

Different Information Communication Technology Based Projects and Its Consequence on Students Performance in Higher Education

Sudhir B. Agarmore¹, Dr. Hemant S. Mahalle²

¹Department of Computer Science, Shri Mathuradas Mohota College of Science, Nagpur, Maharashtra, India

²Principal, Shri Vitthal Rukhmini College, Sawana, Ta- Mahagaon, Dist- Yavatmal, Maharashtra, India

ABSTRACT

ICT refers to technologies that enable telecommunications access to information. It is comparable to IT but mostly focuses on communication technology. In India, education has been aggressively pushed via the application of Information and Communication Technologies (ICTs). Using single way and interactive television, from radio to satellite India has tried and has successfully extended education to backward places. India has extensive expertise in both formal and informal education with broadcasting and digital technology. Various more digital technology-based initiatives in different parts of India have been implemented. Technology used in the name of education is not the goal of education, but rather an aid to it. The use of technology, which is one of the most powerful parts of the information age, encumbers individuals in order to strengthen citizens and occupation members in the face of events and concepts, as well as to simplify their daily routines. India now aspires to be a leader among knowledge-based societies, and it is working hard to achieve this goal. We can say that at this point in time, information and communication technology (ICT) has an impact on every element of human life. They play important roles in the workplace, in business, in education, and in the entertainment industry.

Keywords: Higher, Education, Information Communication Technology, Project, Student, etc.

I. INTRODUCTION

ICT stands for "Technology of Information and Communication." It refers to technologies that enable telecommunications access to information. It is comparable to IT but mostly focuses on communication technology. The Internet, the Wi-Fi networks, communication Telephones and other media this means that in the course of the teacher training, we now have more opportunity to use ICT and to increase teacher quality efficiently. According to United Nations, the "ICT" discipline and management information utilized for the processing, implementation and association of social, economic and cultural data is scientific, technological and engineering." "Teacher is the most educational aspect of our society's education. He works more in every field to better our society. Skilful teachers can use the form of a good social worker, politician, poet, philosopher for society for creative students. Professors can perform with the learner a friendly role. The quick technological

growth has creatively altered our technology and our society's demands. In order to minimize the gap in the education and learning technology between now and the future, recognizing the impact of these new Technologies in the workplace and in everyday life, teacher educational institutions aim to restructure their education programs and classroom facilities. Dynamic changes in society are being made through ICTs. All parts of life are influenced. In schools, the influences are increasingly felt. Since the ICTs offer greater options for students and instructors, forcing schools to respond appropriately to this technology innovation is a society.

II. DIFFERENT ICT BASED PROJECTS IN INDIA

In India, education has been aggressively pushed via the application of Information and Communication Technologies (ICTs). Using single way and interactive television, from radio to satellite India has tried and has successfully extended education to backward places. India has extensive expertise in both formal and informal education with broadcasting and digital technology. This involves the utilization of conferences on radio, TV and satellite. The finest instances of this effort are Gyan Darshan and Gyan Vani. Gyan Darshan is an educational channel based on satellites and Gyan Vani is a radio educational station. EDUSAT is an important step towards improving the quality of mass education. Various more digital technology-based initiatives in different parts of India have been implemented. Some initiatives are as follows:

- Project Gyandoot in Madhya Pradesh Dhar District
 - Andhra Pradesh Government partnered with Tataliteracy.com, a platform that provides information and information in some of the state's poorest areas.
 - Indoor projects in Tamilnadu, Baatchit, Infothela and Sari
- **Class:** The Computer Literacy and Studies (CLASS) project, initiated by MHRD, Department of Electrical Affairs, and NCERT, in 1984, was a cooperative venture. 42 resource centers and 2582 schools were included. It used the BBC's supplied microcomputers. The introduction of PC machines in line with the world trend has been a revised CLASS project from 1993-2004. The CLASS 2000 program was subsequently started to provide computer literacy in 10,000 schools, computer aid in 1,000 schools and computer-based education in 100 schools by the government. These 100 schools were named intelligent schools and are aimed to promote a broad use of computers in the process of teaching and learning.
- **Keli-Kali Karnataka radio program (AIR Government):** The radio project Keli-Kali was established in 2000-01 to promote the teaching of the classroom in two districts (Raichur and Gulbarga) in north Karnataka. Around 2,50,000 Class III pupils from 5,000 schools were able to enjoy the two radio stations broadcasting. The development procedure of the radio lessons included the following steps:
- i. Identifying tricky spots;
 - ii. Script development teacher training;
- **Radio Broadcasts in Andhra Pradesh and Himachal Pradesh:** In Andhra Pradesh, like Keli Kali, 'Vindam Nerchukundam' was initiated in 2002 for pupils in Class III in Vishakhapatnam. In 2003, Class IV was extended and Class V was extended in 2004. The programmes have been transmitted from 4 AIR stations. Some 29 lakh pupils and 1.5 lakh teachers were benefiting from the courses. Such a radio transmission termed "Gyankalash" was launched for Classes I-V students during the night time in Himachal Pradesh in 2000.
- **Azim Premji Foundation Technology Initiatives:** A mix of aspirations, wishes, and perceived advantages has

led to the access of more than 10,000 primary schools in India to computers. Although this accomplishment contributed to increased expectations, the lack of enough content for youngsters in the local language has had an effect on the effective use of these computers. To satisfy this criterion, the Azim Premji Foundation has begun to create content on CDs.

- **The Karnataka Mahiti Sindhu Program:** Initiated in 2000 in Karnataka, the Mahiti Sindhu program is being implemented in roughly 1,000 secondary schools. Three institutes are paid for by the state government that takes charge of teacher training and the computer maintenance in schools. Four periods a week are given for each class. Five computers with one server were installed in schools with fewer than 150 school children, nine computers had one server in schools with 150-250 students, and 14 systems were supplied at schools with 250-500 learners. The agencies provided subject-based CDs.

III. ICT AND IOT IN THE SYSTEM TEACHING

All studies have now confirmed that IoT has risen and grown as quickly as the Internet. The Internet of Things is today a part of developments and developments in many aspects of daily life and connecting of gadgets to the Internet. It is clear that currently this influences teaching practices because the Internet has deeply rooted in our colleges and e-learning in the American and world-wide systems has become a technique of learning. The efficiency of resources in light of the space, time, papers and physical needs of the teaching style is one of the key advantages of these applications. Teachers can also use this technology to produce "intelligent lessons" instead of traditional techniques. The new technology allows the teachers to track the teaching time, offer graphics and video presentations in real time, or construct and try algorithms with high computer capacities for a higher audience or hundreds of students. It is most convenient to explore the imagination of pupils. In 2016, Gartner, a research firm, estimates to have a network and cloud-related 6.4 billion items, up 30 percent from 2015. They expect that more than 20 billion devices will be connected by the end of the decade. It is certain that this evolution will influence the teaching instruments and will also produce new learning approaches. Smart technologies allow optimal usage of resources, starting with papers and all the time, distance and money involved in education.

IV. ICT APPLICATIONS ON LEARNING PROCESS IN HIGHER EDUCATION

Technology used in the name of education is not the goal of education, but rather an aid to it. Students who are proficient with computers, video CDs, mobile phones, and satellite equipment are encountered by education associations on a daily basis. If teachers do not improve their technology usage skills, they may encounter a variety of issues when transferring education in educational programs using traditional methods or technologies. The use of technology, which is one of the most powerful parts of the information age, encumbers individuals in order to strengthen citizens and occupation members in the face of events and concepts, as well as to simplify their daily routines. Understanding the function of technology and society in order to live in today's society and become more compatible with technological advances is a requirement for surviving and being more compatible with technological developments. Education can help you achieve your goals in life. Education takes the place of ignorance and leads to the realization of the obligations of human beings. The most essential thing to remember is to use and mix both technology and education in order to bring out the most stunning aspects of both at once. Students' views and behaviors are observed in this

specialized study, which is carried out at The American University, using specific observation procedures to acquire information about students' perceptions and behaviors. The accomplishments of students at the conclusion of academic terms, as well as their test results, are also included in the performance measuring variables. When it comes to achieving performance goals, one of the most significant elements to consider is the deployment of information and communication technology (ICT).

