CHAPTER - 4

RESEARCH DESIGN

4.1 INTRODUCTION

Research design is the first and foremost step in the research process, which pre-decides the what, how much and from where the data is to be collected or gathered and analyzed for studying a particular problem. Schvaneveldt defines “A research design refers to a plan, blue print, or guide for data collection and interpretation, set of rules that enables the investigator to conceptualise and observe problems under study.” ¹

The successful completion of research depends on having a clearly defined purpose and access to useful data pertinent to that purpose. Various problems require different strategies for successful research. The strategy employed, the approach, or the particular research tools involved relate to the idea known as design or research design.

Thus, research design is a blue print, or an outline, as to what the investigator is likely to do through various stages of his research work, from developing the hypothesis and its operational implications to final analysis of data as to obtain answers to her/his multiple research questions. The following pages dwell at length on the research design adopted for the present study.
4.2 LITERATURE SEARCH

For the study, literature survey was undertaken in two stages. Firstly, an effort was made to understand the problem clearly and to find out which aspects must be covered in the study. For this purpose a preliminary survey of literature was conducted under various subject headings like multi-media, distance education, LIS education, distance learners, IGNOU multi-media resources etc. A thorough search was made through secondary sources to find the literature related with multi-media resources published in different journals, books, reports, conference proceedings etc. and a bibliography was prepared accordingly.

Secondly, the most relevant articles and documents were selected for detailed and in-depth study. Information available on different web-sites was searched. Articles found relevant to the topic were studied.

Therefore, a thorough search and review of literature related to various aspects of the topic was conducted. The findings of literature search have been presented in the second chapter of the thesis.

4.3 QUESTIONNAIRE METHOD

The present study falls under the category of survey research. In such kind of research the major tools for data collection are questionnaire, observation and interview. The questionnaire method has been selected as a data collection tool.

A questionnaire is a formulated series of questions especially for statistical study. According to Krishan Kumar, “It is a written document, listing a series of questions pertaining to the problem under study to which the
investigator requires the answers.”

“Questionnaire is a major instrument for data gathering in descriptive survey and is used to secure information from varied and widely scattered sources. It is particularly useful when one can not readily see personally all the people from whom one desires responses.”

Two set of questionnaires were designed to get information about the use of multi-media resources by the BLIS and MLIS learners of IGNOU respectively. The questionnaires were designed in such a manner that one could find out their reactions on the given aspects, and also the problems faced by them in use of multi-media resources.

As a pre-requisite of designing the questionnaire, the investigator has a professional responsibility to;

(i) Know and analyze carefully the research problem;

(ii) State the questions clearly;

(iii) Request only information that can easily be provided;

(iv) Questions must be conceptually valid, promote understanding and accuracy and encourage respondents to participate in the research.

All the above pre-requisites were also taken into consideration while designing the questionnaires.

4.4 DESIGNING THE QUESTIONNAIRES

After a thorough search and review of literature to understand the various aspects of the problem, it was decided to frame two questionnaires. The
questionnaires were designed to elicit data and information on the use of multimedia by BLIS and MLIS learners of IGNOU respectively.

4.5 FACE VALIDITY OF THE QUESTIONNAIRES

Face validity of the questionnaire indicates the extent to which an instrument measures what it is intended to measure. The tentative questionnaires were subjected to face validity by asking subject experts to evaluate them. Changes were made in consultation with subject experts.

4.6 PRE-TESTING THE QUESTIONNAIRES

The questionnaires for BLIS and MLIS learners were subjected to pre-testing by carrying out pilot surveys on samples having characteristics, similar to those intended to be taken in the study. The questionnaire for BLIS learners was administered to a population of 10 learners whereas the questionnaire for MLIS learners was administered to a population of 15 learners.

Reliability and validity of the questionnaires were tested. Some minor modifications in the language and wording of the statements were carried out in consultation with these respondents of the pilot survey. The responses received in the pilot survey were not included in the final survey results.

4.7 ORGANIZATION OF THE QUESTIONNAIRES

The questionnaires were finally printed with questions on use of multimedia resources and other related topics. The questions were organized in order
to know the use and usefulness of multi-media resources by LIS distance learners of MLIS and BLIS two questionnaire were designed.

Questions were grouped as follows;

(i) The questions (no. 1-12) comprised profile of learners consisting name, address, marital status, gender, age, medium of study, residential status, employment status, educational qualifications and any other programme being pursued simultaneously from IGNOU.

(ii) Frequency and usefulness: It involves questions (no. 13a and 13b) on multi-media facilities frequency of use in 7 points rating, i.e. daily, twice a week, once a week, monthly, occasionally, rarely and never. For usefulness 4 points rating were given as most useful, undecided, least useful and not at all useful. Besides that feeling regarding multi-media resources as replacement of the classroom teaching was also asked.

(iii) Self learning instructional material rating: It comprises questions (no.14, 14.1,14.2 and 14.3) on courses of study and five point rating taken into consideration i.e. excellent, very good, good, poor, and very poor. Besides it whether SLIM give a feeling like teacher’s communication and helpfulness of exercises also put in the questions.

