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TECHNOLOGY AS A TOOL FOR DEVELOPMENT OF RURAL EDUCATION

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ABSTRACT

According to Article 45 of the Indian Constitution, every citizen of India has the right to receive basic elementary education, regardless of their location. However, even after 64 years of independence, many states in India are still struggling to achieve universal enrollment, retention, and quality education. This is particularly true in rural areas, where there are over one million schools in 638,000 villages across the country. These rural schools are essential to increasing the literacy rate in India, where over 40% of the population is illiterate. The primary goal of these rural schools is to provide access to education and raise the level of literacy in rural India. However, many schools in rural areas are inadequate and often equivalent to being non-existent. As a result, the Indian government has initiated programs to establish and improve schools in these areas. Despite the challenges, the conditions of rural education in India are improving steadily, and the government is providing full support and numerous initiatives to make education accessible to all. One significant aspect of these rural schools is their low fee structure, which ensures that every child can afford to study. The government understands the importance of education in uplifting the socioeconomic status of rural India and is committed to ensuring that every child has access to education. By providing access to quality education, the government is not only fulfilling its constitutional obligation but also empowering rural communities to improve their lives. In conclusion, education is a fundamental right that every Indian citizen deserves, regardless of their location. The establishment and improvement of rural schools is crucial in increasing the literacy rate in rural areas and uplifting the socioeconomic status of rural schools is crucial in increasing the literacy rate in rural areas and uplifting the socioeconomic status of rural schools is crucial in increasing the literacy rate in rural areas and uplifting the socioeconomic sta

KEYWORDS: Rural education, Technology, ICT, Problems, Enhancement.

As per the 2011 census, approximately 72.2% of the Indian population lives in rural areas, which amounts to about 638,000 villages. The remaining 27.8% lives in more than 5,100 towns and over 380 urban agglomerations (Census of India, 2011). However, the adequacy of educational techniques in rural India needs to change according to the demands of the 21st century. The main objective of this study is to elevate the scope, purpose, and methodology adopted for computer education in rural India.

Information and Communication Technology (ICT) is a rapidly developing technological field in global society (Castells, 2000). Among developing countries, India has achieved a significant position in the development of ICTs. In particular, the field of education has undergone tremendous transformation due to ICT development. There is no doubt that the future development of education will be based on ICTs. However, the benefits of ICTs have not reached the expected level in rural areas, and the rural population still has minimal access to ICT facilities, especially the poorest of the poor (Gupta & Bhatia, 2016). Both the central and state governments and non-governmental organizations (NGOs) are allocating huge amounts for the development of ICTs and rural education. Despite this, the level of improvement in the accessibility of ICTs in rural schools has not reached the expected level. This paper aims to provide ideas for improving rural education through ICTs, especially computer-related technologies, and suggests effective implementation of the national policy for ICT in education in rural areas.

One of the key ways to improve computer education in rural India is to integrate various government self-employment training institutes to work for ICT education programs. Additionally, disseminating worldwide current science and technological-related information to rural students can increase their knowledge and skillsets. This will help to create awareness for the effective utilization of local resources



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for the development of the economic conditions of rural areas. Moreover, developing a rural knowledge network can enhance the elearning capabilities of rural people, providing them with a forum for the exchange of knowledge and national experiences in promoting ICT for development in rural areas through a training center.

Another way to improve rural education is to provide employment-related education through computer technologies for school students at the standard of 8th to 12th. This will help to prepare them for the job market and enable them to become self-sufficient. The use of rural kiosk machines can also be an effective way to provide access to updated and latest information, particularly for students and educators. In conclusion, while the development of ICTs in India has progressed significantly, the benefits of these technologies are yet to reach rural areas. However, by implementing the ideas proposed in this paper and effective utilization of available resources, it is possible to bridge the digital divide in rural India and provide quality education to all, regardless of their location or socioeconomic status.

