ROLE OF COMPUTER EDUCATION IN INDIAN SCHOOLS

Shweta Pachauri[1], Deeksha Sharma[2], Dr. Rahul Misra[3]

[1]Assistant Professor, Department of Education, Agra College, Agra, UP, India

pachaurishweta5@gmail.com

[2]Assistant Professor, Department of Education, Agra College, Agra, UP, India

deekshasharma2222@gmail.com

[3]Assistant Professor, Department of CSE, Agra College, Agra, UP, India

misra.rrahul@gmail.com

Abstract- **Education is a significant part of social turn of events. Schooling assumes a significant part in guaranteeing the outcome of the improvement of any country. The learning offspring of a nation need to have great abilities and must be proactive with a fitting e-modern mentality. This article deals with the computer education in schools. Teaching through computers is used in many schools of India these days. The computers can be effectively used as a media of teaching starting from the kindergarten classes onwards. The modern technology of teaching through computers is mainly limited to some privately run schools in the cities. The revolution in computer education will not be complete unless computers are made accessible to each and every student of village schools in India.**

Keywords- **Computer, School Education, ICT, CAL, Digitalization.**

I. INTRODUCTION

Education is an important aspect of social development. Schooling plays a major role in ensuring the success of the development of any nation. The learning children of a country need to have good skills and have to be proactive with an appropriate e-futuristic mindset. In India, more than 30,000 public primary schools are running computer-aided learning (CAL) projects. The adoption of Information and Communication Technology (ICT) and Computer Science (CS) in school education has been an important topic of study and research in several countries. Education technology means the use of all kind of modern media and materials for maximizing the learning experiences. Education technology is suggested by expert as one of the potential means of impairing education effectively and efficiently. Previously, teachers used to teach in rigid, formal and stereo-typed ways. Education was then conceived as the process of transmitting knowledge and ideas. Student used to get by heart whatever was given by the teacher or textbook. They often could not understand what was taught and were expected to reproduce at the time of examination. Pupils were silent audience and could not make any logical queries or independent thinking of their own. Today, the student is not considered as an empty vessel to be filled in by facts and figures. They are now expected to use so many media and materials and to get learning experience from all sides. Education is regarded as a process of interaction and interpersonal communication. The modern teacher has to help, to guide and facilitate the learner's development. The teacher has to inspire and motivate the young leaner's and assist the adult learners in their quest for knowledge and skills. Technology in education is defined as an array of tools that helpful in advancing student learning and measured in how and why individuals behave. Educational technology is the study and ethical practice of facilitating e-learning, which is the learning and improving performance by creating, using and managing appropriate technological processes and resources. Educational Technology relies on a broad definition of the word "technology" which significant the tools and the sources to enhanced, to develop the skill of the Education.

According to the National Science Survey of India, students pursuing careers in Sciences preferred math.

Compounding matters are the fact that most often the terms digital literacy, ICT, and CS are used interchangeably by educationists, teachers, and as aconsequence, also by their students. It creates the illusion that CS is already being taught and integrated at the school level and as a result, efforts to improve the situation for CS education at school often end with giving more importance to digital literacy or ICT. Realizing the importance of CS skills in education many countries began to introduce CS as the main subject from primary school curricula. In India, CS school-going as elective subjects for senior secondary school students. This study focuses on adolescence attitude, awareness and effectiveness towards CS education because adolescence is more concerns for the developing future, various interruptions sidetrack serious life decision making them. It is required for young individuals to create an identity in this period; otherwise, confusion disturbs their life. Therefore, the need for directing them to holistic development arises. Student empowerment is one of the primary intentions to help students to gain the confidence, experience, and skills necessary to meet the challenges of an ever-changing world. Computer-aided learning generally covered by Studies of CAL projects in India, the success and failure of such projects depends upon the support of government and social or organizational factors. It also depends upon the learning impacts of children with no prior experience in computer knowledge. The social change about the learning of computers among children, the academic literature leans towards a more critical look from an education policy perspective. On computer learning issues, however, there are general concepts that establishing to improve learning computers is generally difficult and that there are two sides to learning outcomes in schools, the cognitive and social knowledge development for young children who are using computers. The quality of CS education not only depends on the support from Government and curricular content but also on the knowledge and capabilities of teachers teaching CS subjects. Hence, effective teacher training in CS is imminent. According to Ragonis, dedicated CS teacher preparation programs should be developed, and only teachers with formal CS backgrounds should be allowed to teach CS in secondary schools

II. NEED OF SCHOOL STUDENTS TO LEARN THROUGH COMPUTERS

➢ A school student is not expected to learn complex computer programming or lessons in software development through the computers used in our schools. A school student only needs to learn certain basic operations of a computer. These basic operations are enough for a school student to make use of certain computer based educational applications loaded in a school computer.

