Chapter 3

Research Methodology

“It is a truism that no research results are any better than the methods by which they are observed”.

Research in education as in other field is a search for knowledge. It is not a research so as to give perfect reality, other than be quite investigating so as to provides knowledge of solution of problem in the field of education. Knowledge of research methodology therefore is essential for all those who take either an active role in the conduct of research and desires to keep themselves abreast of the latest developments in education. The research methodology organizations as well as of external consultants who managed the overall process. The present work or study was followed by intensive consultations resulting with a well prepared framework of the sample, tools questionnaire and the pie chart which guided this research.

Generally research is broadly classified:

A) Fundamental Research:-It is a basic approach which is for the sake of knowledge. It is primarily concerned with the formulation of theory or contributing to the existing body of knowledge. The main aim of this research is the discovery of new knowledge solely. It ultimately led to clear and sharper definition of the laws which nature and also to this understanding of nature phenomena. The findings of this research have a universal validity.

B) Applied Research

The second type of research which aims to solve immediate practical problem is referred. According to Travers, Applied Research is undertaken to solve an immediate practical problem and the goal of adding to scientific knowledge is secondary. The major purpose of applied research is to answer practical and useful questions about policies, programs, projects, procedures, organizations etc.

C) Action Research

It is research undertaken by practitioners so that they may improve their practices. It helps parishioners to perceive, understand and assess the situation and it further facilitates a systematic analysis and working out plausible. Thus the purpose of action research is to solve classroom problems through the applications of scientific method.
Methods of Research

1) Historical Research
It attempts to establish facts so as to arrive at conclusions concerning past events. The main purpose of historical research therefore is to arrive at an accurate account of the past so as to gain a clearer perspective of the present. It includes the delimitation of a problem formulating research question or tentative generalizations, gathering and analyzing data and arriving at conclusions or generalization based upon deductive- inductive reasoning. It is not based upon experimentation but upon reports of observation which cannot be repeated.

2) Descriptive Survey Research Method
Expressive Research study are intended to get hold of applicable and accurate in order conserve the obtainable location of amount and when possible to draw suitable universal conclusions from the facts exposed. Studies are more than just a compilation of data; they grip amount, organization, study, association and explanation. Descriptive studies investigate phenomena in their expected setting. Their purpose is both immediate and long range. Descriptive research differs from other type of research in purpose and scope. Descriptive studies vary greatly in complexity. At one extreme, they constitute noting more than frequency count of events of the study of local problems without any significant research purpose, at the other extreme, they attempt to ascertain significant interrelationship among phenomena. It helps to explain educational phenomena in terms that are held by the students, teachers, parents and experts, processes that are going on, effects that are evident or trends survey is the only means through which opinions, attitudes, suggestions of improvement of educational practices and instruction and other data can be obtained.

3) Experimental Research Method:–
“The experimental research is the description and analysis of what will be or what will occur under carefully controlled conditions”- J.W. Best

It is used when the researcher wants to find out the result of a certain phenomena under the controlled conditions. It is used of determine and valuate the adequacy and effectiveness of the educational and instructional objectives through the measurement of their outcomes. It provides a logical and variables and observes how the conditional or behavior of students are affected or changed.
**What is Research Methodology?**

The procedure used to bring together in sequence and statistics for the reason of enchanting decisions. The methodology may include magazine investigate interviews surveys and other research strategies and could include both present and historical information.

**Different ways of data collection:**

Here there is quite a little way of showing a study. There are different kinds of survey to be done. For instances an organization wing the students. Is conducting interviews and are trained in giving the best to the students are likely to get good results by interviewing the students. And that can be used for universal topics but self-administration for responsive topics. The option shown by management ways is prejudiced by more than a few factors. By simple way of asking questions to the respondents ‘the enthusiasm to partake and the retort correctness. There are many kinds of tools for measuring the data collecting for instance and also the other studies are done by comparing ranking scale questionnaires from the internet and web-based questionnaires showed that employees favorite online survey doing with the pencil as well as paper set-up.

**DESIGN OF THE STUDY:**

Selection of the problem is the most important thing in research. Objectives are formed, Hypotheses are formulated and a research design is made. It includes objective sampling, research strategy and there are technique in collecting the apparatus and technique for collecting the data, analyzing the data and reporting the findings. It begins from the statement of the problem, objectives of the inquiry and now a satisfactory culmination is to be achieved its practicability. The quality of good research is judged by the degree of accuracy on the level of relevant evidence sought. It is a plan of action.