4.1. The impact of teachers' use of information and communication technology on students' performance in higher education

In the previous decade, information and communications technology (ICT) has evolved and transformed at such a rapid pace that developing countries have not been able to keep up with the pace and have therefore been abandoned, resulting in a lack of correspondence. ICT is considered to be the established foundation of the present world; as a result, knowing this innovation and its fundamental principles is considered to be an important component of the core of instruction. Innovation has the potential to transform the methods of instruction, the locations and modes of learning, as well as the roles of understudy and teachers throughout the educational process. ICT is altering the instructional process by bringing portions of solidarity to learning environments, including virtual environments, which is modifying the instructional process. Data and correspondence innovation is a powerful and engaging tool for providing instructive opportunities; as a result, it is difficult to conceive future learning environments that are not augmented by data and correspondence innovation.

Instructive establishments may use information and communication technology (ICT) to better prepare understudies with skills and information for the twenty-first century, to the point that it can increase overall availability to training, instructional correspondence, broadcasting of value-demonstrating learning programs, teachers' professional development, and assistance in obtaining a more viable educational administration. It follows that ICT can be used to peacefully address the key challenges of instruction, which are availability, consideration of others, and standardization. Improved training standards are achieved through the use of ICT, which facilitates learning through advancing dialogue, postponed-time chat, coordinated guiding, self-learning, basic reasoning, information seeking, and examination. The use of information and communications technology (ICT) can increase results, guidance, organization, and the development of vital capacities in poor gatherings, while also having an impact on educational guidance and research processes. Use of ICT in classrooms is essential because it allows educators and students to collaborate, conserve, control, and retrieve information in addition to advancing self-directed and dynamic education, which is essential in today's world. The use of information and communications technology (ICT) in learning includes a greater affinity for communitarian learning between students and educators, rather than just in the explicit classroom. For example, separate learning encourages instructors and students to participate in adapting even over the course of a school year, whereas educational learning encourages instructors and students to participate in adapting even over the course of a school year.

V. THE ROLE OF ICT IN DEVELOPING INDIAN EDUCATIONAL SYSTEM

India now aspires to be a leader among knowledge-based societies, and it is working hard to achieve this goal. Consequently, it is difficult to overstate the importance of the Information and Communication Technology (ICT) revolution in ensuring high-quality education and training for students everywhere. In India, classroom

computers were introduced in the early 1980s as a result of the efforts of a small number of private schools. It acquired pace as a result of several programs and schemes initiated by the Government of India from time to time, including: The Educational Technology (ET) Scheme was established in 1972 as part of the Fourth Five-Year Plan. Six State Institutes of Educational Technology (SIET) received 100 percent aid, and the states and UTs received assistance with the purchase of radio/cassette players and color televisions under the program. When the Government of India started the Computer Literacy and Studies in Schools (CLASS) project as a pilot project in 1984, it was considered a success. The objectives of the 6 project were to provide students with a broad understanding of computers and their use, familiarize students with the range of computer applications in all walks of human life as well as the potentiality of the computer as an information processing tool, demystify computers and develop a degree of ease and familiarity with computers that would be conducive to developing individual skills in computer applications. Another supposition is that computer literacy would have a liberalizing effect on schools if teachers were attentive to, and capable of employing, computers to improve the objectivity of instruction. The computer literacy program did not achieve much due to a lack of funding, insufficient teacher training, and the absence of a valid space for computing in the school timetable. It was unable to instill in children the ability to perform computations. Using the software, youngsters were able to recognize, identify, and be aware of alleged facts about computers, at the very best. The usage of computers in the classroom was restricted. When working in a Smart School, the teacher's function is that of a navigator, who would offer students with learning maps to sketch out their own learning courses. It boils down to saying that students should see information technology as a serious tool while still in school, rather than as something they will need later on. The report proposed that all educational institutions up to and including higher secondary/secondary school be equipped with computer systems by appropriate investments of 1-3% of total budget during the next five years, according to the report.