PREVALENT CONDITION

Despite efforts by the government, the present scenario of rural education in India remains poor. In many villages, there are limited government schools and children often have to travel long distances to attend them. Furthermore, most schools in these locations lack computer education facilities. During a visit to Bahin Gram Panchyaet (8no. Maraikura), a village in Raiganj Block of Uttar Dinajpur district, West Bengal, India, it was observed that despite the presence of several primary and upper primary level government schools, there were only two or three high schools, all of which were established a long way back. As a result, students often migrate to cities like Raiganj or Siliguri and some Kolkata for higher education. Bahin High School, one of the oldest and popular schools in the area, had inadequate building infrastructure, electricity, telephone facilities, and experienced teachers. It was established in 1956 and it is managed by the Department of Education. The school consists of Grades from 5 to 12. The school is Co-educational and it does not have an attached pre-primary section. Bengali is the medium of instructions in this school. The school has pucca but broken boundary wall. The school has electric connection. The source of drinking water in the school is hand pumps and it is functional. The school has 1 boy's toilet and it is functional and 1 girl's toilet and it is functional. The school has no playground. The school has a library and has 2122 books in its library. The school does not have ramp for disabled children to access classrooms. The school has not sufficient number of computers for teaching and learning purposes. The name-for-only computer room was in a state of disarray, with computers not installed in a systematic order and basic software not installed. The headmaster of the school informed that although the school has few computers, these are not updated and no computer teacher or technical person is appointed by the government. Computer classes are provided by local people, paid for by the school. The quality of ICT-based education is very poor due to inadequate infrastructure and poorly trained teachers. These hired teachers receive very low salaries, leading to frequent absences and inadequate teaching. The same condition is of Samuktala Jr. Girls High School established in 2008 and is located at Samuktala village in Alipurduar-ii block of Alipurduar district of West Bengal. It is managed by the Department of Education of West Bengal. The school has a library and has 16 books in its library. The school has no computers for teaching and learning purposes. The school is not having a computer aided learning lab or any teacher for teaching computer. Although the government has implemented various initiatives, they have not been effectively implemented in schools, resulting in the current scenario.



Interaction at Bahin High School



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CHALLENGES HINDERING RURAL EDUCATION IN INDIA

India has made significant progress in education, yet there are still challenges that hinder its rural education system. The challenges faced by rural education are many, and some of them are as follows:

- 1. Low-Income of Teachers: Teachers play a crucial role in shaping the minds of young children, but the low-income of teachers in rural areas is a significant concern. Due to the meager income, many teachers do not give the necessary attention to children, which hampers the overall learning process.
- 2. Poor Infrastructure: Most rural schools lack proper infrastructure, including basic facilities such as electricity, clean water, and sanitation. As a result, children are deprived of the opportunity to receive quality education, including computer education, sports education, and extracurricular activities.
- 3. Limited Transportation: Many children in rural areas have to travel miles to reach school, and the lack of proper transport facilities makes it difficult for them to attend school regularly. This leads to a high dropout rate and a low rate of enrollment.
- 4. Inadequate Access to Supplemental Education: Children in rural areas have limited access to supplemental education, such as after-school programs or private tutoring. This puts them at a disadvantage compared to their urban counterparts, who have more access to educational resources.

To overcome these challenges, the government of India has launched several initiatives to promote rural education. These initiatives include building schools in remote areas, providing mid-day meals to children, and improving the quality of education. NGOs and private organizations are also working towards improving the situation by providing scholarships, building schools, and conducting teacher training programs.

Despite these efforts, much more needs to be done to ensure that every child in rural India has access to quality education. The government, NGOs, and other stakeholders need to work together to create a sustainable and effective education system that can provide children with the knowledge and skills needed to succeed in life.

