

Chapter 3

Appraise of Related Literature

Nature has made only one thing that is more powerful in the universe and that is called as Human or Man. Man is the only animal that can take advantage of knowledge which has been preserved or accumulated through the centuries or since the origin of man. Human knowledge has the three phases: preservation, transmission and advancement. This fact is of particular importance in research which operates as a continuous function of ever-closer approximation to the truth. Practically all human knowledge can be found in books and libraries and money in the banks. Unlike other animals that must start a new with each generation, man builds upon the accumulated and recorded knowledge of the past. His constant adding to the vast store of knowledge makes possible progress in all areas of human endeavour. The investigator can ensure that his problem vacuum and that considerable work has already been done on topics which are directly related to his proposed investigation.

For any specific research project to occupy this place in the development of a discipline, the researcher must be thoroughly familiar with both previous theory and research. To assure this familiarity, every research project in the behavioural sciences, has as one of its early stage, a review of the theoretical and research literature.

MEANING OF REVIEW OF LITERATURE

The phrase 'review of literature' consists of two words: Review and Literature. The word 'literature' has conveyed different meaning from the traditional meaning. It is used with reference to the languages e.g. Hindi literature, English literature, Sanskrit literature. It includes a subject content: prose, poetry, dramas, novels, stories etc. Here in research methodology the term literature refers to the knowledge of a particular area of investigation of any discipline which includes theoretical, practical and its research studies.

The term 'review' means to organize the knowledge of the specific area of research to evolve an edifice of knowledge to show that his study would be an addition to this field. The task of review of literature is highly creative and tedious because researcher has to synthesize the available knowledge of the field in a unique way to provide the rationale for his study.

The very words 'review' and 'literature' have quite different meanings in the historical approach. In historical research, the researcher does much more than review already published material, he seeks to discover and to integrate new information which has never been reported and never considered. The concept and process implied in the term 'review of literature' have such different meanings in historical as compared with survey and experimental research.

The term 'review of literature' has been defined in the following ways:

According to Good, Barr and Scates "The competent physician must keep abreast of the latest discoveries in the field of medicine. Obviously the careful student of education, the research worker and investigator should become familiar with location and use of sources of educational information."

According to W.R. Borg

“The literature in any field forms the foundation upon which all future work will be built. If we fail to build the foundation of knowledge provided by the review of literature our work is likely to be shallow and naive and will often duplicate work that has already been done better by some one else.”

According to Charter V. Good

“The keys to the vast storehouse of published literature may open doors to sources of significant problems and explanatory hypotheses and provide helpful orientation for definition of the problem, background for selection of procedure, and comparative data for interpretation of results. In order to be creative and original, one must read extensively and critically as a stimulus to thinking.”

According to John W. Best

“Practically all human knowledge can be found in books and libraries. Unlike other animals that must start a new with each generation, man builds upon the accumulated and recorded knowledge of the past. His constant adding to the vast store of knowledge makes possible progress in all areas of human endeavour.”

In survey and experimental research, the review of the literature serves a variety of background functions preparatory to the actual collection of data. In these research approaches, the literature is reviewed to create the context from the past for the new study to be conducted with new subjects and newly gathered data. In the historical approach, we never ignore the past and, in the sense review of the literature is the method of data collection if ‘literature’ is used in the broadest possible sense. In this regard the sources used are the ‘subjects’ of the research and the material reviewed of the ‘data’. Therefore, the primary function of the review of literature in the historical research is to provide the research data.

Reviewing the literature has two phases. The first phase includes identifying all the relevant published material in the problem area and reading that part of it with which we are not thoroughly familiar. We develop the foundation of ideas and results on which our own study will be built. The second phase of the review of literature involves writing this foundation of ideas into a section of the research report. This section is for the joint benefit of the researchers and readers. For the researcher, it establishes the background in the field. For the readers it provides a summary of the thinking and research necessary for them to understand the study.