VI. CONCLUSION

We can say that at this point in time, information and communication technology (ICT) has an impact on every element of human life. They play important roles in the workplace, in business, in education, and in the entertainment industry. Many individuals also see information and communication technologies (ICTs) as catalysts for change; change in working conditions, processing and transferring information, instructional methods, learning approaches, scientific research, as well as accessing ICTs. In this digital age, the use of information and communications technology (ICT) in the classroom is critical for providing students with opportunity to learn and apply the necessary 21st century skills. It is important for teachers to use ICT to improve teaching and learning because it allows them to fulfill their role as producers of pedagogical settings. Teachers at all levels of educational programs benefit from the use of information and communication teacher to present their lessons in an engaging and easy-to-understand manner. One of the most important aspects in the technical evolution of learning systems is the increased freedom afforded to students today by ICT capabilities as well as by the Internet of Things' worldwide connectedness. Projects based on information and communications technology (ICT) have also had an impact on teaching practices.

VII. REFERENCES

- [1]. Khattak, Jamila. (2019). RESEARCH PROPOSAL THE IMPACT OF ICT USE OF TEACHERS ON STUDENTS' PERFORMANCE IN HIGHER EDUCATION.
- [2]. Udochukwu, Chilaka & Njoku, Donatus & Alphonsus, Onyekachi & Rex, Akhigbemidu. (2019). THE IMPACT OF ICT BASED LEARNING IN TERTIARY INSTITUTIONS IN NIGERIA. *International Journal of Engineering Applied Sciences and Technology*. 4.1-6. 10.33564/IJEAST.2019.v04i02.001.
- [3]. Ratheeswari, K.. (2018). Information Communication Technology in Education. *Journal of Applied and Advanced Research*. 3. 45. 10.21839/jaar.2018.v3iS1.169.
- [4]. Molnar Gyorgy. (2016). The Impact of Modern ICT-based Teaching and Learning Methods in Social Media and Networked Environment.
- [5]. Sari, Arif. (2014). Influence of ICT Applications on Learning Process in Higher Education. *Procedia - Social and Behavioral Sciences*. 116. 4939 - 4945. 10.1016/j.sbspro.2014.01.1053.
- [6]. Jain, R. (2017). How ICT is evolving Indian education system, *The Education Post*, Oct., 27. Retrieved from <https://educationpostonline.in/2017/10/27/how-ict-isevolving-indian-education-system>
- [7]. Pothula, V. (2018). Emerging trends in Education Sector in 2019, *Digital Learning*, Dec., 24. Retrieved from <https://digitallearning.eletsonline.com/2018/12/emerging-trends-in-education-sector-in-2019/>
- [8]. Bano, N. (2016). Impact of smart classroom learning environment on the performance of first grade students in English. *FUNOON- An International Journal of Multidisciplinary Research*, 2(1), 121-128.
- [9]. Abuhmaid, A. (2011). ICT training courses for teacher professional development in Jordan. *TOJET: The Turkish Online Journal of Educational Technology*, 10(4).
- [10]. Albirini, A. A. (2006). Teacher's attitudes toward information and communication technologies: the case of Syrian EFL teachers. *Journal of Computers and Education*, 47, 373-398.
- [11]. Daniel Light(2009). The Role of ICT in Enhancing Education in Developing Countries: Findings from an Evaluation of The Intel Teach Essentials Course in India, Turkey, and Chile. *Journal of Education for International Development*, 4(2), 52-66.