

Research: An Introduction

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Research is composed of two words Re and Search. Re means again and Search means verifying facts. So, the meaning of research is referred to again verifying old facts. Research means search of Truth. The term research has been defined in various ways such as “ An attitude of mind, Systematic scholarly application of scientific methods.” Systematic solution of problem; “ Honest, Intelligence and exhaustive search for facts” and “ The quest for the unknown and for more about the known facts to reveal the secrets of the universe.” Definitions of research are more than we can imagine.

Best (1993) called research as “The formal, systematic, intensive process of carrying on the scientific method of analysis.” It involves a more systematic structure of investigation, usually resulting in some sort of formal record of procedures and a report of results or conclusions.

According to Moculeyes “Research is simply the process of arriving at dependable solutions to problems through the planned and systematic collection, analysis and interpretation of data.”

According to Rusk “Research is a point of view, an attitude of inquiry or a frame of mind.”

The Webster New International Dictionary defines research as a “Careful inquiry or examination in seeking facts of principles; a diligent investigation to ascertain something.”

Tennyson said Ciccarella (1997) comments on this score so wonderfully as given below:

Research in its simplest sense, is a search for truth (scientific truth at least) and the truth can be often unpopular sometimes extremely so. Those who speak the truth or what they honestly believe to be truth sometimes risk verification, ridicule, loss of security, loss of professional reputation, and even serious physical harm, especially when their statements threaten widely or deeply held views or undermine established institutions.

The term research has been defined in many ways such as

- (1) Research is an attitude of mind.
- (2) It is a systematically intellectual activity.
- (3) It is based on rational experience but generally deals with empirical facts.
- (4) Systematic solution of problem.
- (5) Research is the formalized, systematic controlled and self corrective engineer which evolves reflective thinking and find out new facts.
- (6) Research is the systematic method of discovering new facts or verifying old facts (P. V. Young).

Types of Research

Depending upon its nature and purpose, research is of three types; Fundamental research, applied research and Action research.

Fundamental or Basic or Pure Research:

It is designed to add on organized body of scientific knowledge and does not necessarily produce result of immediate practical value. It is used for advancement of knowledge. The goal of research is the development of theories by the discovery of broad generalization or principle; it is usually carried on in a laboratory situation. Sometimes with animals as subject. This type of research has been the activity of psychologists rather than education. The prevalent aim of the fundamental research is the discovery of knowledge solely for the sake of knowledge. It has little concern for the application of the findings or social usefulness of the findings. It may result in the discovery of new theory or development of existing theory.

Applied Research:

It is undertaken to solve an immediate practical problem and the goal of adding to scientific knowledge is secondary, It is a process for studying practical problems and finding a solution to it. The focus is to improve and modify the current practices. It is based on basic research. It is used for the purpose of applying or testing the theory and evaluating, it's usefulness in solving problems. In other words the applied research frequently deals with the second level organization of knowledge, closing the gap between available basic knowledge and specific practical need in application without attempting the secure complete knowledge beyond that practical need. The findings of applied research are evaluated in terms of universal and local applicability such as statistics, applied physics, Applied Chemistry, Bio-Mechanics and kinesiology.

Action Research:

It is focused on immediate and specific application and not on the development of theory or in general application. It's findings have local applicability to particular problem and universal validity. the research specialist, who are subsidized by universities, private or Government agencies and professional association. This type of research is problem specific as well as situation specific and has direct relevance to the setting in which it is undertaken. Being more or less informal in nature, it involves neither any control on variables nor requires any high profile instrumentation, statistical analysis, questionnaires, checklists, schedules etc. The difference in all the three types of research largely lies in the emphasis and on the degree to which each type addresses itself to the understanding of the nature of things and solution of problem of the mankind.

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