ENHANCING ICT EDUCATION IN RURAL INDIA

Despite efforts made by the government to improve the infrastructure of rural schools, the development is not uniform across all rural areas. Many areas still lack even basic infrastructure facilities, including access to proper ICT education. While the government has provided ICT facilities to rural schools, many of them are not functioning effectively. The reasons behind this include limited accessibility of the facilities by beneficiaries, inadequate knowledge of users, and programmes not meeting the needs of rural students. In order to enhance ICT education in rural India, it is important to assess the local conditions and priorities of rural students before implementing any programme. This assessment should be conducted through dialogue, surveys, and discussions with beneficiaries in rural areas. It is essential to help rural students understand the real benefits of ICT education, so that the programme can sustain in the long-term and perform effectively in rural areas. Moreover, there is a need to provide proper training to teachers to enable them to use ICT facilities effectively in their teaching practices. This will not only enhance their own knowledge but also increase their interest in teaching. Special emphasis should be given to teachers who lack technical expertise, so that they can improve their ICT skills and effectively integrate them into their teaching practices. In addition, the government and other stakeholders should work together to ensure that rural schools have access to proper infrastructure facilities. This includes providing reliable power supply, internet connectivity, and necessary equipment such as computers and projectors. Special attention should be given to remote areas where access to basic infrastructure is limited. Overall, enhancing ICT education in rural India requires a multi-pronged approach, including proper assessment of local needs, effective training for teachers, and providing necessary infrastructure facilities. By addressing these issues, we can ensure that rural students have access to quality ICT education and can fully participate in the digital economy.

CREATING AWARENESS ON ICT EDUCATION IN RURAL AREAS

To successfully implement computer education in rural schools, it is important to first create awareness among students and teachers about ICT education and its usage. Many rural students lack exposure to ICTs and may not initially show interest in computer-based education. Furthermore, previous failures of ICT-related programs in rural areas have led to a lack of trust and motivation among students and teachers. Therefore, creating awareness and motivation is essential not only for students but also for the instructors of the ICT program in rural schools. Awareness and motivation play a crucial role in the success of ICT-based education in rural areas. The authors suggest that the lack of awareness and motivation can be addressed through various methods such as training programs, workshops, and demonstrations. In addition, the government and NGOs can play an important role in creating awareness by providing resources and funding for awareness campaigns.



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Incorporating ICT education into the curriculum can also help create awareness among students. For instance, in Rajasthan, India, the government has introduced computer science as a compulsory subject in government schools, including those in rural areas (Singh et al., 2020). This move has not only increased awareness and interest in computer education among students but has also led to the development of necessary infrastructure in rural schools. Moreover, teachers must also be trained to effectively teach computer education. In the above mentioned study conducted, it was found that teachers in rural schools lack the necessary training to teach computer education. Therefore, training programs for teachers must be implemented to ensure that they are equipped with the necessary skills to teach computer education effectively. Creating awareness and motivation among students and teachers is crucial for the success of computer education in rural schools. Various methods such as training programs, workshops, and incorporating ICT education into the curriculum can be used to achieve this goal. The government and NGOs also have an important role to play in providing resources and funding for these initiatives.

IMPROVING INFRASTRUCTURE FACILITIES

Infrastructure facilities play a crucial role in the successful implementation of ICT programs in rural areas. Although there have been some improvements in the infrastructure facilities of rural schools, many areas still lack even the basic infrastructure required for ICT education. Therefore, before starting an ICT education program, it is essential to ensure that there are adequate infrastructure facilities such as power, connectivity, computer-related materials, and human support. Without these facilities, the program will not succeed. In addition to basic infrastructure, it is important to assess the specific needs and priorities of rural students when implementing ICT programs. This can be achieved through dialogues, surveys, and discussions with beneficiaries in rural areas. By understanding the real benefits of the program, it can be sustained in the long term and effectively implemented in rural areas.

Overall, the improvement of rural education in India requires a concerted effort from the government, educators, and the wider community. By addressing the challenges faced by rural schools and ensuring adequate infrastructure and awareness of ICT education, we can create a brighter future for rural students and help bridge the gap between urban and rural education in India.

