

b. Review of literature: The “Review of Literature” should begin with a few references by way of introduction, the rest or bulk should only include citations pertinent to the investigations. A “Review of Literature” is thus a documentation of the related work done by others, its merits and limitations, i.e. critical analysis of reported research on the problem or topic under review. The review may be placed under sub-headings for clarity and more critical analysis. In principle, the Review of Literature should provide an account of research work done by others on the related topics. Implicitly it has to be a critique of the previous research results.

While it is not the intention to discourage the students from presenting all the information he/she likes to include in a “Review”, it is necessary at the same time, that a judicious care is taken by his teacher while editing, to retain only those references which are pertinent to the subject of thesis. The students are advised to be exact and concrete in preparing a critique of results of research done in the past. The following steps are usually involved in the preparation of Review:

- Before a student starts working on a thesis, he/she should consult his teacher about the need and scope of the “Review” as well as digestion of reviewed information in the “Discussion” so as to eliminate diffused and unnecessary literature on various aspects of an extensive field.
- The students may do full exercise at the first typing stage taking note of English Usage and Grammar and get it vetted by his/her Supervisory Committee to bring it within the four corners of logical presentation of the information which is pertinent to his/her subject.
- After vetting, thesis should be typed on an ordinary paper and a semi-final thesis be submitted to the Directorate of Advance Studies for a final general check, after which final typing may be done.

These stages of work will allow a student to have mental satisfaction of presenting everything that he/she thought was necessary and by the end will be trained for scientific presentation of facts.

Overall, the Review of Literature should be a complete and orderly development of the status of the knowledge in the area bearing of the work. It should be divided into subsections as appropriate for the particular situation. The sub-sections dealing with

different aspects of work should be arranged as nearly as possible in the same order as the items are considered in later divisions. The On-Line Search facility and Computer Search Services are very helpful for review of literature. To improve the database, a researcher should become familiar with:

- i. The contents of database particularly list of publications and rationale for included
- ii. ~~The~~ methods of obtaining documents and other materials uncovered by the search.
- iii. The structure and contents of system dictionary of key words or descriptors.
- iv. The method of constructing search instructions using key words and logical
- v. ~~The~~ ~~number~~ ~~of~~ ~~items~~ ~~to~~ ~~be~~ ~~obtained~~ ~~by~~ ~~a~~ ~~search~~ ~~request~~, sometimes provided by documentation.

c. Materials and methods

In some cases, the word “Materials” is not applicable. In such cases this chapter may be named “Methodology”. This section usually explains various aspects of what materials were used and how the work was done. The soundness of research has its foundation on the methods followed by the investigator. The validity of his/her technique and logic of interpretation need to be clearly stated and must be acceptable.

To understand and evaluate a thesis, readers would like to know exactly how the study was carried out. If the author does not supply complete information in this chapter, no credence can be placed on the research results and conclusions. It is also essential that the material selected and the basis of selection, if drawn from literature, be clearly described along with other relevant information on the subject.

If a student does not attend to his work personally, he/she will always remain shy and indifferent to the use of research, analytical procedures, statistical methods and their presentation. The make and models of scientific equipment used may be mentioned which will help validate the health of findings.

d. Results and discussion

Some workers name this chapter as simply “Results and then Discussion” separately. This is the main and an important part of the manuscript containing description of experimental observations. Representative data, therefore, should appear in a clear,