

Impact of ICT on Rural Education in Digital Era

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ABSTRACT :

In Right to Education Act (RTE), the free and compulsory education for children between 6 to 14 years was enacted under article 21(A) of Indian Constitution. But the education of the children does not complete as fully fledged when they reside in a far away not so developed secluded village or rural area. Even after 64 years of independence some States in India are still struggling to achieve Universal enrolment, retention and quality education. There are about 79% students were enrolled in Graduation level and rest 21% students were enrolled in post graduation, Diploma, etc. in India in 2017. The country's Gross Enrolment Ratio (GER) in higher education has registered an increase from 24.5% in 2015 -16 to 25.2% in 2016-17 according to latest edition of the all India higher education survey. Although India's aims to attain a GER of 30% by 2020. Nearly 60% Indian college and university are in rural areas. Higher educational institutions in rural areas are promoted to raise the level of education and literacy in rural India. In this situation, ICT enabled education in rural areas can be a innovative option to fill this literacy gap and upgrade the teaching learning process in the rural educational organization so that the students may overcome their challenges facing in rural education centre. The study also suggests the suitable strategies for enabling smooth implementation of ICTs in rural education. The main aim is to increase the rate of literacy in rural areas the after implementation of ICT.

INTRODUCTION :

In the Information era or biometric era, the innovation, productivity, knowledge and technology are the theme of educational development. In this scenario, it has been duly recognized that implementation and adoption of ICT in educational organization would certainly contribute and enhance its productivity, efficiency and growth. ICT is useful in education; for digital literacy and

developing all kinds of resources; in infrastructure development; in logistics management; in healthcare; for livelihood generation and empowerment of masses; for e-governance; in administration and finance; specialized business and industrial uses; agricultural uses; in research and development and for economic growth and poverty alleviation. ICT has a direct role to play in the education sector. India's demographic scenario shows an increasing demand for education for a population - 30 percent of which is below 15 years of age, 75 per cent of which resides in rural India, a literacy rate of about 74 percent. To this end, the government of India has formulated the national policy on ICT enabled education. The National Policy on ICT in School Education "aims at preparing youth to participate creatively in the establishment, sustenance and growth of a knowledge society leading to all round socio-economic development of the nation and global competitiveness". In India, ICTs was launched in schools in December 2004 and revised in 2010 to provide opportunities to secondary stage students to develop their capacity on ICT skills and direct them towards computer aided learning process. ICT in schools have been included under the Rashtriya Madhyamik Shiksha Abhiyan (RMSA). The scheme also provides support to States and Union Territories to establish computer labs on sustainable basis. The role of ICT is multidimensional. ICT can strengthen the economy in specific sectors or in specific processes that lead to economic growth. However, ICT is simply a tool for achieving higher economic growth and not an end in itself. Academicians, industrialists and policy makers tend to accept a direct correlation between use of ICT and positive macroeconomic growth. ICT has a vital role in connecting the rural economy to the outside world for exchange of information, a basic necessity for economic development.

REVIEW OF LITERATURE :

ICT is important in schools and educational institutions as it implements the activities and functions such as record keeping, research work, instructional uses, presentations, financial analysis, examination results management, communication, supervision, MIS, teaching-learning activities, and general school management functions. According to Peeraer and Petergem (2011), Bhatnagar Subash (2010): ICT use in Rural Indi-opportunities and challenges', discusses the role of ICT for development and empowerment of the rural poor. He opined that ICT can be used for democratic decision making , effective governance and lifelong learning. He suggested globally demonstrated ICT opportunities in education, health, economic opportunities, e-government and in advocacy and empowerment innovation and creativity in organization leadership, strong project management, business models are the various keys to success of ICT application.

DEFINATION AND MEANING OF ICT

ICT is the convergence of computer, communication and content technologies. In order to compete in a global competitive environment, a highly skilled and educated workforce with aptitude and skill sets in application of ICT is inevitable for every nation. ICTs are a potentially powerful tool for extending educational opportunities, both formal and non-formal, to previously underserved scattered and rural populations, groups traditionally excluded from education due to cultural or social reasons such as ethnic minorities, girls and women, persons with disabilities, children with special needs and the elderly, as well as all others who for reasons of cost or because of time constraints are unable to enroll on campus. There is no conclusive research to prove that student achievement is superior when using ICTs in the education space, either in the developed or in developing countries. However, there is a general consensus among practitioners and academicians that integration of ICTs in education has an overall positive impact on the learning environment. ICTs have the potential to innovate, accelerate, enrich, and deepen skills, to motivate and engage students, to help relate school experience to work practices, create economic viability for tomorrow's workers, as well as strengthening teaching and helping schools change

Other benefits of ICT in education are:

- It has the potential to improve education system.
- It can transform the nature and quality of education as a whole.
- It helps to enhance the quality of education by facilitating new forms of interaction between students, teachers, education employees and the community.
- It acts as and provides students and teachers with new tools that enable improved learning and teaching and adds to skill formation.
- It improves the learning process through the provision of more interactive educational materials that increase learner motivation and facilitate the easy acquisition of basic skills.
- It makes education more accessible for all, bringing education to the doorstep of children living in remote rural locations by means of enabling distance learning
- It leads to integration of technologies with traditional educational activities although it can never replace the conventional teacher-student relationship that is so crucial to the development process.
- It offers more challenging and engaging learning environment for students of all ages
- It provides greater flexibility and individualized learning facilities to learners
- It enhances the overall teaching-learning process

- It avails high speed delivery of uniform quality content at reduced cost bringing the cost of education from very high to very low
- It can serve multiple teaching functions and diverse audiences

BENEFIT OF ICT

ICT benefits schools in several ways :

- enhancing learning in classroom;
- improving school management and related tasks;
- improving accountability, efficiency and effectiveness in school activities;
- introducing usage of Power Point presentations and internet.