ENHANCING COMMUNITY PARTICIPATION IN ICT EDUCATION

One of the crucial aspects of an ICT education program in rural areas is the involvement and interest of rural students. Rural students have different attitudes and behaviors towards technology, and their access to ICTs may be limited compared to urban students. It is important to educate and motivate rural students about the benefits of ICTs for their educational development. This requires a clear understanding of the rural students' needs and perspectives, which can be facilitated through community participation. The role of teachers is vital in creating awareness and promoting community participation in ICT education programs. Teachers should be provided with adequate knowledge and training on the usage and benefits of ICTs. They can act as mentors and facilitators in guiding rural students towards effective utilization of ICT resources.

Rural students often have misconceptions about computer-based education. Some may perceive it as only computer training in basic applications or gaming. Some may think it requires advanced English language skills or is difficult to access and obtain information. Such misconceptions can hinder their participation in the program. It is important to break down these barriers by providing accurate information and addressing their concerns. This can be achieved by working with computer graduates who live in rural areas and have an understanding of the rural students' educational and life conditions.

Effective community participation can enhance the success of an ICT education program in rural areas. The involvement of local leaders, parents, and other stakeholders can ensure the program is tailored to meet the needs of the community. By working together, rural areas can overcome the challenges of limited infrastructure and resources, and achieve sustainable success in ICT education.

INTEGRATING ICT EDUCATION FOR RURAL EMPOWERMENT

To uplift rural communities, ICT education programs must prioritize the needs of rural students. The vision for ICT education in rural areas should be centered on "Integrated Development for Education and Economic Empowerment for Rural Students." In order to achieve this vision, ICT education programs should integrate the rural lifestyle with information about urban educational developments. Providing computer education alone is not enough. Students should also be informed about higher education opportunities and employment prospects in various fields.



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In Tamilnadu, for example, moral education includes vocational training classes such as farming, tailoring, and weaving. However, many schools are unable to effectively implement these classes. ICT education programs can effectively deliver this training and awareness through computer-based technologies. Moreover, computer-based education can disseminate information on new technological developments from the local to global level. It will help rural students understand the social and technological progress of the world while relating to their rural lifestyle. Such ICT-related educational programs can provide employment opportunities for computer and other educated youths in rural areas, while also broadening the knowledge of rural school students about the latest technological developments. Community participation is also important in the success of ICT education programs. Teachers must be equipped with the necessary knowledge and skills to educate rural students about the benefits and usages of ICT. Unnecessary taboos about computer-based education must be removed from the minds of rural students with the help of computer graduates living in rural areas who understand the educational and life conditions of rural students.

In conclusion, for ICT education programs to be successful in rural areas, community participation, infrastructure facilities, and the creation of awareness about ICT education are essential. By focusing on rural students' needs and empowering them with information, ICT education programs can have a positive impact on their educational and economic development.

INITIATIVES UNDERTAKEN BY GOVT. OF WEST BENGAL INTRODUCING THE TIE SYSTEM CALLED 'KYAN'- AN EXAMPLE.

The Sarva Shiksha Abhiya (SSA) program has been implemented by the Government of West Bengal since its inception. To enhance its effectiveness, the State Government has integrated Information and Communications Technology (ICT) tools into the program for primary and secondary government schools. This integrated approach, commonly referred to as Technology in Education (TIE), aims to familiarize students with the use and workings of computers while leveraging the power of ICT to teach traditional subjects more effectively. The Technology in Education (TIE) system has certain prerequisites, including the use of technology by students to create learning artifacts, integrating technology with the curriculum, focusing on learning achievement, and teacher-designed instruction. To ensure sustainability, the Department of Education, Govt. of West Bengal introduced the TIE system called 'KYAN' (Vehicle of Knowledge), which was developed in collaboration with the Indian Institute of Technology (IIT), Mumbai, as a Community Computer. KYAN is a device that combines a computer with an inbuilt projector, content, speakers, and wireless keyboard and mouse. It utilizes the computing power of a computer with an appropriate high luminosity, high resolution, and large screen projection system. The project has significantly improved classroom teaching and learning practices, attendance, retention of core academic concepts, better recall, and examination results, thereby boosting the morale of teachers. The integration of ICT in education has become a significant trend in modern education, especially in developing countries such as India, where the government has recognized its potential to improve the quality of education. SSA is a flagship program of the Government of India, and the Government of West Bengal has taken several initiatives to enhance its impact by integrating TIE. The KYAN device, designed to support the SSA program, has been successfully implemented in various districts of West Bengal. The device has significantly enhanced the quality of education in government schools by improving classroom teaching and learning practices, attendance, and examination results. The device's success is attributed to its user-friendly interface, which has made it easier for teachers to integrate ICT into the curriculum.