NEED OF REVIEW OF LITERATURE

The review of literature is essential due to the following reasons:

1. One of the early steps in planning a research work is to review research done previously in the particular area of interest and relevant area quantitative and qualitative analysis of this research usually gives the worker an indication of the direction.
2. It is very essential for every investigator to be up-to-date in his information about the literature, related to his own problem already done by others. It is considered the most important pre-requisite to actual planning and conducting the study.
3. It avoids the replication of the study of findings to take an advantage from similar or related literature as regards, to methodology, techniques of data collection, procedure adopted and conclusions drawn. He can justify his own endeavour in the field.

4. It provides as source of problem of study, an analogy may be drawn for identifying and selecting his own problem of research. The researcher formulates his hypothesis on the basis of review of literature. It also provides the rationale for the study. The results and findings of the study can also be discussed at length.

The review of literature indicates the clear picture of the problem to be solved. The scholarship in the field can be developed by reviewing the literature of the field.

OBJECTIVES OF REVIEW OF LITERATURE

The review of literature serves the following purposes in conducting research work:

1. It provides theories, ideas, explanations or hypothesis which may prove useful in the formulation of a new problem.
2. It indicates whether the evidence already available solves the problem adequately without requiring further investigation. It avoids the replication.
3. It provides the sources for hypothesis. The researcher can formulate research hypothesis on the basis of available studies.
4. It suggests method, procedure, sources of data and statistical techniques appropriate to the solution of the problem.
5. It locates comparative data and findings useful in the interpretation and discussion of results. The conclusions drawn in the related studies may be significantly compared and may be used as the subject for the findings of the study.
6. It helps in developing experts and general scholarship of the investigator in the area investigated.
7. It contributes towards the accurate knowledge of the evidence or literature in one's area of activity is a good avenue towards making oneself. This knowledge is an asset ever afterwards, whether one is employed in an institution of higher learning or a research organization.

Bruce W. Tuckman (1978) has enumerated the following purposes of the review:

1. Discovering important variable.
2. Distinguishing what has been done from what needs to be done.
3. Synthesizing the available studies to have perspective.
4. Determining meanings, relevance of the study and relationship with the study and its deviation from the available studies.

Edward L. Vockell (1983) has pointed out the following two purposes:

- The main purpose of this review is to put the hypothesis to be examined in the research report into its proper context.
- Secondary purposes of this part of the report are to provide readers with guidelines regarding where they can look to find more information and to establish the author's credential by letting readers know that the researcher is aware of what has been going on with regard to the current and related topics.

The review of literature provides some insight regarding strong points and limitations of the previous studies. It enables him to improve his own investigation.

PRINCIPLES AND PROCEDURES FOR THE REVIEW OF LITERATURE

The following is the specific procedure through which review can be done appropriately:

1. It is generally advisable to get first and over all view by consulting a general source, such as a text-book which is more likely to provide the meaning and nature of the concepts and variables or theoretical framework of the field. The logical starting point is to get a clear picture of the problem to be solved. A text-book usually provides the theoretical aspects of the problem. It is very essential to develop deep understanding about the variables and the field.

2. After developing the insight about the general nature of his problem, the investigator should review the empirical researches of the area. The best reference for this phase is the handbook of research. Encyclopaedia of Educational Research, the Review of Educational Research and International Abstracts for more upto-date findings.

The researcher's major concern at this point should be to get a clear picture of the field as a whole; specific details are important at this stage. He should start from a topical outline and a temperature set of classifications, so that whatever he reads can be made meaningful.

3. The research for library material must be systematic and thorough. The investigator generally should start by collecting his references from the educational index. When a large number of references are to be copied, they should be typed because precision is required here.
4. The researcher should take note systematically in the light of such criteria as uniformity, accuracy and ease of assembly. The notes should be taken on the card. Each entry should be made separately; references should be recorded with complete bibliographic data. It should be recorded on front side of the card and content should be taken below and reverse side of it. Each note should be recorded carefully and accurately.
5. The investigator should take as complete notes as he might need. On the other hand, taking unnecessary notes is wasteful. The useful and necessary material should be recorded precisely. It would be better that similar sources are gathered.

It is necessary that a general education of each source, rather than simply a summary of its content be made. Such evaluation is necessary both in presenting the study in the review of literature, and in using the study as background for the interpretation of the findings of the study.