(iv) Availability of multi-media devices: like radio, telephone, computer, Internet etc. at home (question no. 15) asked.

(v) Frequency of visits to IGNOU study centres/ tele centre (question no. 16) asked.
(vi) Awareness, use of Audio/Video Cassettes as per the list (Consisting titles of cassettes) (question no. 17) asked.

(vii) Place of use of multi-media facilities asked in (question no. 18).

(viii) Comment on programmes of Gyan Darshan, Gyan Vani, teleconferencing and Radio Counselling: It involves (question no. 19) asking on five point scaling i.e. excellent, very good, good, average and poor on the language, content, duration and presentation of the programmes.

(ix) Counselling: It involves (question no. 20, 20.1, 20.2) and 21 regarding attendance of counselling, sufficient time preparation, doubt clarification, satisfaction and regularity of counselling sessions.

(x) Seminar: It involves (question no. 22) asked for the helpfulness of seminars. This question was not asked from the BLIS learners as there is no provision of seminars in BLIS.

(xi) Internship: It comprises (question no. 23 and 23-1) if internship is needed/required for the completion of programmes and its duration, with its helpfulness for performing the services in a better way.

(xii) Assignments and multi-media resources: It consists (question no. 24) asking the resources used for the completion of assignment.

(xiii) Multi-media other than IGNOU: It involves (question no. 25) asking for the use of Journals, Books, Internet, databases etc.
(xiv) Use of IGNOU multi-media resources for other university programmes. It involves (question no. 25 a and b) in case, these resources used for other programmes and UGC Net.

(xv) Assessment: It covers (question no. 27) exploring the overall assessment of learners on multi-media resources and its helpfulness for improving professional skills and knowledge.

4.8 RESEARCH LOCALE

LIS distance learners of IGNOU were taken as the subject of the study to know the use of multi-media resources offered by IGNOU. Delhi Region was chosen as the location of the study as IGNOU has a large number of LIS learners pursuing their studies in the different regions of the country. Though, it would have been more useful to include other parts/region of the country, these were purposefully excluded in view of the time and cost factor involved. Nevertheless, the research locale was a true representation of the LIS distance learners of IGNOU and thus, formed the focus of the study.

4.9 SAMPLING

The population of study was BLIS and MLIS learners of IGNOU pursuing their studies in Delhi during 2007. Questionnaires were distributed using random sampling.
4.10 FIELD WORK

The study centres of IGNOU located in Delhi were consulted for obtaining the addresses of learners for data collection purpose. In first phase fifty questionnaires each to BLIS and MLIS learners were dispatched through post on their given addresses along with the self addressed stamped envelops for getting the response back without putting the financial burden on the learners. It was supposed that learners will respond positively but to the researcher’s surprise no response was received back for a long period of two months. Later it was decided that the data will be collected personally from the learners at the study/programme centres while the counselling is in progress.

All the study/programmes centres of IGNOU of Delhi region were visited personally by the researcher several times. The questionnaires were distributed among the learners and they were requested to fill in the same then and there. Some learners did so but others denied pretending having other engagements. Finally 109 filled in questionnaires from MLIS learners and 123 filled in questionnaire from BLIS learners were collected.

Generally, the respondents were cooperative and appreciated the importance of the topic; however, some refused to participate without assigning any reason thereof. The statistical figures showing the number of questionnaire distributed and their response rate has been depicted in the table given below:
Table 4.1 - Distribution of Questionnaire – BLIS Learners and MLIS Learners

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Learners</th>
<th>Number of Questionnaires</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Distributed</td>
</tr>
<tr>
<td>1</td>
<td>BLIS Learners</td>
<td>200</td>
</tr>
<tr>
<td>2</td>
<td>MLIS Learners</td>
<td>200</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>400</strong></td>
</tr>
</tbody>
</table>

4.11 DATA INTERPRETATION

For the purpose of data analysis, the categories of options in each item were given numerical values for questionnaires, as detailed below:

The Statistical Package for Social Sciences (SPSS) was used for the analysis of data. Initially the items in the questionnaires were coded. The data was organized on data sheets using their codes. It was later entered using MS-excel package. The printouts were later tallied with the data sheets and errors rectified before the data were finally processed.

4.12 STANDARD USED FOR BIBLIOGRAPHICAL REFERENCES

For providing the bibliographical references MLA (Modern Language Association) 6th edition with slight modifications was used in the study. The examples of records of Books and Journals articles are given as follows:
Bibliography Format

Books

Author (s) [Last name first], (in case of second author first name first) Title. Place of Publication: Publisher, Publication year.


Journal Article

Author (s) [Last name first], (in case of second author first name first) “Title of the article”. Name of the Journal( underline), Volume no Publication year (within the brackets) page numbers.


Referencing Format

Referencing format is the same as that used for bibliography except the page number from where the matter is quoted is added, it is:

Author (s) [Surname first], Title. Place of Publication: Publisher, Publication year. page number (s) from where the matter quoted.

REFERENCES:


