



A Study and Analysis of Research Outline & Methodology

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1. Introduction

The selection of appropriate methodology and research design provide an overview of the investigation. Choosing a design for the investigation basically involves selecting the most appropriate method or techniques to solve the particular problems under investigation “Research design is the scheme, formation and approach of investigation devised so as to secure answer to fact finding question and to control discrepancy.

Therefore, design of the investigation continues to be one of the eminent vital aspects of any research work, without it, the research work is just like wandering in the be wilderness among the various tools and techniques. Hence, the role of design of the investigation cannot be ruled out in the state of affairs of the research activity. As a matter of fact, no one readymade scheme can be applicable for all complications. The nature of the complication determines which scheme would be customized for the investigation.

Research methods are of utmost importance in a research process. An adequate deal of validity, reliability and objectivity of research depends upon methods. They indicate the many steps of the scheme of attack to be acquired in solving an investigation problem. It is therefore, very important that a researcher must have a detailed comprehension of all investigation methods- their strengths, limitations applications and appropriateness.

Rigid application and formulation of one method is not possible: Since no two- investigation undertakings are precisely alike, it is impossible to assign any rigid formulation of methods or procedures. There is a wide diversification the conditions and circumstances, which designate the objective nature of investigation problems in various fields.

The purpose of an investigation may vary from investigator to investigator in terms of where it is to be organized and the applications that are to be made of it. In addition, great variations in the capabilities and characteristics among the individuals who do examine task are a proven fact. Thus, all methods confront portrayal in terms of formula or standardization. There are various ways and means of gathering, analyzing and reporting research data.

Researchers are not in thorough agreement as to the so- called methods of collecting and handling the data. In research literatures many variations of different terms are used to designate shades of meaning. The decision about the methods or methods to be employed always depends upon the description of the problem selected and the kind of data necessary for its solution.

Whatever be the method to be employed, it is very essential that it should be describable otherwise it will lose consequence and effectiveness. If the learner cannot delineate his method, the opportunities are that it is too nebulous and general to give the satisfactory results.

2. Criterion responsible for the discretion of a method-

The selection of any research method solely depends upon the following criterion-

- **Field to which applied:** Education, History, Philosophy etc.
- **Purpose:** Description, Prediction, Determination of status.
- **Locale where it is organized:** In the laboratory or in the field.
- **Application:** Pure research or applied research.
- **Data gathering devices employed:** Tests, Rating scales Questionnaire etc.
- **Character of data collected:** Objective, Subjective Qualitative and quantitative etc.
- **Symbols:** employed in transcribing, describing or handling outputs: mathematical symbols or vernacular symbols etc.
- **Form of contemplating:** deductive, inductive etc.
- **Control of components:** restrained and unrestrained experimentation.
- **Method employed in initiating causative relationship:** agreement difference, residuals and concomitant.

3. Methods of research

Research involves the elements of observation, description and the analysis of different aspects and dimensions of every research problem. Thus,

we find three types of research in the field of Education. They are as follows

- Descriptive research,
- Experimental research and
- Historical research

4. Descriptive research method

The major purpose of explanatory investigation in education is to tell ‘**what is**’. Many surveys go beyond a mere description of the existing situation. Survey deals with curriculum can help us in obtaining information not only about the solidity and fragility of the current curriculum but also can elicit recommendations of change. It determines the present trends and status of a given educational situation and the support for decisions regarding improvements in education. They serve as a stepping stone to more precise investigations in education.

Surveys enable the educational planners, administrators and supervisors to solve current practical problems by providing pertinent data. It suggests the course for future developments in the area of education and prepare back ground for a constructive program of educational reform and research to contribute to the advancement of knowledge and learning because they effort penetrating insight.

Descriptive surveys help trend a number of the tools with which we do academic investigation, the development of devices for measuring many matters in qualitative investigation as good as quite a lot of information gathering instruments like check record, schedules, ranking playing cards rating scales and are in general implemented as a preliminary step to be followed through academic research employing more full of life manipulate and more function methods in schooling, also function the direct sources of priceless talents involving human conduct. Descriptive stories aid us in planning more than a few educational programmes.

Surveys have their usefulness each in main to the formulation of speculation and at a more evolved state in placing them to the scan. They perform in a given investigation depends upon how so much is already recognized in regards to the discipline and on the purpose for which the expert Hypothesis is required.

The important elements of a survey are of what exists through finding out and analyzing essential elements of gift academic main issue, of what we would like by clarifying academic ambitions and

targets, of what to get there via discovering the feasible method of accomplishing the educational goals seeing that the survey method gathers data from a somewhat gigantic number of cases at a targeted time, basically pass sectional and not concerned with the characteristics of individuals but with generalized records of the entire population or a consultant sample, It includes a certainly defined trouble and exact ambitions and required specialists and creative planning, cautious exploration and explanation of the info collected, insightful and accomplished reporting of the results.

Surveys vary greatly in complexity some are concerned only with the frequency of events, while others seek to establish relationship with events. This method does not seek to develop an organized body of scientific principles, information useful to the solution of local problems. They are both quantitative and qualitative.

Results arising out of surveys may be either verbal or expressed in mathematical symbols. Surveys are more realistic than the experiments in their natural settings.

5. Experimental research method

Experiment has manifest to be a necessary and strengthen tool in outstanding man towards progression. There would have been extremely little progress, as we find it today, without layout experimentation. The goal of all experiments is progress and good life.

In so far as good education is recognized as the support of adequate individual and social development, need for experimentation to improve educational practice and policies are being realized increasingly. The educationists are always shopping for extra amazing methods of instruction, extra ample procedures of analysis richer learning materials, and extra efficient methods of administrative considering the fact that of an awfully rapid expansion and democratization of schooling. A number of new educational problems have arisen.

For a victorious resolution of the multitude of issues and for the full attention of the educational ambitions set forth, experimental work, sufficient each in pleasant and wide variety will have to be implemented in various degrees with the succor of all people who find themselves nagged in educating occupation in distinctive and academic layout almost always.

Experimentation differs from normative or descriptive survey approaches and from different procedures of investigation in that the experimenter has degree of managing over some variables worried and the conditions under which variables are located. Experimental research is the outline and evaluation of what will be, or what will occur under carefully managed condition.

Experimentation involves an attempt to control all predominant explanations besides a single variable, which is manipulated with the intention to assess and measure the results of its operation. It has been applied with gigantic success in the category room by using controlling big reasons inside distinctive limits. In educational investigation, the basic situation of alternative things being equal is problematic or achievement.

In schooling we take care of those subjects who are tricky i.e. Human beings. The control group and experimental group are never adamantly empirical can yet approximate adamantly empirical investigation in many areas. All experiments in education are ultimately experiments with children. It is, therefore, very important from behavioral point of view that are not subjected to conditions that may harm them.

It describes what will be when variables are carefully controlled or manipulated. The focus is on variable relationships. Deliberate manipulation is always a part of experimental.

6. Historical method of research

Before the description of methods of research, it is necessary to differentiate between a method and technique. A method is a **'systematic- layout'** whereas a technique is a **'procedure'**. For instance, in historical method, the techniques used are like questionnaire, schedule and interview etc.

Historical research implies an effort to delineate some aspects of the past of educational problems. Historical materials in such areas of education as principle or philosophy of education, elementary education secondary education, higher education etc. have made valuable contribution in understanding the present-day problems.

Historical research is the layout and objective situation, assessment and combination of proof in order to establish details draw results concerning past occurrences. It involves studying, understanding, and explaining past events. Historical research is a procedure supplementary to observation in which the researcher seeks to test the authenticity of the reports or observation made by the other. This is the systematic collection and objective evaluation of data related to past occurrences to determine causes, effects or trends of those events that may help explain present events and anticipates future events. The purpose of historical research is to arrive at conclusions concerning causes, effects, trends of past occurrences that may help to explain present events and anticipate future events. While historical studies are less frequently conducted than other types, there are certain educational problems and issues (such as grading policies) that can be better understood in light of past experience.

Historical research studies do not typically gather data by administering instruments to individuals. They must seek out data that are already available. Sources of data are referred to as primary or secondary. Primary sources constitute firsthand knowledge, such as eyewitness reports and original documents; secondary sources constitute secondhand information, such as a description of an event by other than an eyewitness. Primary sources are admittedly harder to acquire (it would be quite a feat to find an eyewitness to the Boston Tea Party) but are generally more accurate and to be preferred. A major problem with much historical research is an excess of secondary sources.

Evaluation of historical data involves external criticism and internal criticism. External criticism assesses the authenticity of the data; internal criticism evaluates their worth. The worth of the data, the degree to which data are accurate and reliable and do indeed support the hypothesis is judgmental and sometimes a matter of opinion. For example, a researcher investigating trends in classroom discipline might utilize a letter, allegedly written by Albert Einstein, containing an expression of concern regarding the amount of physical punishment of school. The result of external criticism might verify that the letter was indeed written by Albert Einstein. Internal criticism would be involved whether he could be considered a reliable source concerning educational practices of the day.

The choice of the method of research is determined by the nature of the problem. Because of the method's apparent care and directness, descriptive method has been undoubtedly been the most popular and mostly used research method in education. In addition, to this, there are certain approaches in educational research and of which qualitative approach rather participatory approach is very important. In this piece of research, the qualitative approach has also been taken into consideration. The present study has adopted qualitative as well as historical approaches of research. As it has mentioned earlier that the historical research studies do not typically gather data by administering instruments to individuals. They must seek out data that are already available. Sources of data are referred to as primary or secondary.