The design used for the present study is descriptive survey research. The descriptive survey helps the researcher to get attitude of B.Ed students towards English learning through remedial programme for improving the disability i.e. Reading and Writing.

The descriptive-survey investigation is immense value in solving problem and knowing their attitudes of the teachers by coming in direct contact with the students of vernacular medium students. An opinionative was prepared for students containing 120 statements. Pre questionnaire containing sixty statements were given to the students and another sixty statements were given as
post questionnaire. The students were asked to fill in the necessary details and the sheet was collected back in half an hour.

**Sample size of this research:**
A sample collection is a must for the research and it is a miniature segment of a inhabitants chosen for the study. A good sample must be as nearly representative of the entire population as possible and ideally it must provide the whole of the information about the population from which the sample has been drawn. One hundred samples (students) from five Bachelor of Education B.Ed colleges were selected for the study.

The term sampling refers to the strategies which enables us to pick a sub-group from a larger judgment about larger group. If sampling is done on scientific lines, it would yield better results. Therefore a judicious and careful selection of sample is of utmost importance. An inhabitant is of some collection of folks so as to have single otherwise additional feature inside widespread so as to is of attention in the direction of the canvasser. In the direction of revise the entire inhabitants is impossible and therefore selection of a relatively little quantity of inhabitants chosen intended for surveillance and psychotherapy toward convinced inferences about the nature of the population from which the sample is drawn. The grounds must be examined in such a way that conclusions may be more or less objective. “The purpose of collecting information for a research project is to draw conclusions and make generalization which will lay in solving the problem which will aid in solving the problem which is being studied.” A questionnaire prepared by the researcher and had standardized it from the experts in the field of education. Pilot study was also done and then the curious confusion given by the sample respondents was verified and the researcher prepared a final questionnaire of sixty statements and distributed to the sample of hundred. For data collection the investigator framed the questionnaire after consultation with the guide and some experts. The investigator decided to confine a survey to five English medium B.Ed colleges as she felt it would help in getting early and prompt replies to the project. The colleges selected were:

1) Pal Rajendra B.Ed College Kandivali (East)
2) St.Michael’s College of Education (Nerul)
3) Pandit Rajpati Mishra College of Education and Research -Thane (West)
4) 4 Guru Vidya College of Education Titwala
Clara’s College of Education Dadar- (West)
In each college 20 students were given the questionnaire. The replies were by 100 students. The investigator personally visited all the colleges. She faced some minor difficulties like not receiving the questionnaire back on time, but on the whole the response given by the students was heartening. All the people involved like the principals, teachers and the students were extremely helpful and co-operative. Tools of Research For research we need certain instruments or devices to collect new facts. These are called tools of research. “Like the tools in a carpenter’s box, each research tool is appropriate in a given situation to accomplish a particular purpose.

A questionnaire is a data gathering instrument through which respondents answer and respond to statements in writing. A questionnaire is used when factual information is desired. The questionnaire has unique advantages had properly constructed and administered it may serve as a most appropriate and useful data-gathering device in a research project.

An interview is in a sense an oral questionnaire. Instead of writing the response the subject or interviewee gives the needed response orally and face to face.

The investigator used both the Questionnaire Method and the Oral Interview Method was taken for the research project.

In order to study Effectiveness of remedial programme for improving disability and achievement in English method the investigator prepared a questionnaire which was given to 100 students of five B.Ed colleges from Mumbai who gave their responses.

**Statistical Techniques**

The preparation of the questionnaire was a difficult and time consuming task. First the investigator made an exhaustive study of other questionnaires. Then the various questions were phrased, rephrased and tentatively decided upon. Then these items were given to other members of the class and faculty for their criticism, comments and suggestions. After that the questions were arranged in the most appropriate psychological order before its final format. Items and questions were refined, revised and replaced. The questionnaire was tried out on a few friends and acquaintance to see if certain items were unclear and ambiguous. Then the instrument was “Pilot tested “with a small group of students similar to those who would eventually be used in the study. This dry run was worth the time and effort. It revealed defects that were corrected before the final printing of the questionnaire. This Pilot testing is important as once the questionnaires are distributed it is too late to remedy the questionnaires defects. Respondents were chosen carefully after consultation with the teacher and the principals. It is important that
questionnaires be given only to those who possess desired information and who are likely to be sufficiently interested and respond conscientiously and objectively. Students were given a questionnaire to get it filled by putting a tick mark for the statement as ALWAYS, SOMETIMES, NEVER and were told to submit it back in half an hour. As the questionnaire was to be used in a college it was essential the approval of the project be secured from the principal, supervisors and teachers. After that the covering letter was drafted explaining the reason of the learning which be known the length of the survey in the direction of the students, teachers and principals of the various colleges. The questionnaire was prepared with the help of the guide and some teachers. The final format is given below: Criticism on Effectiveness of Remedial Programme for Improving Disability and Achievement in English Method