Hence, it compels policy formulation for the education sector. Literature reveals that when well-utilized, ICT in schools has the potential to improve the teaching-learning process in many ways. ICT is learner centric and hence brings about active involvement of students in the learning process. Students get motivated when learning activities are challenging, authentic, multi-sensorial and multi-disciplinary. Schools tend to witness a higher attendance, motivation levels, academic accomplishments and effective communication as an outcome of ICT programs and projects. Teachers too gain as a result of ICT initiatives. They find ICT to be useful for teaching as well as for personal and professional work. Application of ICT in teaching makes teaching more innovative, interesting, interactive, easy and effective. It complements the traditional teaching-learning process. While imparting knowledge with the aid of ICT educators find that students are more receptive and responsive. Also, ICT can help to impart more information and knowledge to students in a shorter time, enabling maximum utilization of resources and time. Against this background, the study explores the issues and challenges associated with the implementation of ICT in rural schools in India.

CHALLENGES IN IMPLEMENTATION OF ICT BASED EDUCATION IN RURAL AREA

- There is lack of dynamic teachers having poor knowledge and skill formally trained in ICT in rural area.
- In rural area, the teacher's attitude and beliefs are outdated, orthodox, rigid and they can not to adapt the changes. So it is very hard to implement the ICT based education in unfavourable organizational culture and poor attitudes and beliefs of the teachers in rural area.
- Most of the teachers has to engaged to different kind of task other than teaching. So

they can not to make arrangement of time for smooth functioning of ICT in educational organization.

- In rural educational organization, a problem is always being created for maintenance and upgrading of equipment. Though the govt. initiatives are restricted by budgetary constraints. The ICT projects in rural school or college are not self sustainable.
- Lack or insufficiency of funds leads to redundant and obsolete infrastructure and equipments in rural educational organization and the hinderance in the process of enabling ICT skills.
- A large proportion of the educational software is in English language. So the students in rural school or college cannot understand the properly.
- There is a lack of computer and computer related resources such as printers, projectors, scanners, etc in govt. educational school in rural areas and the number of students is also very high.
- There is a lack of up-to-date hardware and software availability in rural educational school or college.

VARIOUS DEVICES IN ICT INCLUDES

- Access of course materials through remote device.
- Online digital repositories for lectures, course material and digital library.
- Online /cloud based academic management systems.
- Employing the flipped classroom concept.
- Making use of handheld computers, tablet computers, audio players, projector device etc.
- Massive Open Online courses (MOOCs) like the NPTEL, WizIQ etc.

INITIATIVES FOR RURAL EDUCATION IN INDIA

The Govt. of India has announced 2010-2020 as the decade of innovation with special focus on ICT based education and skill for students. So our goal is to create an environment of integrated development for education and economic empowerment of rural students. Important initiatives have been taken as under:

- Computer literacy projects for teachers and students.
- To access the mobile through making wi-fi zone in campus.
- E-learning centre and Kiosks for enhancing online education in rural society.
- Community telecentre to meet the ICT learning outside formal schooling.
- Bicycle-based connectivity in rural areas.

- National award for teachers and student using ICT in the teaching learning process.
- Development IT curriculum.
- Higher education ICT initiatives such as E-Gyankosh, Gyan Darshan, Gyan Vani and various other distance education programs.

SUGGESTION

Revolution in ICT has reduced the distance between need and fulfillment of demand of the students. In this scenario, the education of digital India can not function with out the support of ICT. In order to lessen the gap, it is necessary to evolve cooperation between public and private stakeholders. The study brings following suggestions for improving ICT education in rural India:

- Need for public-private partnership for resource mobilization for funding ICT education in rural area.
- To provide need based ICT Education in rural area.
- To formulate policies to access the skill and competencies for learning ICT
- Provision for ICT in formal education.
- To create awareness and community participation in ICT education.
- Give incentives to rural students for encouraging involvement in continuous training in ICT.
- Develop proper infrastructure facilities such as 24 x7 hours electricity, internet, etc. and in absence of electricity alternative power supply system.
- To provide adequate computer in educational institution.
- Govt. should ensure the availability of high speed of Internet in any time in any rural area.
- Govt. should emphasis to purchase or install high quality software so it may support the curriculum and different language.
- School or college authority should block the social media sites so that students can not use it.
- Govt. authorities should maintain the ICT instruments periodically.

The concept of Urban and Rural was created on the basis of facilities, use of technologies, resources, communication, education etc. If the modern technological facilities may be created in rural communities, the life of rural India may become better and more welcoming.

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