Here two intelligent people are involved; an indexer interpreting the document and a searcher interpreting his query. A match is then made in the interpretations. Even if a text were to exactly satisfy a query, the imperfect representation of a text by the indexer, and imperfect selection of keywords for matching might result in a failure to retrieve relevant material.

One way of reducing mismatching is to combine the searcher and the indexer. In such a system, the end users of information would convey their queries to an information specialist who would then do the searching. The search would be more effective, since the specialist would have been involved in the original indexing procedure itself. Intelligence and subject-matter knowledge on the part of this specialist is now a must. His indexer role will, however, provide him with increased subject-matter knowledge.

There is, of course, a problem area which is intensified when very large volumes of information are being handled. This is due partly to numerous information specialists who handle information in their specialty, but who, when searching, must access information entered by specialists in other subject areas. In addition, new specialists taken on strength inherit information processed by their predecessors. All this results in increasing mismatching of query and information.

- Descriptor File Scanning. In attempting to overcome the problems of interpretation a third method of retrieval may be adopted. Instead of using keywords individually generated by the indexer and the searcher standard descriptive terms drawn from a controlled and structured library of terms are utilized.

  By having both the indexer and searcher use the same vocabulary the possiblity of choosing the same words to represent the same topic is increased. Furthermore, by building a structure into the vocabulary that links up related descriptors, a likelihood is introduced that even if the indexing words are not the same as those used in searching, the words are related and linked in the vocabulary.

37. One can conclude, therefore, that of the three retrieval methods presented the "descriptor file" or rather the "controlled vocabulary" approach is most desirable, coupled with a group of information specialists knowledgeable in the subject matter who perform both indexing and retrieval. It is, however, important to provide additional aids for retrieval purposes to maximise the number of ways of selecting an item, and at the same time to minimise the possibility of never retrieving a relevant item. Two such aids are described below:

- Basic information such as author, title, source, abstract, etc. should be entered into the system either clerically at points of entry or better still automatically. This would free the specialist's time for his more important function of indexing the text.

- Utilizing a structured vocabulary between text and indexing, as well as between query and retrieving. This will inevitably result in reduced work throughput during the initial months since the need to consult the vocabulary at each step is time-consuming. However, the stated relationship between words will provide a checklist to enable the retriever to more intelligently and comprehensively respond in searches.