**Arithmetical Strategies:**

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**Importance of Present Research:**
Showing the way in finding a answer for a variety of evils of enlightening institutions. Mutual co-operation from the teachers in helping the students for the development and expansion of education results in growth and expansion of education in understanding subjects like- Mathematics, English grammar, History, etc.. Bad Handwriting, Sleeping in class, Inattention of student or a student, Reading problems- English, Hindi, etc. difficulty in solving Mathematical problems. Good marks in geometry but no score in algebra. Mischievous student or mischievous class, pronunciation problems, Absentees on the overall makes good student but weak in specific of English in present competitive world and why reading skill is important for this? Problems faced by Hindi medium students in reading English. Therefore, keeping in view the importance of English Language in competitive world the present study aims to identify the difficulties in reading English by Hindi medium students and to give remedial measures for the improvement in reading English. Once the researcher has identified the problem area for study and specified the goals and objectives for the study, he or she then comes to the core of the study which is research methodology. The methodology is the most important phase of the research process. In that it gives guidance as to how the study will be conducted. Research methods can be called as planning and execution undertaken by researcher to solve a specific research problem. It involves research method, sample and sampling technique, tools for research, data collection and data analysis methods. The research problem can be past oriented, present oriented or future oriented. Thus on the basis of the conclusions, the research methods are divided into three categories as given under:

Research methods are of:

Historical Method
Descriptive Method
Experimental Method

Historical method: Historical method provides a method of investigating to discover and describe and interpret what existed in the past. Historical research attempts to establish facts so as to arrive at conclusion concerning past events.

To conduct historical research primary sources of data are commonly used. They are the eye witness accounts. Primary sources of data include relics or remains, documents such as laws, official minutes, films, recordings and research reports etc.

Descriptive method: According to John W. Best, ‘A descriptive study describes and interprets what is? ’ it is concerned with conditions and relationships that exist, opinions that are held, processes that are going on, effects that are evident or trends that are developing. It is primarily considered with the present, although it often considers past events and influences as they relate
to current conditions. Generally survey method is used for data collection in this type of research study.

Experimental method: The research in which effect of one factor on the other studied is called the experimental research. In scientific terms, experimental research means examining the hypothesis, indicating the cause and effect relation.

According to Kerlinger (1953), “An experimentation is taken to make a systematic study in which canvasser makes changes in addition to wheel solitary otherwise additional self-governing that changes and in addition to seize that he is a dependent changeable otherwise variables designed for disparity associated to the handling of the autonomous erratic.”

It is only method of research that can truly test the hypothesis concerning the cause and effect relationships. It represents the most valid approach to the solution of educational problems both practical and theoretical and to the advancement of education as a science.

Experimental design is the blueprint of the procedures that enable the researcher to test hypothesis by reaching valid conclusions about relationships between independent and dependent variables. Three categories of experimental design are as follows:

Pre-experimental design
True-experimental design
Quasi-experimental design

Selection of a particular design is based on the purpose of experiment, the type of variables to be manipulated and the conditions or limiting factors under which it is conducted.

3.2 Selection of research methodology:

Experimental research method was chosen to conduct the present study. Within the experimental research design pre experimental design i.e. one group pretest posttest design is used.

One-group pretest - posttest design

In this design the researcher administers a pretest, then the treatment and finally a posttest. The effects of treatment are judged by the difference between the pretest and posttest scores. The design is represented as follows:

$O_1 \quad X \quad O_2$

Where $O_1$ - Pretest
X - Treatment
$O_2$ - Posttest
3.3 Sample and sampling technique

3.3.1 Sample:
An example is a diminutive piece of the inhabitants that is chosen intended for surveillance in addition to examination. In addition to it the collected sample comprises of 60 students from B.Ed College.

Sampling Technique:
Sampling technique is the strategy chosen for selecting samples based on logistics, ethics and paradigm of the researcher. Generally two types of sampling techniques are used, which are as follows.

1. PROBABILITY
   - Simple random sampling
   - Systematic sampling
   - Stratified sampling
   - Cluster sampling
   - Multi steps sampling
   - Sequential sampling

2. NON PROBABILITY Sampling
   - Quota sampling
   - Incidental sampling
   - Convenience sampling
   - Purposive sampling
   - Judgmental sampling

Purposive sampling technique was applied to select school (________________________) and class (_____). Students were chosen by using simple random sampling technique.