However, the implementation of KYAN has not been without challenges. Some of the issues faced by the government include inadequate infrastructure, lack of awareness and training among teachers, and limited funding for the program. The paper suggests that to sustain the success of the program, the government needs to address these challenges and provide adequate resources and support to teachers. The integration of ICT in education has significant potential to improve the quality of education in developing countries such as India. The KYAN device, developed to support the SSA program, has successfully enhanced classroom teaching and learning practices, attendance, and examination results in various districts of West Bengal. However, to ensure the program's sustainability, the government needs to address the challenges faced in its implementation and provide adequate resources and support to teachers.

NEED FOR ICT EDUCTION IN RURAL SCHOOLS

The education system in India is one of the largest in the world. However, the planning and management of ICT-based education have primarily been the responsibility of the state governments, while the central government oversees the matter of policy, planning, and monitoring. The size and complexity of the education system in India, spread across different states, make it highly complex to manage. Effective planning and management are crucial to improve the quality of ICT education, and it should be designed to meet the needs of the user operating agencies at different administrative levels. The decision-making process and control mechanism become more complicated due to the wide geographical institutional network representing a variety of school locations and endowments. Moreover,



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the complexities increase due to the variation in school structures, endowments, and availability of teaching-learning resources. ICTs have the potential to be a powerful tool for extending educational opportunities, both formal and non-formal, to previously underserved constituencies, such as rural populations, ethnic minorities, girls and women, persons with disabilities, and the elderly, who were traditionally excluded from education due to cultural or social reasons. ICTs' anytime, anywhere feature makes it possible to transcend time and space, allowing for asynchronous learning or learning characterized by a time lag between the delivery of instruction and its reception by learners. Online course materials can be accessed 24/7. ICT-based educational delivery, such as educational programming broadcast over radio or television, eliminates the need for all learners and the instructor to be in one physical location. Teleconferencing technologies also enable instruction to be received simultaneously by multiple, geographically dispersed learners. ICTs also provide access to remote learning resources, eliminating the need for teachers and students to rely solely on printed books and other materials in physical media housed in libraries, which are often available in limited quantities. The internet and the World Wide Web provide a wealth of learning materials in almost every subject and in various media that can be accessed from anywhere, at any time of the day, and by an unlimited number of people. This is particularly significant for many schools in developing countries and even some in developed countries with limited and outdated library resources. ICTs also facilitate access to resource persons such as mentors, experts, researchers, professionals, business leaders, and peers, from all over the world.

ROLE OF NATIONAL INSTITUTE OF RURAL DEVELOPMENT (NIRD)

As a renowned research, training, and action research organization for rural development in India, the National Institute of Rural Development (NIRD) operates as an autonomous body under the Ministry of Rural Development. Founded in 1958, NIRD has become a center of excellence for research and training in the field of rural development. Apart from research and training, NIRD also engages in curriculum development, preparing training manuals, and creating training guidelines. To increase the reach of its training programs, NIRD is working on developing a distance learning component that includes print materials, audio-visual content, and two-way video conferencing technologies. Such initiatives leverage ICT tools for the training and development of rural education.

