



# THE GLOBAL PERSPECTIVE OF EDUCATIONAL RESEARCH

---

---

**Ravinder**

Research Scholar, Ph.D (Economics) Deptt. of Economics, SKDU, Hanumangarh (Raj.)

E-Mail: ravindergnc65@gmail.com

---

---

## ABSTRACT

In modern world, knowledge generation is a matter of prime concern. Science focuses on the rationalism and empiricism. Harmonious blend of rationalism and empiricism marks the knowledge generation, as an approach of viewing the reality, as a process which is scientific in nature. Rationalism rests entirely upon reasoning process which requires careful statement of the information in hand and hence paves the way(s) for logical rules to act upon and thus leading to the solution/conclusion which stands acceptable. Rationalism involves reasoning process which may be deductive, inductive or a combination of both. Aristotle laid foundations of deductive reasoning in which a minor premise provides a particular example/instance and a major premise refers to some sort of declarative proposition and from these premises a conclusion is inferred. Bacon postulated another approach of viewing reality (inductive reasoning) in which some particular instances are posed to generalize the process. An inductive conclusion may require all instances to be observed which is known as perfect induction. Imperfect induction helps in arriving at generalizations by observing available instances only. Deductive and inductive reasoning, both, have advantages and limitations at their ends. So, a combination of both modes of reasoning would help in securing true knowledge and this approach is known as inductive-deductive method or scientific method. These different approaches of knowledge generation frame the skeleton of a process, which attempts to probe/answer/find out the causality of almost all phenomenon that is research which is an organized and systematic methodology to obtain answer to questions in hand through scientific method. Educational research probes systematically and logically the educational phenomena that is problems pertaining to educational settings/scenario. The guiding light of any research activity is paradigm which is a model/trend accepted by the community of experts. Natural Sciences rely upon positivist paradigm. Non-positivist paradigm is the driving force behind research in social sciences like education. By being global it simply means the point under consideration is/should be applicable across the globe. Subject matter, context, resourcefulness of investigator, body of knowledge, logical nature etc. are aspects pertaining to educational research in global perspectives

## INTRODUCTION

In a civilized society, knowledge generation is a matter of prime concern. It is a search, in an organized way, to find/arrive at the solution of the problem or seeking answers to questions in hand. Science focuses on the rationalism and empiricism that is it channelizes the thinking process through reasoning and requires the citations of some evidence which must be empirical in nature. The term empirical means being sense oriented that is the aspect should be within the range of senses. Thus, the knowledge so generated stands valid and reliable in terms of being testable and demonstrable in nature. But to be more precise, a harmonious blend of rationalism and empiricism marks the knowledge generation, as an approach of viewing the reality, as a process which is scientific in nature. Rationalism, as the name reflects, rests entirely upon reasoning process which requires careful statement of the information in hand and hence paves the way(s) for logical rules to act upon and hence lead to the solution/conclusion which stands acceptable. Rationalism involves reasoning process which may be deductive, inductive or a combination of both. Aristotle laid foundations of deductive reasoning in which the knowledge seeker undergoes cognitive shift from general to particular instances/route/ references/examples etc. Actually, this cognitive shift is a conclusion drawing process from a minor and major

premise. In such a discourse, a minor premise provides a particular example/instance and a major premise refers to some sort of declarative proposition and from these premises (major as well as minor) a conclusion is inferred.

For example:

All Boys Are Students..... (Major premise).

Ravi is a Student..... (Minor premise).

Therefore, Ravi is a Student..... (Conclusion).

Deduction can organize the known, identify the new relationships but here care should be taken by the practitioner in the sense that deductive reasoning focuses on "verbal symbols" which may be perceived by the persons differently like the term "Citizen" for some it refers to the people, only, residing in a state while some people may mean the citizens as those who have certain rights and duties towards that state. Also, deduction does not progress beyond the givens as it only has to deduce so knowledge and advancement gets restricted. Another noticeable aspect is that if any premise (major/minor) is not true or premises themselves are not related to each other than conclusion, thus generated, will be invalid.

To overcome the shortcomings of deductive reasoning, Bacon postulated another approach of viewing reality in which some particular instances are posed to generalize the process. But to work out those particular instances the knowledge seeker should carefully observe, record, collect the data. This is a nomothetic approach and research, in general, is inductive in nature. Actually, inductive and deductive reasoning are reverse of each other.

