



## **ROLE OF ELECTRONIC GOVERNANCE IN EDUCATIONAL SYSTEM: A STUDY**

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### **Abstract**

*Electronic Governance (e-Governance) is the use of Information and Communication Technologies (ICT) for the planning, implementation, and monitoring of government programs, projects, and activities. Educational governance today increasingly needs to be understood as digital educational governance. The monitoring and management of educational systems, institutions and individuals is taking place through digital systems that are normally considered part of the backdrop to conventional policy instruments and techniques of government; technical systems that are brought into being and made operational by certain kinds of actors and organizations, and that are imbued with aims to shape the actions of human actors distributed across education systems and institutions. The digital transformation of teaching processes is guided and supported by the use of technological, human, organizational and pedagogical drivers in a holistic way.*

*E-Governance is expected to help deliver cost effective and easy-to-access citizen services, and improve processing of transactions both within the government, and between the government and other agencies. The concept of effective governance of education sector is thoroughly innovated; for effective handling of new challenges confronting the education sector. Educational e-governance can facilitate in improving transparency, providing speedy information dissemination, improving administrative efficiency and public services in all aspects of the education. The challenge is therefore to bring e governance into educational sector. This research aims at bringing ICT for e-governance of the education sector. The present paper deals with e governance significance in educational system and its impact.*

**Key Words: Electronic Governance, Information and Communication Technology, Educational System, Technologies**

### **Introduction**

India is a vast geography with varying levels of development in different parts of the country, and therefore, experiences of using ICTs for education across the country also reflect this diversity. At all levels, from infrastructure availability to availability of trained faculty, there is tremendous variation between urban and rural areas, developed and less developed states, and access for economically and socially weaker sections vis-à-vis the more wealthy in the country. While some interventions have been immensely successful in one area, the same interventions in another part of the country have not succeeded. The most significant insight through this study has been that a whole spectrum of solutions using ICTs in the education space is required in India. This can range from initiatives using community radio for non-formal education through general community mobilization and awareness creation in rural areas to the state-of-the-art technology-enabled learning spaces and other advanced e learning practices in select schools. In the era of digitisation, technology and knowledge have taken centre stage in national and international debates. At the same time, ICT has become an integral part of nearly all sectors and segments especially linked to the education landscape. Be it teaching, learning and assessment.

Technology integration nowadays has gone through innovations and transformed the societies that have totally changed the way people think, work and live (Grabe, 2007). It has profoundly changed the



way of educational interactions around the world and has become an integral part of most of the educational process. The emerging trends have enabled the teachers to use technology innovatively to create learning objectives, develop curriculum and instructional strategies, deliver instruction, embed ongoing assessments, and provide appropriate interventions based on student needs and track outcomes and learning. The New Education Policy of India, 2020 has also emphasized the usage of technology in education. The policy calls for investment in digital infrastructure, development of online teaching platforms and tools, creation of virtual labs and digital repositories, training teachers to become high-quality online content creators, designing and implementation of online assessments, establishing standards for content, technology, and pedagogy for online teaching-learning.

The education sector has faced radical transformation with the help of technological advancements like digital books, multi-sensory classrooms, remote learning, virtual and augmented reality, and artificial intelligence across the globe. ICT is considered an important tool for building knowledge societies (UNESCO, 2003) and especially, as a tool in school education that could help in reconstructing the educational processes and system leading to effective education for all people. The Indian education sector has also witnessed an extensive push by the policymakers, educators, and learners in integrating technology with improving the learning process. It has also led to a considerable shift in the teacher's beliefs in using ICT as a pedagogical tool. Indian teachers have been optimizing various EdTech initiatives launched by both national and state governments potentially solving systemic issues such as access, equity, and quality. The efforts of teachers integrating ICT in the classroom have helped in improving the quality, accessibility, and cost-efficiency of delivery of instruction to students, and the teacher-student relationship as well. Thus, playing a significant role in contributing to achieving the targets of the Sustainable Development Goals, by providing platforms for increasing access to high-quality educational resources and reaching larger numbers of learners.

### **Significance of ICT in Teaching-Learning Assessment**

ICT has changed the education scenario in the last few decades by emerging as one of the most efficient tools used in the learning process, both by tutors and learners.

According to Experts, ICT has changed the face of education over the last few decades. “It has proved to be a boon to both the teachers and the learners. Looking for matter beyond the textbooks is no longer a challenge with respect to time and resources anymore.”

Assisting in the growth of ICT learning in the country, several brands are ensuring to create options for educational institutions.

Recognising the importance of digital literacy in rural India, in 2013 Samsung India launched a Smart Class initiative in collaboration with Navodaya Vidyalaya Samiti. The initiative is available across 500 Jawahar Navodaya Vidyalaya Schools, benefitting over 2.5 lakh students. The brand has imparted training to over 8,000 teachers on interacting technology.

Gopal Singh Tomar, Principal, Jawahar Navodaya Vidyalaya, Dadri (Uttar Pradesh) feels “60 per cent of the students in our school are the first time users of technology or Smart Class”.

Stating that students are now confident and the use of technology is helping our teaching also to a great extent, he said: “Our results have improvement post-ICT.”



“Smart Classes have helped students in developing a mobile application. This app helps the user in calling his/her dear and near ones in case of any emergency just by using the app and that too by a single touch.” According to Singh.

Lately, technology is playing a vital role to ensure effective and efficient assessment of learning. Modern technology is offering educators with a wide range of tools that can be used in the classroom.