6. A major pre-requisite for effective library work is the ability to read at high speed. This can only be developed through practice. He must learn to skim material to see what it has to contribute to the study, only after its reference has been established, it should be read in detail. Surveying the literature for the purpose of conducting research is not just 'a pleasant excursion in the wonderful word of books', it is a precise and exacting task of locating specific information for the specific purpose.
7. The actual note-taking process is always a difficult task for the researcher. He has to spend long hours in the library taking notes by hand. It is a very tedious job and leads to importance to carelessness and illegibility. He should make use of the facilities available in the library for this purpose.

THE NATURE OF THE REVIEW OF THE LITERATURE

Through a process of integration of past research and thinking with current research and thinking, we move knowledge forward. For this process to function successfully, each researcher must know the past so that he can design research to build on what is already known and study what is not. There are times when researchers lack this knowledge. We see researches are being done on matters which have been demonstrated sufficiently so as not to need further replication. When this is done the research becomes an academic exercise of little interest in consequence to the discipline involved. We also see research into the unknown which does not build on the known. In a sense this is the greater professional loss. Needless repetition is only a waste of the researcher's time, money and energy, but new research which is unconnected to previous thinking and research is a lost opportunity to move knowledge forward. When new research is not based on a thorough review of the literature, it becomes an isolated entity bearing at best accidental relevance to what has gone before. When it is based on the literature, we can hope for cohesive and integrated approaches to our problems and for resolution and solution of them through research.

Reviewing the literature has two phases. The first phase involves identifying all the relevant published material in the problem area and reading that part of it with which we are not thoroughly familiar. As we read what others have done and/or thought about the problem area, we gradually develop the foundation of ideas and results on which our own study will be built. The second phase of the review of the literature involves writing this foundation of ideas into a section of the research report.

A distinction must be made between the literature that is reviewed, that is, read by the researcher, and that which is discussed in the study itself, that is, referred to in the section or chapter headed "Review of the Literature." The amount that anyone researcher needs to spend on anyone problem is determined by the unique combination of the problem which delimits the total amount of knowledge needed and how familiar the researcher may be with none, some or even all of that knowledge. The section in the research report discussing the literature is different matter. For the researcher, it establishes the framework or background in the field and thus, provides the setting in which he reports the new study. For the reader, the section provides a summary of the thinking and research necessary for him to understand the study. It also gives the reader a good estimate of the researcher's scholarliness. One basis for this estimate is the researcher's ability to distinguish the relevant from the irrelevant.

How important this stage will be in the development of the researcher's thinking, depends, of course, on the richness of the literature. There are problem areas in education, psychology, and sociology, and in all branches of knowledge in both the social and physical sciences in which there is little literature. The researcher's obligation is to search the literature, find what exists, and review it. 'He is not responsible for previous generations' disinterest or neglect of a problem area, and so if his search yields little, he is entitled to say this. In this case, the written section will simply be a brief statement, identifying the extent of the search, naming the sources consulted, and reporting how little was found.

But let us assume that there is a literature in the problem area. Then the amount of time devoted to this stage of the research depends upon how well the researcher knows the problem area and literature. If he knows the area well and keeps his knowledge current, then he will need only a once-over-lightly review to be certain that he is aware of the latest research and thinking. In all other instances, where a researcher has less than complete current knowledge, a thorough review of the

literature is needed ranging to the deep and extensive review needed by the researcher working in a problem area new to him.

SOURCES OF REVIEW OF LITERATURE

There are various sources of literature which may be used for this purpose. These sources can be broadly classified into these heads. (1) Books and Text-Books material. (2) The Periodical literature, and (3) General references.

1. Books and Text books Material

The most useful list of books published in the English language is the Cumulative Book Index and Book Review Index, Books Review Digest, Subject Guide to Books indicates that books are in print or press or forthcoming books. National Union Catalogue is also useful for this purpose. There are a number of publications that locate specific references that cover particular area of knowledge. The Cumulative Book Index is published monthly to provide the references, all books published in the English Language.

Sources of Information in the social sciences 'organized' by subject area and indexed by author and title, this work contains comprehensive list of reference books and monographs.