For example:

### **Deductive Reasoning**

All Birds Have Feathers ..... (Major premise).

All Pigeons Are Birds ..... (Minor premise).

So, All pigeons Have Feathers ..... (Conclusion).

Now the same example, if subjected to inductive reasoning, would appear as

### **Inductive Reasoning**

**Every pigeon that has ever been observed has feathers. Hence, Every Pigeon Has Feathers.**

Thus, in former example, that is deductive reasoning, before arriving at a conclusion, the major premises must be available with the person to arrive at a conclusion while in the latter example, that is inductive reasoning, instances are observed and generalizations are worked out from particular to general aspects then a valid conclusion is inferred. It must be noted that an inductive conclusion requires all instances to be observed. This is known as Perfect Induction. It helps in generating valid and reliable piece of information. But in practices this is difficult in the sense that due to time constraints, limited resources, authority measures, financial aspects etc. an investigator cannot probe each and every instance. For example, "To study the attitude of students towards Science courses at senior secondary school level" requires, if undergoing perfect induction, every student at senior secondary school level in that state should be gauged through some tool like Likert scale. But will it be feasible, economic or manageable on the researcher's part? The remedy of this twist is provided by another practice under inductive reasoning that is Imperfect Induction which arrives at generalizations by observing available instances. For example, by tasting some grains of rice, which are being cooked, the person can generalize that rest of the rice are also eatable.

Imperfect induction depends upon the representativeness and size of the units under observations because they, in turn, determine the worthiness of the conclusion like in previous example, if tasted grains have been taken from bottom, then such cooked grains may taste differently from the grains at the top layer which might not have been cooked properly. So, on the basis of those grains, at bottom, the conclusion, that rice is eatable, now may stand invalid.

So, deductive and inductive reasoning, both, have advantages and limitations at their ends. Knowledge is a complex structure in terms of its validity, reliability and testability etc. thus a combination of both modes of reasoning would help in securing true knowledge and this approach is known as inductive-deductive method or simply the scientific method. Here, the researcher first works inductively that is after observations, hypotheses are formulated and then deductively from hypotheses to logical implications. Thus, these different approaches of knowledge generation frame the skeleton of a process, which attempts to probe/answer/find out the causality of almost all phenomena that is Research.

### **Research: Meaning and Characteristics**

Research is an organized and systematic methodology to obtain answer to questions in hand through scientific method. In the context of research, scientific method may be defined as logical and systematic study of a problem. Being logical means having reasons behind the event or even the problem under investigation. Systematization stands for being sequential or following a step wise methodology. The word problem used here means anything that disturbs an individual. The key word for being a problem is its extent of disturbance. If it does not disturb an individual than at least it cannot be a problem because it can be ignored and the researcher has some available alternatives with respect to that problem hence need for research does not arise. In fact this disturbing attribute of a problem diggers the journey of a researcher. For a problem, to be a piece of work for researcher, requires that the problem must be researchable and there must be definite tools for data collection.

Research is simply an empirical, objective and logical analysis of events leading to conclusions, generalizations, laws, principles and theories etc. which support to probe any phenomena. Best and Kahn (1992) describe the process of research by highlighting its main features like research

- requires careful recording, reporting.
- looks for answers to, hitherto, unsolved problems or unanswered queries.
- aims at the generalization process so that a prediction, with minimum error, may take place.
- accepts only those verifiable which are observable in nature.
- requires courage, wisdom and patience on the part of investigator.

### **EDUCATIONAL RESEARCH: NATURE AND IMPLICATIONS:**

As other research activity, educational research probes systematically and logically the educational phenomena that is problems pertaining to educational settings/scenario. For Travers (1958) educational research attempts to develop an organized body of knowledge with respect to the events which concern an educationist. For example, one of the important domains of central concern in educational settings is related to behavioural aspects of learners then, through educational research, the organized body of knowledge generated may enable the teachers to reflect upon teaching and learning as process in order to derive the desired behaviour from learners. Educational research, like any other usual research activities, rests upon inductive and deductive reasoning which involve observations, hypotheses formulations, data collection, hypotheses testing etc. During all this, educational research uses scientific method.