3.4 Data collection

3.4.1 Tools for data collection:
The researcher used self-constructed pretest and posttest questionnaire. Following questionnaire (Appendix A and B) were used for data collection:

1. __________Pretest questionnaire.  
2. __________Posttest questionnaire.

3.4.2 Administration of tools:
At first permission was sought from the principal of the school to conduct the present study. Then the class teacher was contacted and permission was to administer the tool was taken from him/her. The researcher gave necessary instructions to the students regarding the pretest or posttest questionnaire. The data was collected from _____ students. (Appendix C). To regulate advance English, successful corrective teaching is a must. Corrective teaching does not mean
learning again. Every cure though expensive or difficult is ineffective, if it does not cure the
disease. A curative educator must have a frame of mind of compassion that has affection for and
is concern for his or her students.
From beginning to end in educational achievement: When questions are asked to the under-
achievers they resolve to answer the questions incorrectly. He may most likely not respond to the
questions asked and will appear to be baffled in the classroom.
Task to be done at Home: A child who is underachieved will not take interest in home
assignments and will not do the homework that is assign to him or her. If forced to do his
worksheet and if he or she is under pressure to complete the work, he may find way out to
replication, which may be detected without any difficulty.
Component tests and periodic tests: He will show underprivileged presentation time and again in
periodicals. He will also not challenge the difficulties and will be engage in some other activity
and he may even write down the same questions that is asked.. He possibly will even try to
replica the answer to the problems from his friends. From beginning to end in behavioral aspect:
Approach towards scholastic behavior: He will resolve to be unbiased in such behavior. He will
attempt to abstain himself from such actions. He will try to keep away from debates,
conversations about academics with his classmates and teachers.

Concluding Remarks

In this chapter of data collection details about the sample is given by the investigator. The
investigator also explains about the tools of research and the procedure followed. It is necessary
so that a reviewer can understand about the analysis and interpretation of data in the correct
perspectives.

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**Questionnaire on A Study of Effectiveness of Remedial Programme For improving Disability And Achievement In English Method.**

**GENERAL INSTRUCTIONS-**

Please put a Tick mark against your choice. Select only one item and state reasons whenever possible.

Name

1. Which of the following income groups does your family (per annum)

   □ English talking

   □ Non-English talking

2. Which of the following are your parent / parents profession

   □ Business

   □ Private Service

   □ Government Service

   □ Professional

   □ Any other

2. What is the educational qualification of your mother?
1. What is the educational qualification of your father?
   - Non-Graduate
   - Graduate
   - Post Graduate
   - Professional
   - Any other

2. Which of the following languages do you converse in at home?
   - Hindi
   - English
   - Regional

3. How much time in a day do you spend on reading? (Apart from Your Studies)
   - Less than 15 minutes
   - 15 minutes to an hour
   - More than hour
   - Not at all
State reasons, if any:-

4. You read books/magazines/papers because:-

☐ You get bored with studies

☐ You have nothing else to do

☐ Nothing to watch on TV

☐ Keeps you well informed.

☐ You enjoy it

☐ Any other

5. What type of reading do you do?

☐ Morning Papers

☐ Evening Paper

☐ Afternoon Papers

☐ Magazines

☐ Books

☐ Comics

6. Which part of the Newspaper do you prefer to read?

☐ Comic Strip/TV Guide/City News

☐ Headlines

☐ Sports

☐ Readers’ letters
7. Which type of magazines do you read?
- Film (Stardust, Cine Blitz, Etc.)
- News magazines (India Today, Sunday, etc.)
- Sports (Sport star, Sport week, etc.)
- Science

8. Which type of books do you read?
- Poetry
- Novels
- Short stories
- Biography
- General information
- Others

State reasons, if any:

3. Which of the following would you like to read?
- Hardy Boys/ Nancy Drew
- James Hadley Chase
- Agatha Christie
☐ P.G. Wodehouse

☐ None

State reasons, if any:-

4. Which of the following authors have you read the most?

☐ Somerset Maurier

☐ Isaac Asimov

☐ None

5. What would you like to receive as a gift?

☐ A book

☐ A Sports Kit

☐ Video Game

☐ Audio Cassette

6. In what way is this reading helpful to you in your studies and/or future career?

**Concluding Remarks**

In this chapter of data collection details about the sample is given by the investigator. The investigator also explains about the tools of research and the procedure followed. It is necessary so that a reviewer can understand about the analysis and interpretation of data in the correct perspective.