Improvising rural education system
A digitalized Step towards development

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Abstract

A major population of our country is from rural sectors and hence they can contribute a lot to the economical development of the country. Youth are future of a nation, and hence their education is of utmost importance. There is a noticeable gap between the urban and rural education systems in India, where urban students are having all kinds of facilities but rural students are not. Hence the urban students are way ahead of rural students in every aspect be it academics or co-curricular. There are plenty of problems associated with rural education in India. Some of the major drawbacks in rural education are lack of skilled teachers, appropriate books and libraries are not available, laboratories are not there to teach practical skills. This often leads to a major problem, demarginalization where a lot of students and job seekers leave their home village and move to urban areas in search of better and higher education along with jobs. Digitalization can prove to be a major solution to it. By means of E-libraries, virtual labs, Video lectures and E-teaching, the above problems could be resolved efficiently. It will narrow down the gap between the education systems of rural and urban areas. Many initiatives are being taken by government and various communities towards digital India. This includes MOOC, MOODLE, NPTEL, NMEICT, wiki educator and many more. These steps taken will soon improvise rural education system and will lead to developed India, where there would be no difference in education and opportunities among pupil from various sectors and states.

Keywords:

Rural education, digital education, skilled educators, demarginalization, E-lib, Virtual laboratories

Introduction

In present arena of social development, education is an important aspect. Schooling plays a major role in ensuring the success of the development of a nation. The learning population of a country needs to have good skills and have to be proactive with an appropriate e-futuristic mind set.

Plethora of government initiatives to provide access to primary education may be underway, but issues of equity, quality and access to education remain areas of concern especially in rural schools. Children in rural areas are deprived of quality education owing to factors like lack of dedicated and committed teachers, lack of textbooks and much more.

Major population of India still lives in villages and so the rural education in India is of utmost importance. Even though the number of students in rural areas attending schools is rising, but major lot of students of higher grades are unable to read basic textbooks and are not able to solve simple mathematical problems. As a result, the quality of education in field of mathematics, science and languages is deteriorating. Though efforts are being made but they are not fruitful. The reason cited for this problem is the increasing number of single classroom, to educate students from more than one grade which results in declination of attendance.

Quality and access to education is the key concern in rural schools due to lack of dedicated teachers. Government schools when compared to private schools, quality is a major issue. Though rural population has understood the importance of education and knows that it is the only effective way to get

rid of poverty, but due to lack of money they are dependent upon government schools and schemes for education. If the problems associated could be resolved, then aspiring rural children can fulfill their dreams of doing something great.

Urban education v/s rural education

The excellent performance of urban students is because of:

➤ Better quality of their education

➤ Availability of the information that they get from various sources like mass media and electronic media

➤ Their educated families and peers groups which help them for better performance.

Students in rural areas are less exposed to the outside world as compared to students in urban and hence result in lack of knowledge about the currents issues.

Education is proving to be a key instrument that can raise student's self confidence, forethought, self-esteem and efficiency. Students of underdeveloped villages need to attain the best education. They should avoid making their living environment as one of a barrier in their success. Also students in rural areas are much less likely to earn a college degree than students of urban areas. Student's background also has a great impact on their performance and academic achievements.

Computer education is given high importance in urban areas as compared to rural areas. School education in urban areas is more advanced because lot of computer aided teachings. Apart from the course curriculum rural schools are not able to involve children in other activities like sports, extracurricular activities and competitions.

Major Problems associated with rural education

➤ **Skilled educators**: There is a common criteria in India where highly educated people prefer residing in urban areas and avoid moving to rural places because of huge difference in life style. This way rural education system is being deprived of quality teachers

➤ **De-marginalization**: There is another major problem in country side that is unavailability of higher education, which leads to high number of students drifting towards urban areas. A huge lot of students in rural areas move out of their comfort zone to have access to higher education. Also a major lot of students, specially girls and people with weak financial background are deprived of higher education.

➤ **Unavailability of study material**: There is another problem that is seen in rural schools, that is unavailability of quality books. Since rural schools are not economically efficient and are unable to provide favorable libraries.

➤ **Lack of practical skills**: Due to lack of specialized labs pupil in rural areas are deprived of practical skills and hence their knowledge lags behind the urban students.

➤ **Unavailability of specialized courses:** Mostly primary education is available in rural schools, but there is a high need of secondary education and specialized degrees in these sectors.

Digital Education : A revolutionary solution

Due to lack of proper services in rural India, switching of normal education system to digitalized system could be implemented. By this we would be able to fill in the gap between the education system in rural and urban India. We would be able to establish equality in terms of quality of education.

Some of the major problems associated with the key solutions are as follows:

➤ Video Lectures: By means of digitalization, rural areas can have access to the best professors in the country. The lectures would be available online, and hence the problem of de-marginalization would be resolved.