7. Sources of data

Sources of data in a historical research study are classified as primary sources or secondary sources. They are-

Primary sources

Primary sources consist of-

- Remains or relics, associated with a person, group, period or event. Fossils, skeletons, tools, weapon, utensils, clothing, buildings, furniture, paintings, coins, and art objects are examples of those unconscious remains that were not deliberately intended for use in transmitting information or as records. However, these sources may provide clear evidence about the past. The contents of an ancient mound, for instance, may reveal a great deal of information about the way of life of a people- houses, food, clothing, tools, weapons, art, religious beliefs, customs, social life and means of livelihood.
- Oral or written testimony or the records kept and written by actual participants in an event or actual witnesses of the same. These sources are consciously produced for the purpose of transmitting information to be used in the future. Documents classified as primary sources are constitutions, characters, laws, courts rulings, official records, autobiographies, letters, diaries, contracts, deeds, wills, licenses, declarations, certificates, lists, bills, receipts, newspapers, magazines, advertisements, maps, inscriptions, diagrams, books, pamphlets, films, pictures, paintings, recordings and research reports.

Secondary sources

Secondary sources are the reports of a person who relates the testimony of an actual witness of an actual witness of an event or an actual participant in the same. The writer of the secondary source was not on the scene of the event. Secondary sources of data are usually of limited worth because of the usual errors that result when information is passed on from one person to another. Most of history books and encyclopedias are examples of secondary sources.

8. External criticism

External criticism deals with the genuineness of the document, whether it is what it seems to be and reads true to the original. It is concerned with form and appearance of the document rather than meaning of the contents, although external criticism at times may employ internal evidence from the document through a study of its contents, in an attempt to establish questions of authorship. Problems of external criticism, in testing the genuineness of a document or remain, involve questions about the characteristics of the author and his qualifications as a reporter; factors or conditions that may have influenced the production of the document, such as time, place, purpose, and circumstances of composition; and the extent to which the document and its parts read true to the original.

The work of external criticism has been greatly facilitated through the development of a number of auxiliary sciences, and of printing and photography, especially in dealing with older sources. A partial list of the important auxiliary aids or fields includes: anthropology, archaeology, astronomy, cartography, chemistry, chronology, economics, education, geography, politics, philosophy, and psychology etc. In the present study the external criticism has been ensured by observing the authenticity of the documents. Here all the documents except few have been consulted which are published from government offices; which are available in the NCERT, NUEPA library and Government's web sites.

9. Internal criticism

Internal criticism deals with the meaning and trustworthiness of statements remaining within the document after any spurious or interpolated matter has been removed from the text; in other words, it weighs the testimony of the document in relation to the truth. These questions of accuracy and value of the statements made normally come in sequence after question of authorship, genuineness, time, place, and actual language or text of the original document has been answered through the processes of external criticism. The shift of emphasis in internal criticism is from the document as such to statements within the document. Many authentic and genuine documents (so determined by external criticism) may not be completely accurate or truthful, and require the processes of internal criticism in

the form of textual criticism, as well as investigation of such factors as the competence, good faith, position, and bias of the author of the document.

As it is mentioned earlier that the present study is documentary analysis study, so here documents related to school education which are published from government's offices and some of the documents are published even by the Ministry of Education, Government of India. Hence, from this it may ensure that internal criticisms have also been duly taken care in the present study.

10. Sources of data for the present study

In the present study the researcher has consulted with both the primary and secondary sources of data for the purpose of the research. Regarding primary sources of data, the researcher has consulted with the various documents concerned with the history of education of India.

11. Exploration of documents

To drive the study in its proper direction to reach the objectives, the following documents had been explored in addition the research literatures, to acquire data. It would be worthwhile to mention here is that Commissions and Committees constituted regarding the school education before and after independence in India have been consulted for the purposes. Commissions and Committees constituted before independence.

Various commissions and committees were appointed at different times to survey, study, review and recommend improvements in the existing system, policies and programmes of education. Reserving the net effect of all these for later sections of this paper, it is appropriate here to recall the chronology of some landmark commissions, committees, policies, programmes and frameworks.

