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An Analytical Study on the Immense Assistance of Computer in Research Work

Mr. Prasenjit Ghosh

Ph.D Research Scholar

Mangalayatan University, Department of Arts (History), Aligarh, Uttarpradesh, India

Abstract: We are living in the age of computer. The most arising tool in the research is computer. Problem solving activity easy with the help of developing technology. Problems can be solved with the help of computers quickly. Today computer is used in every field of life. It is immensely used in education also. Researchers are using it for conducting their research effectively. Computers are very useful and important when large sample in used. It saves the time of researcher and gives more accurate and fast results.

Keywords: Computer, Research Process, Tools, Applications, Academic Performance, Education System, Patterns, Data Science, Composing, Pre-Writing, Revising & Editing, Teaching& Learning

I. INTRODUCTION

Computer has always helped in serving the difficulties faced by human beings. By the passing of the time computers have been reduced from a size of room to six of human palm. Computer performs many functions and does variety of jobs with speed and accuracy. Today life has become impossible without computers. They are used in schools, collages and have become indispensable part of every business or profession. Research is also an area where computer are playing a major role.

Computer is comprised of an input device, a central processing unit and an output device. It has the following features:-

- Speedy Device: Computer is known for its speed and takes few seconds to perform any fuction.
- Storage Device: Computer can store and retrieve huge data. It can be used when needed. There is no risk of forgetting and loosing data.
- Accurate Device:- Computer is known for its accuracy. Sometimes it can be inaccurate due to some Technological weaknesses and poorly designed system.
- Automatic Device:-The programs which are run on computer are automatic. They can be operated through some instruction.
- Diligent Device:-Computer works tirelessly and does not suffer with lack of concentration. Large calculations can be done with accuracy and speed with the help of computer.

Aims And Goals Of The Study:-

- To enable to understand the huge contribution of computer in the field of research work.
- To understand the role of computer in the area of data collection in research work.
- In analytics computer has a major part which is to be noted.
- To understand the genetic source of operations as programming in computation.
- To understand the programs which enable computers in wide range of tasks .
- To understand the role of computer in sending creating, sending emails, saving documents, understanding the multi tasks to computer.

What is Computer:-

The term Computer is derived from the "Latin" word "Computare". It means to calculate/to count/to sum up/to think together. A computer is an electronic machine that accepts data from the user, processes the data by performing calculations and operations on it, and generates the desired output results. Computer performs both simple & complex

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operation, with speed and accuracy. In shortly we can say, computer is a data manipulates and saves data through output.

The Role of Computer in Research:

Computer are used in scientific research widely and it is an significant tool. Research process can also be done through computers. Computers are very beneficial and essential when large sample is used. It has many storage devices like floopydisk, CD(compact disk) etc. Data can be used from these storage devices and retrieved later on. There are various steps are required to effectively carry out research and the desired sequencing of these steps in the research process. This data can be used for different phases or research process.

Phases of Research:-

Research has five major phases. Computer can be used in these following phases.

1. Formulation of working hypothesis and computer:-

In this phase, formulation of research problem, review of literature, theoretical frame work and formulation of hypothesis. Computer helps in searching the existing literature. It helps in finding the relevant existing research papers so that researcher can find out the gap from the existing literature.

2. Preparation of Research Design and Computer:

A research design is a detailed plan or a strategy of conducting research. It answers the questions what, how, when/where, and why about the facts to be collected for the study. Computer can be used for deciding population sample, questionnaire designing and data collection there are different internet sites which help to design questionnaire. Several software's can be used to calculate the sample size.

3. Collection of Data:

Actual gathering of data and information begins in accordance with the research design. By collecting the data, the researcher tests the hypotheses which he may ultimately accept, change. Computer helps in collecting data. After collecting data it is stored in computer in word file or excels sheets.

4. Analysis of Data:

After the data have been collected, the researcher turns to the task of analyzing them. Broadly, this step of scientific research includes coding, classification and tabulation of gathered data. These days, much of this work is done by computers. The computer gives the desired computations and comparisons including data for statistical tests.

5. Drawing Conclusions in the form of Theoretical Formulations and Generalization and Computer:-

If a hypothesis is tested, it may be possible for the researcher to arrive at Generalization, i.e. to build a theory. Computer helps is converting the results in to a research articles or Report which can be published. It can be written in a word format or PDF format.

Analysis:-

Computer and its related technology have completely revolutionized our lives. Now, information technology is important in every walk in life. Undoubtedly, computer uti information technology great impact In our education system. Various technologies have been used to improve the teaching and learning process. Information technology makes our education system is time this can learn better without getting bored and frustrated. Computers can make writers job easier in writing process. Computers can simplify the revising process. Revising on the computer is easy, but quality of the revising depends on the nature of the changes that are made by students. In the editing process, writers pay attention to details such as spelling and punctuation. Word processing programs, spelling checkers, on-line dictionaries, on- line style and grammar manuals are useful for the editing. Students make most appropriate revising when they use online prompting and word processing.

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II. CONCLUSION

Use of computer in research in science is so extensive that it is difficult to conceive today a scientific research project without computer. Many research studies cannot be carried out without use of computer particularly those involving complex computations, data analysis and modelling. Computer in scientific research is used at all stages of study-from proposal/budget stage to submission/presentation of findings.

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