E-LEARNING CENTERS

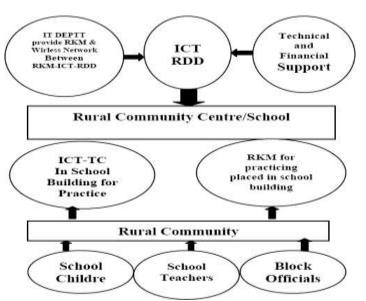
The Indian Government's IT Department is responsible for establishing ICT-based E-Learning Centers in each block of the country, either by themselves or with the assistance of non-governmental organizations (NGOs). This move is aimed at creating a literacy campaign in rural areas, and it serves as a prime example of the effective use of technology in promoting the development of rural India. E-Learning centers provide education through visual and audio content, enabling people to learn how to read and write. The ICT-based E-Learning system plays a critical role in enhancing online education for social and economic change in rural society. With e-learning, education can be delivered anywhere and anytime, providing flexible models such as just-in-time learning.

PROPOSED MODEL FOR ICT EDUCATION

Our proposed model for ICT education takes into account various aspects of rural development and leverages technology to bridge the gap between the rural community and the Rural Development Department (RDD). To enable technical communication between the RDD and the rural community, we plan to use Rural Kiosk Machines (RKM), which will serve as a physical interface. These RKM's will be connected to different departments, based on area-specific wireless connections tailored to local needs. The model includes Community Training Centres, referred to as ICT-TC, where people will be trained initially by the RDD on how to use the RKM and gather relevant information. The Rural Community Centre is the core component of this model, consisting of RKM and ICT-TC, and will be housed in rural school buildings that operate 24 hours a day. Furthermore, ICT instructors from the RDD will provide guidance to rural residents on how to use the RKM and navigate the available information. The proposed model will enable individuals in rural communities to access vital information and resources, fostering growth and development.



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Source: from Niraj Kumar Roy

RURAL COMMUNITY CENTER

The Rural Community Centre is a pivotal element of the proposed model, comprising the Rural Kiosk Machine (RKM) and the ICT-Training Centre (ICT-TC). A rural school building will serve as the Rural Community Centre, housing the RKM, which will be available to people around the clock. In addition, the building will function as the ICT-TC, providing a space for discussion and training in the evenings for the rural community. An ICT teacher or instructor from the ICT-RDD department will be available to assist individuals in learning how to use the RKM and obtain information from it directly. By using this model, the community will have access to information and training resources, allowing them to enhance their skills and knowledge, ultimately leading to the development and empowerment of rural areas.

RURAL KIOSK MACHINE

The Rural Kiosk Machine plays a crucial role in providing access to information in local languages. It is imperative that the kiosk displays information in Hindi and other regional languages to ensure that people in rural areas can understand and benefit from it. To achieve this, the RKM stores information in various formats such as textual, audio, video, livestock data, market prices, weather forecasts, health information, etc. The machine has a user-friendly interface that is easy to navigate and understand. The ICT-RDD department will update all the relevant information on an hourly basis using wireless connections from various departments.

The Ministry of IT will sponsor the installation of RKM machines. These machines will be connected directly to the ICT-RDD through wireless connections, and all the machines will be centrally operated by the department. By having access to up-to-date information in their local language, people in rural areas will be empowered to make informed decisions and improve their lives.

ICT TRAINING CENTERS (ICT-TC)

The responsibility of providing basic education on the use of RKM for every faction of the rural area will fall upon the ICT-RDD department. They will establish an ICT-Training Centre in every school in each village, even the smallest ones. In cases where a school is not available in the village, the RKM will be placed in a well-known and secured central location. These centers will educate the community on how to access information from the RKMs on various rural aspects.

RURAL DEVELOPMENT DEPARTMENT FOR ICT (ICT-RDD)

The ICT-RDD department will be responsible for gathering the latest information from IT and other related departments, updating the RKM machines, and providing training to the ICT instructors on the latest updates at the rural community center. The main goal and theme of the ICT-RDD department are to focus solely on the development of the 70% of the population which requires more attention and care, and can contribute more to the country's development. This is a cyclical process and it is hoped that it will accelerate rapidly



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with the passage of time. The department will work tirelessly to bridge the gap between rural and urban areas in terms of access to information and knowledge.

