

# Chapter 04

## MANAGING THE LITERATURE

Managing collected scientific literature enables one to work more efficiently. The literature collected should be divided into different sections. It is suggested that all literature be pasted on same sized paper, letter or A4. This should be marked with appropriate headings or key words. All literature should be filed in separate files according to the section of the document in which it would be used.

### 4.1 INTRODUCTION

Collection of literature requires a lot of effort. Books, periodicals and abstracts are scanned. Electronic sources are also searched. As a result of the hard work done to hunt for information from the printed and electronic sources, loads of literature get piled up. Although the search was conducted in a systematic manner, the literature collected appears to be haphazard. There are some reprints consisting of a few pages, others are photocopies of original articles or chapter or pages from the books. Then there are abstracts obtained from databases on continuous paper. Furthermore, we have photocopies of pages of abstracts from printed abstracting sources. All these together are the literature that has been collected.

The pile of collected papers looks difficult to handle, and indeed it is, unless it is managed and organized properly. Sometimes the situation becomes horrifying since the students and young scientists hardly know how to deal with it. There is a need to give a proper shape to these documents so that they can be located and used whenever and wherever the need arises. The collected literature might comprise of:

- Photocopies of chapters from books
- Photocopies of sections from books
- Photocopies of original articles from journals

- Original articles requested from authors
- Printouts of articles from the Internet
- Photocopies of abstracts from printed sources
- Printouts of abstracts from databases
- Printouts of abstracts from journals on the internet

The main job of the researcher now is to organize these bits into suitable lots so that the information collected in different forms is used more efficiently.

#### **4.1.1 SORTING OUT THE LITERATURE**

First step towards organizing the literature is to sort out the bits and pieces into suitable lots. Abstracts from all sources are best to handle first since these are short and take least space – part of a page. Book chapters or sections and articles are long and need some extra effort.

##### **a. Arranging abstracts**

Separate all abstracts in one lot. Take each abstract one by one and cut out into single units. This means cutting out the abstracts from photocopied material, printed sources and printouts of databases. This would provide all abstracts on different sized paper. Now that all abstracts have been separated, it is easy to handle them. Paste each of these on a letter (8.5 x 11 inches) or A4 (8.27x11.65 inches) size paper (better use paper that has one side clean). This gives us all abstracts on single sheets of same size that can be filed neatly.

##### **b. Managing original articles**

The original articles, whether photocopies from journals or reprints from authors, are usually long, consisting of from 3 to 7 pages or even more. All articles, now published in professional journals, carry an abstract located right at the beginning of the paper. Copy this abstract with all details on a letter size or A4 paper (do not cut it otherwise you will destroy the original article). Older journals had no abstract but a summary. Use this summary from the original articles or reprints and copy on separate sheets in a manner similar to the one followed for the abstracts. Save the original articles in a separate file marked as "original articles". Also copy complete reference (author, publication year, title, journal, volume, issue number and inclusive pages) on the abstract sheet.

##### **c. Arranging material from books**

Chapters or sections photocopied from monographs or reference books can be pretty long. These need to be converted into one-page

summary. Make a summary or abstract of the book section and chapter on letter or A4 page. Make sure that this page contains all essential points reported in the material and related to your work. Also copy complete reference (author, year of publication, name of the book, publisher, location of the publisher, total pages) on the abstract sheet.

## **4.2 CLASSIFICATION OF LITERATURE**

As a result of the above exercise one will have sheets of paper with abstracts or summaries of required information, original articles or book chapters in separate files. The number and volume of this material depends on the effort made in collecting it. This is the literature that will be used for writing class assignment, synopsis, article or thesis. It must be classified properly so that when writing different sections of the document, only relevant material is taken and used for the purpose. This would save time on going through the whole pile of literature over and over.

### **4.2.1 DIFFERENTIATION OF LITERATURE FOR RESEARCH PAPERS AND THESES**

By now you must have figured out various sections of the document you are preparing. For a research article, the sections are simple and take the form of IMRAD formula – introduction (containing review of literature), materials and methods, results and discussion. In a thesis or dissertation, the review of literature is a separate entity after the introduction. In addition to these sections, the paper or thesis might have an abstract, summary and acknowledgement. For these no external help from the literature is needed.

The selected literature may be classified into different lots as follows:

- i. Go through each reference and determine where it will be used. Some references are useful in one section of the paper only, while others could be of help in two or more places.
- ii. Separate all sheets into five lots for introduction, review of literature, materials and methods, and discussion.
- iii. Write the word "introduction" or "review", etc. on each sheet on top right hand corner or any other suitable place.
- iv. Literature that will be used in more than one section may be assigned two or three topics, if needed. This would give reference sheets with personal headings on them. Some will have one heading, some may have two or three.

- v. Where original article or chapter is available, mark the sheet on left hand side as "original". This means when using this sheet, one can take out the original article for consultation.

#### **4.2.2 DIFFERENTIATION OF LITERATURE FOR A REVIEW**

A review article or even review of literature has a different order. It is probably the most difficult part to write. In this, work done by others has to be compiled into a form that would provide some insight into the topic. It should report most recent work in the subject area. Reviews are designed to summarize, analyze, evaluate, or synthesize information that has already been published as research reports by different workers.

The procedure for differentiating literature for the review is the same, except that topics assigned are those of relevance to the document being prepared. The best way to proceed is to split the title of the project into small headings and subheadings in a manner similar to contents page of a book – or simply prepare an outline. A postgraduate student may not be able to do it in the beginning but as one goes through the literature, one will find that the topic can be easily divided into subtopics. Assign these subtopics on the references collected. Write these on the right hand corner of the sheet. Prepare a number of files according to some main headings of the review and place these sheets in the allocated files.

#### **4.3 FILING LITERATURE**

- Collect all articles on a topic in one lot.
- Rearrange or organize in the desired order. Chronological order is preferred.
- Where more than one topic has been assigned to a reference, select the one required for the first topic to be dealt with.
- Place these sheets in one file.
- Likewise, make files for literature on other topics.

At the end of this exercise one should have separate files marked appropriately with "introduction", "review of literature", "materials and methods" and "discussion". The number of files for a class assignment, review of literature or a review article will depend on the headings in which the topic has been divided. Additionally, make one more file marked as "general" in which all unutilised literature may be placed. In this manner one shall select literature on each topic that can be used for writing the paper or thesis.