

Research

Introduction

Research is an essential and powerful tool which leads towards progress. Without systematic research there will be no or very little progress. John W. Best a research scholar has said that the secret of our cultural development has been research. Research has pushed back the areas of ignorance by discovering new truths and led to better ways of doing things.

Scientific research leads to progress in every field of life. New products, new facts, new concepts and new ways of doing things are found due to the increasing role of research in the physical, the biological, the social and the psychological fields. Research today is not only in the science laboratory. The manufacturers, the agricultural experts, the archaeologists, the sociologists, anthropologists, economists and educationists are carrying on research in their fields.

Definition

Scholars and researchers have defined research in different ways with different words. **C.C. Crawford** defines:

“Research is simply a systematic and refined technique of thinking, employing specialized tools, instruments & procedures in order to obtain a more adequate solution of a problem than would be possible under ordinary means.”

It starts with a problem, collects data or facts, analyses the data and provides results and future guidelines. It is based on original work instead of only personal opinion. In the well-known nursery poem:

Twinkle Twinkle Little Star

How I Wonder What You Are

According to **Webster Dictionary** *“Research is a careful inquiry or examination in seeking facts or principles and diligent (hardworking, thorough) investigation in order to ascertain (find out) something.”*

The purpose of the research is mainly to answer questions and to increase and update the knowledge. Here knowledge means information about matters. No doubt our knowledge can be increased by

doing trials, errors and chance experiences. These methods are useful but risky, time consuming and expensive to get knowledge or answers. In some cases, trial and errors are acceptable option. For example, children learn basic skills by trying and failing. There is no other way to learn how to walk or catch the ball.

However, mostly learnings and answers are obtained through the use of logic and systematic ways. Research is a systematic way to form new conclusions and concepts. It involves data-gathering methods to increase our understanding and make us able to decide in well manner. For Example, if you decide to buy a new car, you will not go straight to the dealer and buy it without getting details about it. Surely, you will do some research. You will read stories and see ads about cars in magazines and see features of different cars. You will talk to your friends who have bought or used cars already. You might even count the number and type of new cars you see on the streets. If some model is used by the majority of people, it can be a good car. This kind of research we have been doing to get answers to our questions or to increase our knowledge. The knowledge and information can be collected from different sources like experience, human beings, books, journals, newspapers, etc. Research always contributes and adds in existing knowledge in that field.

Objectives of Research

The prime objectives of research are:

- To discover new facts
- To verify and test important facts
- To analyse an event or process or phenomenon to identify the cause and effect relationship
- To develop new concepts and theories
- To find solutions to scientific, nonscientific and social problems

Significance/Importance of Research

Research is important both in scientific and nonscientific fields. In our life new problems, events, phenomena and processes occur every day. Best suitable ways and suggestions are required to handle new problems. Scientists have to undertake research on them and find their causes, solutions, explanations and applications. The importance of research is:

1. A research problem means a difficulty which a researcher or a government organization or a society faces. There is a need for a thorough understanding and possible solutions.
2. Research on existing theories and concepts helps us to know their use and importance.

3. It is the source of knowledge and provide guidelines for solving problems.
4. Research provides the basis for many government policies. For example, research on the needs and desires of the people and on the availability of funds to meet the needs helps a government to prepare a budget.
5. It is important in industry and business for higher gain and productivity and to improve the quality of products.
6. Only through research inventions can be made; for example, mobile phone technology and modern ways of treatment have been discovered only through research.
7. Social research helps find answers to social problems. They explain social phenomena and seek solutions to social problems.
8. Research leads to a new style of life and makes it delightful.

What is the Motivation for Research?

This is an important question. No person will do research unless there are some motivating factors. Some of the motivations are the following:

- To get a research degree (Doctor of Philosophy (Ph.D.)) along with its benefits like better employment, promotion, increment in salary, etc.
- To get a research degree and then to get a teaching position in a college or university or become a scientist in a research institution
- To get a research position in countries like U.S.A., Canada, Germany, England, Japan, Australia, etc. and settle there
- To solve the unsolved and challenging problems
- To get joy of doing some creative work
- To acquire respectability
- To get recognition
- Interest to find out the unknown facts of an event
- Interest to find new things
- To serve the society by solving social problems.