➢ These days even the kindergarten students make use of the computers for learning. They need to handle the basic components of the computers like the keyboard and mouse to work on their computer systems. When these young students try to play some basic educational games of alphabets and numbers, they not only learn about the alphabet or numbers which are seen by them on the computer monitor screen but they also learn to identify these numbers and alphabet letters on the keyboard. They also learn how to move and click the mouse pointers on the screen. By doing this, the students also come to know the left and write mouse buttons of the mouse. The basic educational games available readymade in the market or made by their teachers using MS PowerPoint fascinate the attention of the students and get attracted towards learning.

➢ The various educational slides and games that can be bought or prepared by the teachers for the use of kindergarten students can relate to the study of alphabets, numbers, colours, actions, animals, body parts, clothes, family relationships, fruits, vegetables, places of worship, days of the week, months of the year, classroom articles, school articles; rooms in a house; means of transport or anything which might come to the mind of the teacher and which the teacher thinks that the children of this age should know and learn. Children can learn their nursery rhymes from videos which can be played in the computers.

> Growing up from these basics, the students can learn to draw by using MS Paint and learn to type small words and sentences using MS Word. Moving away a little from these applications, the students can learn the use of MS Excel for small calculations and MS PowerPoint for making slides.

III. USE OF MS POWER POINT IN SCHOOL EDUCATION

MS PowerPoint can be used as an important educational tool both by the teachers and students. Teachers can make PowerPoint slides based on the text book lessons. These slides can be made very effective by inserting sound files, images and can also be given animation effects to the text and images. These slides will thus make learning very interesting to the students. Even interesting educational games can be created by using MS PowerPoint which can be run in the computer labs in the school where the individual students can interact independently or in groups of two to play these educational games. The children learn their subjects very fast in this manner.

IV. COMPUTER EDUCATION IN SCHOOLS
A. Computer Education In Government Schools

India lives in villages which comprise of three fourths of our population. Most of our government run schools are located in villages. These schools are fully or properly equipped with the infrastructure to teach children through computers. Even in the city government schools, wherever the computers are provided, they lack proper maintenance facilities or there are no competent teachers to use them in a proper way as a media of education. Many schools just keep computers only to show the statistical data to satisfy the inspection authorities.

B. Computer Education In Privately Managed Schools

Many privately managed institutions which are mostly located in the urban areas do provide basic computer education to the students. The scope and extent of computer education provided in the privately run schools differ from school to school. Most of the small schools in this category mainly use the computers for teaching fundamentals of computers or playing ordinary games by the children. Most of them do not have internet facilities. The computer related infrastructure in these schools for the use and implementation of computer based education is also not the same. Some international and corporate schools which collect very high rates of fees from the students provide electronic interactive white boards with computer based educational software from companies like the Educomp, Teachnext, digiclass, smartech etc. In some other private schools where these companies provide the hardware and software for teaching called smart classes, charge around Rs.100 per month per student extra from the students in addition to the normal fees of the school.

Some of the schools have provided their own computers, projectors, LCD TVs and have developed their own PowerPoint lessons based on the text books used by their school students. I know one school run by the Holy Mary Children's Educational Society at Ferozguda in Hyderabad city of Andhra Pradesh which provides all these facilities from LKG to X class. The school charges a nominal fee of about Rs.500 to Rs.700 per month which includes the fees charged for all these facilities in this school. The school has a network of about 35 computers supported by the LCDs TVs and overhead projectors. All the computers in the computer lab and classes are networked to one another. So there are some schools in India like the one I have mentioned which provide these facilities on a no loss no profit basis. The idea of education for such schools is not business which many of the modern private schools have indulged in.

V. CHALLENGES USE OF TECHNOLOGY IN EDUCATION

Despite early implementation of technologies in Education system, India still faces teething problem for the new technologies in education:

- Not enough or limited access to computer hardware & computer software in education institutes
- Lack of time in school schedule for projects involving use of technologies
- Lack of adequate technical support for education institutes
- Not enough teacher training opportunities are there
- Lack of knowledge about ways to integrate technologies to enhance curriculum
- Education technologies integration is not a priority
- Students and Teachers do not have access to the necessary technology at home

There is also a negative facets of new technologies used in education. Many ethical questions and issues arise with this use of the latest technologies in education.

VI. BENEFITS OF COMPUTER EDUCATION
- It enhances creativity & thinking skills.
- Provides efficient & better use of IT Technology.
- Proves beneficial for career aspiration.
- Improves research work & helps in communicating with different education providers.
- Gives instant information on any topic in just a single click, & many more.

VII. USES OF COMPUTER IN EDUCATION
- Huge & organized store of information
- Quick processing of data
- Audio-visual guides in teaching process for a viable learning
- Parents can know their wards' progress
- Quick Communication & Correspondence

VIII. CONCLUSION

Whether we like it or not, the education through computers is going to become one of the most important techniques of teaching methods in the schools of the 21st century. But the revolution in computer education will not be complete until the computers are used as media of teaching in each and every school in rural India. We was also seen the use of computer in teaching learning in the COVID also. Today ongoing scenario computer is the one of the most important part and need of the education.

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