents on microforms. People submitting documents should realize that they will be copied and disseminated exactly as received without any editing or refining. As a general rule, each generation of copying represents a 10% loss in resolution and materials disseminated on microfiche are three generations removed from the original.

To see that their reports meet the specifications, authors would do well to observe the following checklist in preparing materials:

A. "Ditto" copy does not usually reproduce well and is usually not acceptable.

B. "Mimeo" copy must be clean and clear to be acceptable. Be sure that print is not obscured by smudges, and that type characters are complete and unbroken.

C. Paper opacity is an important consideration in microfilming materials printed on both sides of the page. Paper should be opaque enough to prevent bleed-through (i.e., images which are visible through the paper).

D. Use of various color paper is acceptable for color coding entire sections of a work. However, color-coding every other page or every few pages should be avoided.
E. Generally, paper size should not exceed 8½ x 11 inches. Oversize pages should be avoided unless absolutely necessary. Try a different layout to see if the oversize page can be placed on a standard page, or use a photographic reduction, if possible.

F. Illustrative material drawn in black or opaque ink will reproduce satisfactorily. Remember that microfilming is a black-and-white photographic process. Colors appear as varying shades from true black to light gray. Thus, lines on a graph should be identified by labels or symbols rather than colors. Similarly, shaded areas - such as countries on a map - have better contrast if cross-hatching is used instead of color.

G. It is helpful to leave at least one-inch margins on all sides of the paper. Remember that bindings and ring holes will be cut away from the paper before it is reproduced.

H. The following general guidelines are offered to help you determine how well different kinds of illustration reproduce:

1. Line illustrations reproduce well on microfiche and as xerographic copies. Make sure lines are unbroken and show good contrast.

2. Half-tone and solid-tone illustrations will reproduce on microfiche, but some loss of detail can be expected. Greater loss of detail can be expected in hard copy generated from fiche. Try to refrain from using predominantly dark illustrations.

3. Photographs should have a low range of contrast, preferably from pure white to medium gray; refrain from use of photos which are predominantly dark, as detail will be lost in the microfilming process.

Once the author has done his best to write a quality report which meets the physical criteria, it is up to the information analyst to see that the report is abstracted and indexed so that it can be retrieved. He is assisted no end in his task if the author provides an abstract with his report.
If an editor or reviewer writes an abstract, this is fine, too, provided he indicates that it's not the author's abstract so the information analyst will evaluate the abstract fairly.

In writing an abstract, the conventional and accepted rules for good writing and good abstracting practice and style should be followed: brevity and clarity are essential; abstracts should have the same relative emphases as the document; abbreviations are to be avoided; the title should not be repeated; objectivity is required, avoiding personal prejudices. Evaluative language, unless it is the author's, should not be included. The minimum requirement of every abstract is a statement of the subject and scope of the document. Wherever possible the abstract should be informative (an objective summary), but if the document type does lend itself to this approach (as in the case of conference proceedings, bibliographies, etc.), then an indicative abstract which provides a guide to the contents should be written.

Whether an author provides an abstract or not, he must provide certain bibliographic information so his document can be cataloged. While these items may seem obvious, it's amazing how often they are hidden or missing. The cataloger needs the author's full name, his affiliation, the date and place of publication, a complete document title, and the sponsoring or funding agency. How nice it is to have these vital pieces of information altogether on the title page!
Finally, we turn to tips for indexing so that people who want documents can retrieve them in a search. The whole purpose of indexing is to provide tags for concepts in the literature. Applying these tags, or subject headings, or descriptors, is both a science and an art. As a science, experimentation and practice in using descriptors have derived certain methods and procedures for getting similar results. As an art, indexing remains an expression of the individual indexer and cannot be subject to a rigorous method of always arriving at the same exact results.

One primary rule for indexers is to index the document in hand, not to fall into the trap of indexing the usefulness, applications, or implications rather than the content. It is also helpful to searchers to index for the form of the document, e.g., textbook or bibliography, and the level of sophistication, e.g., undergraduate, adult, etc. So that everyone is speaking the same language, a thesaurus of descriptors is relied on for indexing vocabulary and later for structuring searches. In using this vocabulary, the indexer should index the document at its own level of specificity so that people seeking specific information will be led to the document which treats their subject as narrowly as they need. Indexing, like all other phases of preparing documents should be performed to make it easy for others to get and use the documents.