### **ICT overpowering Traditional methods**

Technology has brought in major changes in the way education is imparted. Teaching and learning process has evolved from being a one-sided activity to an active process involving exchange of ideas. Indulgence of various creative tools and techniques has made the process a collaborative initiative. Students in today’s classrooms are encouraged to participate actively in the learning process and become active producers of ideas and thoughts. “The students are equipped with the correct knowledge, skill and attitude to take full advantage of all the new opportunities that will be available for them in future,” according to Dr Bharti Swami from Vidhyashram International School (Jodhpur).

### **Major ICT Initiatives in Higher Education**

India has taken up major initiatives in terms of content delivery and furthering education through Information and Communication Technology. For instance Gyan Darshan was launched in 2000 to broadcast educational programs for school kids, university students, and adults. Similarly Gyan Vani was another such important step which broadcast programs contributed by institutions such as IGNOU and IITs. Under the UGC country wide classroom initiative, education programs are broadcast on Gyan Darshan and Doordarshan’s National Channel (DD1) every day. E-Gyankosh which aims at preserving digital learning resources is a knowledge repository launched by IGNOU in 2005. Almost 95% of IGNOU’s printed material has been digitized and uploaded on the repository. The National Programme for Technology Enhanced Learning (NPTEL) launched in 2001 is another joint initiative of IITs and IISc which promotes education through technology.

Moreover, the ambitious National Mission on Education through ICT was launched by the government to harness ICT’s potential throughout the length and breadth of the country. In 2009, the government approved the landmark “National Mission on Education through ICT” scheme. The National Mission on Education through ICT is centrally sponsored scheme submitted by the Ministry of HRD and proved by the Cabinet Committee on Economic Affairs (CCEA). The Mission has planned a variety of initiatives aimed at developing and standardizing digital content for Indian higher education segment. The Mission envisions catering to the learning needs of 500 million people in the country.

### **Role of central Government Central Government in promoting ICT**

The concept of ICT in schools was initially introduced in December 2004. The Central Government later revised it in 2010 to ensure opportunities for students enrolled at the secondary level of education.

Presently, the Central Government has subsumed ICT in schools under Rashtriya Madhyamik Shiksha Abhiyan, a national drive for secondary education.

“Various initiatives have been taken by the Government of India for boosting the use of ICT in Education education sector. All e-resources are made available through e-pathshala. Rashtriya Avishkar Abhiyan aims at nurturing the spirit of enquiry and creativity in young learners,”



To achieve complete digitisation and smart education, the Ministry of Human Development has initiated several new initiatives.

The Central Government initiatives are good in many ways as it permits online submission of data through web portals. "This is more transparent and bogus data can be avoided and Indian education sectors have to do education with quality only in future," said educational expert.

### **All India Radio**

For the vast reach and depth of dispersion of various educational resources to the remotest region of the country, central and various state governments have been utilizing radio channels. All India Radio (AIR) is being used to broadcast virtual classes and other educational content through regional channels across the country. The platform is being specially used for children from primary grades (1-5) in remote areas who do not have access to online resources. The broadcasts focus on activity-based learning. 289 Community Radio Stations have also been used to broadcast content for the National Institute of Open Schooling (NIOS) for grades 9 to 12. A Podcast called Shiksha Vani of the Central Board for Secondary Education (CBSE) is being effused by learners of grades 9 to 12. Shiksha Vani contains over 430 pieces of audio content for all subjects of grades 1 to 12.

### **Key Challenges in Integrating ICTs in Education**

Though ICT holds the potential to transform the education system of a country to a great extent, its implementation in terms of developing countries remains a challenge to an extent. "Training teachers for the use of ever evolving technologies, upgrading their skills continuously and keeping them abreast of the latest developments and best practices is a herculean task." Availability of latest hardware and software facility determines the efficient usage of technology and maintaining it in schools involves a lot of financial investments. "The biggest challenge for effective implementation of ICT in the schools and colleges is the high expenditure in the installation and running of the tools,"

### **Conclusion**

Information and Communication Technology has no doubt brought about tremendous change in education, but we are yet to achieve the desired level of IT adoption in primary and higher education in the country. The optimal utilization of opportunities arising due to diffusion of ICTs in higher education system presents enormous challenge. Nonetheless, it has become an indispensable support system for higher education as it could address some of the challenges facing higher education system in the country. Moreover, it can provide access to education regardless of time and geographical barriers. Similarly wider availability of course material in education which can be shared by means of ICT, can foster better teaching. While technology can influence the way how students are taught, it would also enable development of collaborative skills as well as knowledge creation skills.

### **References**

1. Amutabi, M. N. & Oketch, M. O. (2003), 'Experimenting in distance education: the African Virtual University (AVU) and the paradox of the World Bank in Kenya', *International Journal of Educational Development* 23(1), 57-73.
2. Duffy, T., & Cunningham, D. (1996). Constructivism: Implications for the design and delivery of instruction, *Handbook of research for educational telecommunications and technology* (pp. 170-198). New York: MacMillan.
3. Eriksen, T.H. (2001). Tyranny of the Moment: Fast and Slow Time in the Information Age. London: Pluto Press.
4. ICT in Teacher Education – A Planning Guide, UNESCO(2002) Report.



5. Lebow, D. (1993). Constructivist values for instructional systems design: Five principles toward a new mindset. *Educational Technology, Research and Development*, 41(3), 4-16.
6. Goswami, Chinmoy. (2014)“Role of Technology in Indian Education”. PEDR.
7. McGorry, S. Y. (2002), 'Online, but on target? Internet-based MBA courses: A case study', *The Internet and Higher Education* 5(2), 167-175. Info Dev. “Teachers, Teaching, and CTs”. World Bank Group.