RESEARCH METHODOLOGY IN EDUCATION

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RESEARCH

- Intellectual Activity
- Bringing to light new knowledge
- Removing the present mistakes
- Adding new learning
- Considered as application of scientific method to solve the problem
- It is systematic, formal and intensive process of scientific methods

DEFINITION

Research is simply a systematic and refined technique of thinking, employing specialized tools, instruments and procedures in order to obtain a more adequate solutions of a problem that would be possible under ordinary. It starts with problem collect data or fact, analyzing there critically and searches decisions based on actual evidence'

G.C CRAWFODE

DEFINATION EDUCATIONAL RESEARCH

“Educational Research is study and investigation in the field of education or bearing upon educational problem”

GOOD.C.V

PURPOSE OF EDUCATIONAL RESEARCH

1. Based on the past experience, solution for the present day problems.
2. Development of science of behavior
3. Knowledge to active goals
4. Knowledge to achieving educational objectives
5. Help the class teacher in order to achieve the result.
6. To establish sound educational theories with the help of philosophical, historical, economic, psychological and sociological.
7. Systematic solutions for educational problem
8. Review existing knowledge
9. Describe situation or problem
10. To construct some situation

FEATURES/CHARACTERISTICS

1. Develops new knowledge or data from primary source.

2. Develops general principles of a theory or law.

3. Systematic, expert and accurate investigation about the problem

4. Eliminate feeling, emotion, prejudice, favor and preference

5. Generalize even unpopular findings.

6. Requires inter disciplinary approach.

7. It is not a purely mechanical approach.

8. It suffers from inadequate of control.

9. It is not a field of specialist only action research may be done by a class teacher or educational administered.

10. Its methods are inadequate for the solution of many problems we face

TYPES OF RESEARCH

1. PURE RESEARCH
2. APPLIED RESEARCH
3. EXPLANATORY RESEARCH
4. DESCRIPTIVE RESEARCH
5. ANALYTICAL RESEARCH
6. LIBRARY RESEARCH
7. SURVEY METHODS
8. FIELD METHODS
9. CASE STUFY
10. EXPERIMENTAL RESEARCH
11. HISTORICAL RESEARCH
12. BUSINESS RESERCH

BASIC RESEARCH

• Basic Research is also known as 'fundamental' or 'pure' research. Basic research studies phenomena to get a fuller understanding of it. This is essentially to obtain knowledge of a natural phenomenon whose applications may or may not have any bearing on any application in the immediate future or even after a long time. Hence, it is fundamental in nature.

Generally this type of research demands a very high order of intellectual calibre as well as intuition. Those who are involved in basic research devote their efforts to the formulation or reformulation of theories and may not be concerned at all with their practical application. The knowledge obtained thus expands the theoretical base of a subject.

Generally, basic research is conducted by intellectuals at academic institutions who are specially commissioned for this purpose.

CHARACTERISTICS OF BASIC RESEARCH

1. It is based on the belief 'knowledge for knowledge's sake.'

2. It involves collection and analysis of data to develop or enhance theory.

3. It leads to advancement of knowledge.

4. It takes place in a sterile environment.

5. It is carried out for understanding theoretical relationship between variables.

6. It is explanatory in nature.

7. Its application may or may not have any bearing on any application in the immediate future or even after a long time.

8. Basic research lays down the foundation for the applied science that follows

APPLIED RESEARCH

.. Applied research on the other hand, is to acquire knowledge on the practical application of the theoretical base already built up which is expected to solve a critical problem... Applied Research is usually conducted for industries or governments by universities or by specialised research laboratories or institutions. Applied Research is always for development purposes. It is generally referred to as Research and Development (R& D)... Hence, applied research is designed to solve practical problems of the modern world, rather than to acquire knowledge for knowledge's sake. One might say that the goal of the applied scientist is to improve the human condition. Some scientists feel that the time has come for a shift in emphasis away from purely basic research and toward applied science. This trend, they feel, is necessitated by the problems resulting from global overpopulation, pollution, and the overuse of the earth's natural resources.

CHARACTERISTICS OF APPLIED RESEARCH

- 1. Applied research is solution-specific and addresses practical questions.

2. It involves collection and analysis of data to examine the usefulness of theory in solving practical educational problems.

3. It can be explanatory but usually descriptive.

4. It involves precise measurement of the characteristics and describes relationships between variables of a studies phenomenon

PURE RESEARCH

- Done for gathering knowledge for knowledge.
- It lead to discovery of new theory or refinement of an existing.
- theory Solutions to many practical problem Ex. Maslow's theory of motivation.
- To find out the critical factors in a practical problem.
- Develop many solutions and enable us to choose best solutions. Ex. Research on pure mathematics human behaviour.

ACTION RESEARCH

• Action research is an extension of applied research. It has its origin in the works of the social psychologist Kurt Lewin (1946). According to John Best & Kahn, "Action research is focused on the immediate application and not the development of theory. It has placed its emphasis on a real problem in a local setting. Its findings are to be evaluated in terms of local applicability, not in terms of universal validity.". Hence, action research is focused on immediate application, not on the development of a theory, not upon general application. It has placed its emphasis on a problem here and now in a local setting.

CHARACTERISTICS OF ACTION RESEARCH

1. It is situational.

2. It is a reflective inquiry.

3. It is based on scientific approach.

4. It is a scientific way of solving problems.

5. It is a small scale intervention.

6. It is a unified exercise to bridge the gap between theory and practice.

7. Its emphasis is not on obtaining general scientific knowledge but on obtaining knowledge concerning a specific local problem. -

RELATIONSHIP BETWEEN BASIC AND APPLIED RESEARCH

Basic research provides the theory that produces the concepts for applied research for solving specific problems.

Applied research provides the data to support, help, guide, and revise the development theory resulted from basic research.

Doing basic research ensures that applied researchers don't need to reinvent the wheel every time they start on a new project as it lays a readymade groundwork

DIFFERENCE BETWEEN BASIC AND APPLIED RESEARCH

Basis Basic Research Applied Research:

1)Problem selection by Individual researcher Employer or sponsor

2) Motivation for researcher Intellectual curiosity and satisfaction in advancing knowledge Commitment to promote public welfare

3) Goal Generalised theoretical understanding, tools, techniques Cost-effective reduction of social problems

4) Research Arena Laboratory Real world setting

5)Nature Analytical Synthetic

Basis Basic Research Applied Research:

6) Application of results Not concerned with applicability of results of the research Acton-oriented and concerned with applicability of results of the research

7) Use of predetermined norms The research starts without any predetermined norms, hypothesis and theories Based on predetermined conditions, objectives, hypothesis and theories

8) Commercial Value No commercial value related to results Commercial value related to results

9) Dependence Doesn't depend on applied research Depends on related basic research for principles, fundamentals, theories, etc.

10)Mode of dissemination of results Publication in learned technical journals Communication with lay decision makers

Thank You...!!!