

CHAPTER-I

INTRODUCTION

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1.1 INTRODUCTION

Education has a great importance in everybody's life. It is old as human race. It is never ending process of inner growth and development, and its period stretches from birth till death i.e. from cradle to grave. Education in real sense is to humanize humanity and to make life progressive, cultured and civilized. It is the education that develops man's thinking and reasoning, positive sentiments, intelligence, skill and good values. Teaching and learning are the two fundamental aspects of education process. Teaching means to cause the pupils to learn and acquire knowledge and skills. Learning involves acquisition of habits, knowledge and attitudes. . Since teaching and learning are integrally related to each other, good teaching means maximum learning. India faces today challenges both internal and external. Education is most effective instrument to meet these challenges. Only a purposive, appropriate, need based, time bound education can endow people with the knowledge, the sense of purpose and confidence essential for building a dynamic, vibrant and cohesive nation capable of facing challenges and providing its people with the wherewithal for creating better, fuller and more purposeful life and the answer to such types of education is use of information and communication technology (ICT). The country is marching towards the 21st century with the lost of optimism. The present generation needs to be well equipped to meet the challenges of the 21st century.

Globalization and technological change processes that have accelerated in tandem over the past fifteen years have created a new global economy **"powered by technology, fueled by information and driven by knowledge"** The national policy of education (1986) has emphasized that educational technology should play an important role in educational sector.

Research findings several that the proper use of science and technology in the fields of education can help in achieving desired results ,thus facilitating the whole teaching-learning process with information growing at a mind boggling pace, technology provides the necessary help and technical support required to keep pace with the information growth.

In the field of education, ICT (information and communication technology) provides the teacher with variety of tools, which help in transforming the teacher-centered classroom into a rich, Learner-centered and knowledge-rich environment. Information and communication technology-which includes radio and television as well as newer digital technologies such as compilers and the internet-have been treated as potentially powerful enabling tools for educational change and reform when used appropriately different. ICTs are said to help expand access to education, strengthen the relevance of education to the increasingly digital workplace, and raise educational quality by among others, helping make teaching and learning into an engaging, active process connected to real life. However, the experience of introducing different ICTs in the classroom and other educational settings all over the world over the past several decades suggests that the full realization of the potential educational benefits of ICTs is not automatic. The affective integration of ICTs into the educational system is complex, multifaceted process that involves not just technology- indeed, given enough initial capital, getting the technology is the easiest part, but also curriculum and pedagogy, institutional readiness, teachers competencies, and long-term financing, among others.

1.1.1 INFORMATION AND COMMUNICATION TECHNOLOGY

ICT constitutes "Information Technology" and "Communication technology" both of which are developing at a very high speed.

Information Technology (IT): Oxford' Advanced Learners Dictionary defined IT as the study or use of electronic equipment especially Computers for storing analyzing and sending out information. It deals with the use of computer and its software to convert, store, protect, process transmit and retrieve information. In the United Kingdom's education system, IT was formally integrated into the school curriculum.

It was quickly realized that work covered was useful on all subject. With the arrival of internet and broadband connections to schools, the application of IT knowledge, skills and understanding in all subjects become a reality. This change in emphasis has resulted in a change of name from IT to ICT i.e. Information and communication Technology.

Thus information Technology (IT) comprises the knowledge, skills and understanding needed to employ information and communication technologies appropriately, securely and fruitfully in learning, employment and everyday life.

IT capability at school age includes:

- Understanding of how information is structured in a database.
- Skills in carrying out a search on the World Wide Web with sensitivity to meeting, accuracy of data and reliability of source.
- Understanding of how computers can simulate real processes e.g. predator-prey relationships.
- Skills in using software e.g. word processing or e-mail to communicate effectively.
- Understanding that ICT can be used to control things.
- Knowledge of how to use ICT securely, with consideration of the feelings of other people, their rights to privacy and ownership of material.

Not all IT learning will involve the use of computers. For example, teachers might ask pupil to:

- Sort real objects into different categories as an introduction to database.
- Read a piece of printed text in order to identify the key words that might characterize it and help to retrieve it electronically if necessary.
- Develop paper-based models and simulations.
- Consider the use of font sizes and print effect in newspapers and magazines as part of their work with word processors.
- Give each other instructions as a way of teaching about precision and control.
- Compare the use of IT tools and software with other ways of undertaking a design, composition or analysis task.

Communication Technology: Communication is the process of sending, receiving and exchange is possible through a series of interconnected local networks expanding and connecting to other networks globally. Multimedia information can be transferred and exchanged taking high quality real time interaction.

ICT: (Information and Communication Technology) ICT stand for information and communication technologies are defined, as a “diverse set of technological tools and

resources used to communicate, and to create, disseminate, store and manage information". These technologies includes computers, computer works stations, display facilities, hardware, software recording and processing system for sound, still and moving pictures, graphical calculator, the internet, broad casting technologies (Radio and Television) and other vide range of communication facilities. It may also be defined as use of hardware and software i.e. storage, retrieval, processing, communication and sharing cultural upliftment. ICT makes the classroom learning interesting and effective, self-learning easy and successful and lifelong learning possible for all. By 1990, the choice of technologies for education was limited because these were expensive and required high skilled technicians to create and use them. At that time Radio, TV, Overhead Projector, Slides Projector etc. were the best example of technology for use in teaching- learning process. But recently technology applications in education no longer are limited by convenience, cost and their potential. In recent years there has been a groundswell of interest in how computers and the internet can best be harnessed to improve the efficiency and effectiveness of education at all levels and in both formal and non-formal settings.