➤ E-universities: The problem of absence of higher education or quality education could be effectively resolved by setting up e-universities. This will provide professional courses to rural students and hence ensure the development of rural India.

➢ E-Libraries: E-books and E-libraries would be quite helpful in the scene;children will have access to not only their course books but also books by foreign authors.

➢ Virtual Labs: It aims to provide remote-access to Laboratories in various disciplines of science and engineering for students at all levels from under-graduates to researchers. It also intends to develop a complete Learning Management System where the students can avail the various tools for learning, including additional web-resources, video-lectures, animated demonstrations and self-evaluation.

There are three aspects of virtual labs:

1 Videos: The actual video of experiment being performed in the labs where equipments are available can be recorded and can be used to impart practical knowledge to places where labs are not available.

2 Animation: A lot of times recorded videos of experiments are not efficient enough to clear the concepts, in that case animated experiments could be performed in order to set up a better understanding among school students.

3 Simulations: It is the catchiest aspects of virtual labs. Simulation is the imitation of the operation of a real-world process or system over time. The model represents the system itself, whereas the simulation represents the operation of the system over time. This way student will be able to perform experiments by his/her own and would like to perform the actual experiment and eventually will establish a better understanding.

Skilled education: Rural areas should be provided with such higher degrees that could be helpful in making a skilled professional in his/her field. Skills based education is marred by multiple access barriers like limited infrastructure facilities, quality of training, rigid entry requirements, lack of financial support, and negative perceptions. These shortcomings exist more for the disadvantaged, especially women and rural communities. Developing our human resource reservoir that not only feeds to the domestic market but also the global workforce and labor crunch is the urgent growth imperative. Indian workforce needs to be trained across the four levels, from White Collar to the Rust Collar workers linking them to job opportunities and market realities.

Initiatives taken for Digital Education across the globe

Vision and efforts for Digital India are being well-received by the Silicon Valley in the US. It would provide a new meaning to the country's education sector. India is the second biggest e-learning market globally after the US, further we need to implement the very idea in country's rural sectors.

The rapid internet penetration and the availability of low-cost mobile and hand-held devices are bringing about a revolutionary change in education system in our country. Technology is playing a major role in multiplying reach and providing access to learning tools and material, this opportunity is being seen as a huge potential for many foreign and domestic training providers offering online education opportunities in the country. Some of the communities promoting digital education are as follows:

The National Mission on Education through Information and Communication Technology (NMEICT) has been envisaged as a Centrally Sponsored Scheme to leverage the potential of ICT, in teaching and learning process for the benefit of all the learners in Higher Education.

A **massive open online course (MOOC)** is also an aimed at unlimited and open access via the world wide web.. In addition to traditional course materials such as filmed lectures, readings, and difficulties, many MOOCs provide interactive user forums to support community interactions among students, professors.

Moodle (Modular Object Oriented Dynamic Learning Environment) is a learning platform designed to provide educators, administrators and learners with a single robust, secure and integrated system to create personalized learning environments.

The National Program on Technology Enhanced Learning (NPTEL), a project funded by the MHRD, provides digital learning through Web and Video courses in Engineering, Sciences, Technology, Management and Humanities. This is a joint initiative by seven IITs and IISc Bangalore.

Wiki Educator is a community project working towards incremental development of open educational resources. Main focus of this community are building capacity in the use of Media wiki and related free software technologist, developing free content institutions and informal education, facilitating the establishment of community networks**.**

Google and Facebook servers in India: After blackberry, big MNCs like Facebook and Google has eye on investing on digital India. They are planning to set up servers that are directly connected to satellites. Such set ups will help a lot in providing web in rural India and hence digitalizing it.

Conclusion:

Majority of population of India resides in rural sectors and hence the development of rural sectors ought to be a topic of major concern. The youth is the key to development of any state hence education is a topic of utmost importance in here.

Though seeds are sown by introducing many policies and schemes in order to achieve good results in rural education system but still fruits are yet to ripen. Recent educational research has examined rural and urban differences in their achievement. Many educators, researchers, legislators and the general public believe that students from rural schools mostly receive an education that is inferior compared to the students that live in urban areas.

The main problems associated with rural schooling system that are drifting the gap between urban and rural education apart are lack of skilled teachers, unavailability of facilities like libraries, labs and also means of higher education or specialized degree and courses.

Digital education is proving to make a great impact on development. Various means like Virtual Labs, Skilled education, E-Libraries, E-universities are efficient solutions to the problems associated with rural education. It will establish the equality between urban and rural education system.

Some initiatives taken for Digital Education across the globe including India are Moodle, NPTEL, MOOC, Wiki educator, and NMEICT. All theses aim to provide efficient means of learning through web. All these have access to even remote sectors around the world and are helping efficiently in providing equality in education system. Implementing digitalization will help in promotion of rural students and hence will lead to overall development of our nation.

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