OBSTACLES OF THE ICT FOR EDUCATION

The implementation of ICT for education in rural areas presents numerous challenges that must be addressed to ensure its success. One major challenge is the lack of infrastructure facilities, particularly in internet connectivity, which is crucial for the effective use of ICT. This challenge can be overcome by providing training and information through computers, even without internet connectivity. Additionally, the use of CDs is an inexpensive and technically feasible option for providing developmental programs in rural schools. Another challenge is the knowledge and computer skills of the instructors working in these schools. It is crucial to select instructors who have basic knowledge of various technologies related to development aspects. To support this, government training institutions for ICT programs should make use of CDs to collect and display practical and theoretical works of experts from different fields. However, it is important to compile this knowledge in a way that is simple and understandable to all students.

Moreover, the knowledge of local resources and its utilization is another significant challenge. This information can be acquired from elders in rural areas, related research institutions, historical events, and books. However, it should be compiled like a syllabus and provided to students in a manner that is easy to comprehend.

Furthermore, the involvement and interest of teachers, education departments, and the end-user community (i.e., students) is critical for the success of ICT for education in rural areas. It can be achieved through continuous motivation and providing better awareness of the importance of ICT programs. Monitoring and evaluating the overall program is also a significant challenge that needs to be addressed. Concerned school education departments can appoint suitable persons to monitor the ICT program in schools. These persons should have better knowledge of computer skills, technical knowledge on various fields, and knowledge of local resources and their management.

It is also important to establish institutional networks at the Panchayat level to facilitate in-service training of teachers and Panchayat officials such as Block Education Officers. State institutes of education and training could provide leadership at the state level and network with districts, while district-level lead institutes can develop a network with Panchayat levels. These institutions, if provided with adequate funding and professionally trained staff, can effectively take responsibility for capacity building at different levels to ensure absorption of ICT inputs. The national policy of ICT for education should pay more attention to rural areas and the education standard of rural students. This represents a great opportunity for rural students to improve their education, employment prospects, and knowledge of global technological developments. By addressing the challenges presented by ICT for education in rural areas, we can ensure that this opportunity is not wasted, and that the benefits of ICT are enjoyed by all.

OBJECTIVES

This paper aims to address the challenges faced by rural education and to improve the accessibility of basic information in rural schools through the use of ICT. The main goal is to promote the development of education in rural communities. To achieve this, several objectives have been identified. Firstly, the objective is to provide employment-related education through computer technologies to students in grades 8 to 12. This will help them acquire skills that are relevant in today's job market, and enable them to secure better employment opportunities. Secondly, the government's self-employment training institutes will be integrated into the ICT education programmes, in order to enhance the effectiveness of the training. Thirdly, the dissemination of current scientific and technological information to rural students is crucial. This will keep them up to date with the latest advancements in technology and science, and prepare them for future opportunities. Another objective is to create awareness among rural communities on the effective utilization of local resources for economic development. This will help them to identify opportunities for economic growth and develop their communities sustainably. To enhance E-learning capabilities among rural people, the Rural Knowledge Network will be developed. This will provide a platform for accessing and sharing knowledge and experiences related to ICT for development. Moreover, the Training Centre will be established to provide a forum for the exchange of knowledge and national experiences in the promotion of ICT for development in rural areas. A tested set of resources and training materials on concepts, issues, and approaches to promote and realize the access of ICTs for all will be produced through the Rural Kiosk Machine. This will help in disseminating knowledge to rural students in an effective manner. Lastly, fast and easy access to updated and latest information is essential. This objective will be achieved by ensuring that the ICT infrastructure in rural schools is equipped with the latest technology and reliable internet connectivity. In conclusion, these objectives will pave the way for improved access to education and development opportunities in rural areas.



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