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1.1.2 ICT AND EDUCATION

Educational system all around the world are under tremendous pressure to use ICT to teach students the knowledge and skills they need in the 21st century. With the infusion of ICT in teaching- learning process, the role and responsibilities of both teachers and learners is transformed. The 21st century teachers and students require the vision of learning- From ICT-With ICT Through ICT-Around ICT, with the skills of digital age literacy inventive thinking and effective communication.

1.1.3 ICT AND TEACHER EDUCATION

Success of any educational reform depends on the effective learning process which in turn depends on the quality of teachers. The government and community endeavor to create condition. Which will help motives and inspire teachers on the constructive and creative lines. Teachers should have freedom to innovate and device appropriate methods of communication and activities relevant to the needs and capabilities of the communities.

Effectively harness the power of new information and communication technologies (ICTs) to improve learning, teachers must have the knowledge and skills to use the new digital tools and integrate the use of ICTs into training/teaching effectively if he develops various competencies like creatively, flexibility, logistic skills and collaboration skills. ICTs can help educators/teachers in the different ways. It enables them:

- To enhance the initial preparation by giving good teaching materials.
- To have access with colleagues, institution and universities and national organization like UGC, NCERT, NCTE and NAAC etc.
- To interact with students over a physical distance.
- To access online libraries, journals and researches to enable individual learning.

1.1.4 ICT AND SCHOOL CURRICULUM

ICT is being accorded increasing importance within the school curriculum. Not only does it support teaching and learning within other curriculum subjects, but it is also a subject in its own right. Developing skills, knowledge and understanding in the use of ICT, prepares pupils to use such technologies in their everyday lives. ICT tools enable pupils to access, share, analyze and present information gained from a variety of sources and in many different ways. The use of ICT provides opportunity for pupils to work both collaboratively and independently. As such, the role of ICT within the curriculum is not only to enhance the learning experience of pupils but also to help them in developing the skills essential to participate effectively in the world of affairs. Recognizing the growing importance of ICT in education area, policy makers in school education sector has taken proper care to integrate computer education at school level.

1.1.5 COMPUTER TECHNOLOGY IN SCHOOL

Computers are revolutionizing all fields of actively nowadays. With quest for knowledge growing at a very rapid pace and with the human intellect becoming more and more inquisitive, the need for data warehousing, data analysis, decision making and presentation has become the most pointed aspect of modern living.

Some of the most sophisticated applications of computer arise in computer- added design, computer-added

manufacture, computer-added teaching and so on. Educators are interested in computers as “interactive learning tools”. In the classroom, students can use computers to develop science projects, prepare reports and gather information from electronic sources around the world. Computers can provide better learning results and can be made adaptive to the individual learner.

This is called “computer-supported” collaborative learning. Thus, it is possible to use computers to teach new skills, to develop better understanding more clarity of concepts, to provide remedial teaching and to facilitate development of creativity and problem solving approach etc.

1.1.6 COMMONLY USED ICT TOOLS IN EDUCATION

The new digital technologies are no single technologies. They are combination of hardware and software media and delivery systems. Following are the types of ICTs commonly used in education:

- Digital video/ Still camera
- E-mail and chat
- Multimedia PC, Laptop Notebook, CD ROM & DVD
- Digital Libraries
- Computer Conference
- LAN and other networks/ Mobile Phones
- Application S/W such as work processing spread sheets, Power point stimulation and speed recognition.
- Integrated Based Research
- Integrated Learning System

1.2 RATIONALE OF THE STUDY

Today's world is that of technology and education keeping in view with the pace of it has the idea of technology into it to cater properly to the needs of today's students. The old method of teaching is somehow becoming unproductive to a large scale chalk and talk method in the classroom doesn't reach each and every student but the ICT education can reach as many companies are developing new technology to attract students for better understanding of the concept because of which, the technological approach towards the learners seem very effective than the old teaching method. It is time saving, required less manpower, and is easily available through internet and App's and it is very effective in increasing the achievement level of students.

1.3 STATEMENT OF THE PROBLEM

The problem for the present study was worded as:

STUDY OF EFFECTIVENESS OF ICT ON ACHIEVEMENT IN SOCIAL SCIENCE OF CLASS VII STUDENTS

1.4 OPERATIONAL DEFINITION OF THE KEY TERM USED

ICT: ICT is a scientific technological and engineering discipline and management technique used in handling information, its application and association with social, economical and cultural matters.

Achievement in education: A performance is the extent to which a student, has achieved their short or long-term educational goals. Cumulative GPA and completion of educational benchmarks such as secondary school diplomas and bachelor's degrees represent academic achievement.

1.5 OBJECTIVES OF THE STUDY

1. The objectives of the study are: To study the achievement in Social Science of the Students studied through the ICT-mediated learning.
2. To study the effect of Treatment, Gender and their interaction on the achievement in Social Science of the Students by taking their pre-test scores of achievement in Social Science as covariate.

1.6 HYPOTHESIS OF THE STUDY

1. There is no significant effect of Treatment on the achievement in Social Science of the Students when their pre-test scores of achievement in Social science are taken as covariate.
2. There is no significant effect of Gender on the achievement in Social Science of the Students when their pre-test scores of achievement in Social Science are taken as covariate.
3. There is no significant Interaction of Treatment on the achievement in Social science of the Students when their pre-test scores of achievement in Social Science are taken as covariate.

1.7 DELIMITATIONS OF THE STUDY

In view of the research constraints under which the study was conducted, it remained confined, it remained confined to the following.

1. The CBSE syllabus of class VII Social science only.
2. The study is delimited to one school only.
3. Only 7 days treatment was given.
4. Only five lesson plan were taught.
5. The study is delimited to Bhopal district of Madhya Pradesh