The guiding light of any research activity is paradigm which is a model/trend accepted by the community of experts. Thomas Kuhn (1962) was the proponent of the term paradigm and in his book "The Structure of Scientific Revolution" he stressed that paradigm

is deeply rooted to research activity in a field that is no research is valid if it does not have any paradigm. Educational research is also not an exception to this kind of directional notion that is paradigm. Natural Sciences rely upon positivist paradigm (also known as quantitative research paradigm), which is a type of paradigm that emphasizes quantifiable and empirical observations that further upon subjecting to mathematical treatments help in arriving at the conclusion(s). But in Social Sciences, like education, a researcher deals primarily with humans as subjects and humans cannot be compared with matter, which is subject of a natural scientist, as humans have rationality behind their behaviour and every human has a purpose in this universe that is the quality of human behaviour. So, humans cannot be subjected to rigorous mathematical treatments like natural sciences hence non positivist paradigm (also known as qualitative research paradigm) is the driving force behind research in social sciences like education.

### EDUCATIONAL RESEARCH: GLOBAL PERSPECTIVES

Thus, after discussing all this, it is appropriate to ponder upon the notion that what does it mean by being global? Is research, as a process, global in nature or are these the features of research, which themselves by being global, establish the research as universal phenomena? By being global it simply means the point under consideration is/should be applicable across the globe like for a country aspects pertaining to terrorism, economy, education, poverty, defence etc. are globally a matter of concern.

- **Subject matter:** as discussed earlier, humans are primarily the subject matter of educational research. Actually, Sociology, Anthropology, Psychology and Education as disciplines however in different settings, focus on humans. Restricting up to education only all societies expect desirable behaviour which is conducive for all to grow. Education, as an agency through educational institutions like schools, proves instrumental in this respect as no civilized society can progress without education and education in turn is constantly being enriched through researches.
- **Context:** education has its own definite context which is built up by its philosophical, sociological, psychological foundations. Educational researches definitely have a background, significance; rationale to work upon that is educational research does not work in vacuum. The context helps in proper solution of the problem or addressal of the issue.
- **Resourcefulness of the investigator:** educational research requires genuine resourcefulness on the part of investigator that is proper training/orientation/knowledge is mandatory. Generally, teaching as job is perceived by people that anybody can be a teacher like if one is doing nothing after his/her graduation then let us do a teacher education course and be a teacher but in reality teaching as a profession requires rigorous training programmes which is important and relevant not less than required for any other profession.
- **Body of knowledge:** educational researches, like other researches, add to the existing body of knowledge as sound methods of data collection, data analysis techniques are there. Sufficient literature is available in libraries etc. which strengthen any educational research process,
- **Logical nature:** educational research rejects dogmas, mythology etc. as it strictly on only verifiable aspects of reality like natural sciences.

Thus, educational research has its own aura with respect to its nature, meaningfulness and wide applicability in global perspectives. It is a search for knowledge which stands on valid results not on infallible truths. Educational research has its own modes of investigations comprising of tools, techniques and related literature hence assigning education a global status.

### REFERENCES

1. **Best, J.W. and Kahn, J.V.** (1999). Research in education (9th ed.). New Delhi: Prentice Hall
2. **Cohen, L., Manian, L. and Morrison, K.** (2000). Research methods in education. London: Routledge.
3. **Ghosh, B.N.** (1999). Scientific method and social science research (revised ed.). New Delhi: Sterling Publishers.
4. **Grazino, A. M. and Raul in, M.L.** (1989). Research methods-a process of inquiry. New York: Harper & Row.

5. **Guba, E. G.** (1990). *The paradigm dialog*. New Delhi: Sage Publications.
6. **Koul, L.** (2014). *Methodology of educational research* (4th ed.). New Delhi: Vikas Publishing House Pvt. Limited.
7. **Keeves, J.P. (ed.)** (1997). *Educational research methodology and measurement: an international handbook*. New York: Pergamon Press.
8. **Kumar. R.** (2014). *Research methodology: a step by step guide for beginners* (4th ed.).New Delhi: Sage Publications India Pvt. Ltd.
9. **Lovell, K. and Lawson, K.S.** (1970). *Understanding research in education*. London: University of London Press.
10. **Mouly, G.J.** (1978). *Educational research*. Boston, M.A.: Allyn & Bacon
11. **Singh, J.** (2001). *Methodology and techniques of social research*. New Delhi: Kanishka Publishers.
12. **Travers, R.M.W.** (1958). *An introduction to educational research*. New York: Macmillan.
13. **Yadav, M.S. and Lakshmi, T.K.S.** (1995). *Education: its disciplinary identity*. Journal of Indian Education, NCERT, New Delhi.