- University Education Commission (1948-49) popularly called Dr. Radhakrishnan Commission
- Secondary Education Commission (1952-53) popularly called Dr. Mudaliar Commission
- Committee on Higher Education for Rural Areas, Rural Institutions (1954) Shri K. L. Shrimali Committee
- National Committee on Women's Education (1958) Shrimati Durgabai Deshmukh Committee
- University Grants Commission's Review Committee on Education (1960) Prof. K.G. Saiyidain Committee
- U. N. Dhebar Commission (1960)
- Committee on Emotional Integration (1961) Dr. Sampurnanand Committee
- Committee on Plan Projects: Study Team for Selected Educational Schemes (1961) Shri B. N. Jha Committee
- Study Group on the Training of Elementary Teachers in India (1961)
- Kothari Committee on Model Act for Universities (1961)
- University Grants Commission's Committee on Education as an Elective Subject at the Undergraduate Stage (1963) Mr. A. R. Wadia Committee
- Study Group on the Study of English in India (1964) Prof. Gokak Committee
- Education Commission (1964-66), popularly called Dr. D. S. Kothari Commission
- Committee of Members of Parliament on Education (1967)
- Three Delegations by University Grants Commission (1967-1971)
- Steering Committee of Planning Group on Education (1968)
- National Policy on Education (1968)
- Review Committee on the Working of National Council of Educational Research and Training (1968) Dr. Nag Chaudhuri Committee
- Study Group on the Development of Pre-school Child (1970) Shrimati Mina Swaminathan Committee
- Gajendragadkar Committee on Governance of Universities and Colleges (1971)
- National Committee on 10+2+3 Educational Structure (1972) Dr. Shukla Committee

- Committee on Secondary Teacher Education of NCTE (1973-77) Dr. Jha Committee
- Committee on Elementary Teacher Education of NCTE (1975) Dr. Malcolm S. Adiseshaiah Committee
- University Grants Commission's Panel on Teacher Education During Fifth Plan Period (1974)
- The Curriculum for Ten-Year School: A Framework (1975)
- Standing Committee of National Council for Teacher Education (1975- 76)
- Review Committee on the Curriculum for Ten-Year School (1977) Shri Ishwarbhai Patel Committee
- Working Group on Vocationalisation of Education (1977-78) Dr. Malcolm S. Adiseshaiah Committee
- Draft National Policy on Education (1979)
- Study Group on INSAT Television Utilisation for Education and Development (1980) -- Shri S. Sathyam Committee
- National Commissions on Teachers I & II- The Teacher and Society (1983-85) Prof. Chattopadhyaya Commission
- Working Group to Review Teachers' Training Programme (In the Light of the Need for Value-Orientation) (1983)
- Challenge of Education- A Policy Perspective (1985)
- National Curriculum for Primary and Secondary Education: A Framework (1985)
- National Policy on Education (1986)
- National Policy on Education: Programme of Action (1986)
- National Curriculum for Elementary and Secondary Education- A Framework (1988)
- National Curriculum for Teacher Education: A Framework (1988)
- Committee for Review of NPE 1986: Towards an Enlightened and Humane Society (1990) Acharya Ramamurthy Committee
- University Grants Commission's Report of the Curriculum Development Centre in Education (1990)
- NCTE Committee for Teacher Education Programme Through Distance Education Mode (1990)
- Central Advisory Board of Education Committee on Distance Education (1992)
- CABE Committee on Policy, 1992
- National Policy on Education 1986- Programme of Action 1992
- National Advisory Committee- Learning Without Burden (1992)
- The National Council for Teacher Education Act, 1993
- Group to Examine the Feasibility of Implementation of the Recommendations of the National Advisory Committee (1993) Prof. Yashpal Committee
- Committee on B.Ed. Correspondence (1993) Prof. Ramlal Parikh Committee
- University Grants Commission's Committee on B.Ed. Correspondence, Distance Education Programme (1994)
- Special Orientation Programme for School Teachers (SOPT) (1994-97)
- Committee of National Council for Teacher Education on Different Modes of Education Used for Teacher Preparation in India (1995)
- University Grants Commission's Committee on B.Ed. Through Correspondence for In-service Teachers (1995) Prof. Takwale Committee
- Planning Commission's Report on Teacher Education in Five Year Plans (1951-97)
- NCTE Curriculum Framework for Quality Teacher Education (1998)
- National Curriculum Framework for School Education (2000)
- National Curriculum Framework (2005)
- Curriculum Framework for Teacher Education (2006)

- National Curriculum Framework for Teacher Education (2009)
- Panel to Review the functioning of the University Grants Commission (UGC) and the All-India Council for Technical Education (AICTE) (2008), later rechristened as The Committee to Advise on Renovation and Rejuvenation of Higher Education (2009)- Prof. Yashpal Committee
- The Right of Children to Free and Compulsory Education Act, 2009
- The latest commission is the National Knowledge Commission (NKC) 2006-09, which is popularly called Sir Sam Pitroda Commission.
- National Education Policy 2020

Again, regarding the secondary sources of data the researcher has consulted different books regarding the history of Indian Education. Beside this the researcher has consulted with different encyclopedia, journal and Magazine's article related to the topic concerned. Secondary sources constitute second hand information, such as referee books (encyclopedias, for example) or reports by relatives of actual participants or observers. After collection of necessary data and information from the various primary and secondary sources the researcher has arranged all the documents chronologically and interpreted with proper references on the basis of objectives.

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