2. Periodicals

A periodical is defined as a publication issued in successive parts, usually at regular intervals, and as a rule, intended to be continued indefinitely. These include Yearbook, Documents, Almanacs, The Cumulative Book Index, International Abstracts, Journals, Newspapers, Magazines, International Index to Periodicals.

Periodicals are generally placed in open shelves in the Periodical room. Their effective use is predicted on the use of an index to identify the articles on subject matter under the study.

The Education Index has served as a comprehensive index of practically all publications in the area of education.

Education Index. New York, published monthly.

Canadian Education Index, Ottawa published by the Council of Education.

Current Index of Journals in Education, New York, it is published monthly. Index of Doctoral Dissertations International. Ann Arbor, it is published annually and consolidates all dissertations accepted American, Canadian and European Universities.

Bibliographic Index, New York, this guide indexes by subject current bibliographies of published books and educational periodicals both in English and in foreign languages.

3. Abstracts

Another type of reference guide is the abstract, review, or digest. In addition to provide a systematized list of reference sources, it includes a summary of the contents. Usually the brief summaries of research studies are given in the form of abstract Educational abstracts, International abstracts in humanities.

ERIC Educational Documents Abstracts, Washington DE., this annual publication includes abstracts of all reports which appeared in Resources in Education for, the year. Education Abstracts, psychological Abstracts and Sociological Abstracts are published including research studies in these disciplines.

A wide variety of indexes and general references can be found to cover almost any area in which the modern researcher might be interested.

4. Encyclopaedias

Encyclopaedias provide concise information on a number of subjects written by specialists. They provide a convenient source of information, and often include illustrations and bibliographies. Only specialized encyclopaedias deal with restricted areas of knowledge.

Encyclopaedia of Educational Research, New York. It is published, every ten years. It refers to important work on educational problems.

5. Almanacs, Handbooks, Yearbooks and Guides

This general category of references includes those publications that present rather detailed up-to-date information on a variety of subjects, organized around a given theme. They are the types of references that one consults to find specific information, often of a statistical nature. Generalized sources are listed first, followed by those with a more specialized emphasis.

'World Almanac' Book of Facts, New York: It is source of miscellaneous information of various subjects.

'Handbook of Research on Teaching' Chicago: It provides comprehensive research on teaching within depth and extensive bibliographies.

'Education Year Book', New York: It is annual publication which includes statistical data on major educational issues and movements with an extensive bibliography and reference guide.

'Year Book of Higher Education' : It provides upto-data information on all aspects of higher education in U.S.A., Canada and Mexico.

Mental Measurement Year Book, Highland Park: It provides the most comprehensive summary on psychological measurement and standardized tests inventories. It is published every four years.

6. References on International Education

This type of publications deals with education outside the United States.

'The World Yearbook of Education', New York: It is issued annually and prepared under the joint responsibility of University of London and Teachers College of Columbia University, each issue is devoted to some aspect of international education.

'Inter-national Yearbook of Education', Geneva: The Yearbook presents in English and French a review of educational development for the previous year in the United States, Canada and more than 40 foreign countries.

'Educational Documentation and Information', Geneva: It is a quarterly issue which provides short-descriptive articles on national, international institutions, documentation and research.

'International Handbook of Universities' Paris: This book describes universities and other higher institutions of bearing in more than 100 countries of the world and the British Common wealth. It provides information about facilities, history, structure, academic year, admission, scholarships degree programme, libraries, teaching staff, publications and language of instruction. There is also a publication 'Common wealth Universities Yearbook.' Edinburgh which provides information of universities in 23 Common wealth Countries.

'Higher Education in Developing Countries.' Cambridge: It is a selected bibliography on students. politics and higher education.

7. Specialized Dictionaries

There are specialized dictionaries of education which includes terms, words and their meanings.

'Dictionary of Education,' New York: This educational dictionary covers technical and professional terms. Foreign educational terms used in comparative education writings are also included.

Government of India has also prepared a 'Dictionary of Education' which includes technical and professional terms from English to Hindi.

The educational worker often needs information about another educator or a prominent person outside the field of education. These are essential to conduct an educational research. It requires biographical and auto-biographical references.

8. ERIC (Educational Research Information Centre)

The current knowledge explosion makes selective data retrieval the key to the research enterprise as well as to effective educational practice. The major developments in this regard as they relate to the educational literature are ERIC (Educational Research Information Centre) and SRIS (School Research Information Service). ERIC is an attempt to facilitate information exchange and to increase the value of research to the educational community by simply making its results readily available in usable form. A related service in SRIS initiated to provide and ERIC type coverage of educational materials.

In our country NCERT has established a separate ERIC cell to facilitate educational research community.

9. Microfiche

The development of the microfiche has been one of the most significant contributions of library services by providing economy and convenience of storing and displaying of scholarly material.

A microfiche is a sheet of film containing micro-images of printed material. A copy of film 4" × 6" card contains the material of one hundred printed pages of 9" × 11" size. There are many document-reproduction services that supply microfiche to libraries upon special order.

Super-and Ultra Microfiche is the recent development in the field of micro-printing. It has transformed the process of storage of published material in libraries of the future. A super microfiche has been developed that contains upto two pages of printed material on a single 4" × 6" transparent card, the equivalent of two or more books. An even more spectacular development is the ultra- microfiche that contains upto 3200 micro-dots on a single card of 4" × 6". When projected each dot contains the equivalent of several pages. Thus, seven to ten volumes can be included on a single 4" × 6" transparent card. Reader printers make hard copy points out of any page in few seconds.

10. Dissertations and Theses

The theses and dissertations which embody the bulk of presenting educational research, are usually housed by the institutions and universities that award the authors their advanced degrees. Sometimes these studies are published in whole or in part in educational journals. The related dissertations and theses are the main sources of review of literature. the entry 'dissertations and theses' issue of the bibliographic index in the most comprehensive listing of sources to these research in progress.

11. Newspaper

The current newspapers provide upto-data information and speeches, reports, conferences, new developments in field of education. The current events and educational news are also reported in newspapers. It is also one of the important sources of review of literature.

Exploring the literature moves the researcher to the frontiers of knowledge where he can evaluate new findings in his field, gaps in knowledge contradictory findings and identifying needed research. He will be familiar with methods and bibliographies that may prove useful in his own investigation.

THE FUNCTIONS OF THE REVIEW OF LITERATURE

There are five functions of review of literature :

1. The conceptual frame of reference for the contemplated research.
2. An understanding of the status of research in problem area.
3. Clues to the research approach, method, instrumentation and data analysis.
4. An estimate of the probability of success of the contemplated research and the significance or usefulness of the findings and, assuming the decision is made to continue.
5. Specific information required to interpret the definitions, assumptions, limitations and hypotheses of research.

The detailed description of these functions have been given in the following paras:

1. Conceptual Frame of Reference

The first function, provides the conceptual framework of research which involves both conceptual and research literature. The most direct way of doing this is to read the basic writings in the field as well as the recent writings of key thinkers. The researcher must feel fully satisfied when he has completed this phase of his view that he is aware of all the points of view in the field and particularly that he has devoted himself diligently to learning about the points of view which differ from or are opposite to his own. All points of view relevant to the research problem should be presented as strongly as the most devoted proponents of that point of view would wish.

The first function of review of literature provides the sound conceptual framework of the research problem. He should feel that, in a debate or seminar, he is able to represent any point of view fully, in the sense that he has come to understand the arguments for that point of view.

2. Status of Research

The second function of the review of the literature is to provide an understanding of the status of research in the field. This comes from reviewing the research literature. This phase has several specific sub-functions which can be described in terms of the questions words: what, when, who and how. These four words provide the basic information which reveals the status of the research in hand.

First, through his review of the research literature the researcher learns what researchers have already been undertaken and completed in the problem area and the results that this research has already achieved. The unnecessary repetition can be avoided. Learning about research in progress is difficult to locate. Within specific university or the experts of research degree committee can help in this direction.

The other aspect of what, learning the results of previous research, is the best known purpose of reviewing the literature. We are more interested in learning about previous research than the result. After intensive review of conceptual and research literature in such an area, a researcher may develop confidence that he has an explanation for the inconsistencies.

In addition to learning what has been done, the researcher seeks to identify when the research has been done, specifically how current research has been done, specifically how current research in the