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CHANGE IN INDIAN EDUCATION SYSTEM THROUGH TECHNOLOGY-AN ANALYTICAL STUDY

Komal Joshi[1], Dr. Alok Tiwari[2]

Department of Education

[1,2]Shri Venkateshwara University, Gajraula (Uttar Pradesh)

Abstract

This paper discusses about the effectiveness of ICT-driven education and Change in Indian education system through technology greater commitments and willingness to share and adopt innovative solutions are urgently needed from all aspects of society be it Governments, the private sector, communities, donors, parents, and students. All schools should be transformed into active learning environments open to their communities. Telecommunication and power infrastructure policies should aim at schools as starting points for rural transformation; trainers, teachers and students should be empowered to be creative and should act as catalyzing agents for change in their schools; and leaders must cuddle a vision that will set up their youth for tomorrow's challenges. Despite the challenges mentioned in the paper, ICTs are being increasingly used in education in both the developed and developing world, in order to connect children from poor and remote communities, render them a quality education, and in general equip both teachers and students with a wider range of educational resources to have greater flexibility. Hence it can be said that, the growth and success of digital education depends on the extent to which the issues and challenges mentioned in this paper are addressed.

1. OVERVIEW

Although, India scored well in improving from mere 12% literacy at the time of independence to 74% as per 2011 census, it still lags behind the world average of 84%. Targeted programs at primary and secondary education like SSA (Sarva Shiksha Abhiyan) have proved beneficial to some extent but a lot needs to be done to truly educate India. Data figures and enrollment ratios might have presented a rosy picture, but one needs to invigilate the dark corners of Indian education.

We are living in the world of quickly advancing technology. Since the advent of the Internet and personal computers, we no longer compete with the people next door, city, or state but with the people around the world. It is a generation of students who have very different social experiences growing up through the changing times. They are used to surfing the Web looking for interesting information and things to buy. They post their photos and blogs to share with other members of global community. They frequently send and receive text messages and emails to family and friends via wired and wireless networks. Many educators argue that the only way to continue our dominance and prosperity in the world economy and politics is to educate our people as competitive and creative members of the global community, and the proper integration of technology in our education system is crucial to accomplish the goal. Numerous research papers, articles,

and books were written on integrating technology into the classroom, and they often couple it with the 'constructivist' learning theory.

Many of them focus on using technology to enhance teacher-student communication and to promote collaborative and active learning, which calls for a dramatic paradigm shift from the lecture-based education model. Historical Background In order to discuss how best we can integrate technology into the classroom, we need to review the historical relationship between technological innovation and education. A "meaningful integration of technology in classroom" can be traced back to the early part of the 20th century when visual aids such as films, pictures, and lantern slides were commonly used in public schools Then came motion picture projectors, sound motion pictures, the radio, the television, Video Cassette Recorders (VCRs), computers and the Internet in chronological order. How did they change our learning and teaching? Here are some historical anecdotes which can give us some ideas.

With the Indian education system welcoming the new age methods of teaching, the dream of modern India will be a reality soon. The adoption of high-tech driven technologies in education seems bridging the gap between the modern and the traditional practice of teaching.

2. GOVERNMENT OF INDIA'S VISION TOWARDS DIGITAL INDIA

The Government of India's vision of Digital India Campaign has given hopes to many schools and universities to bring certain changes in the education system with a positive outlook. The education sector is in the middle of paradigm shift from a one-size-fits-all factory approach, to a much more tailored learning e-book, e-content, e-learning technologies have brought a slew of changes in the teaching methods and the schools alike. The universities and schools majorly private players have adopted the new teaching tools, but government and government aided schools still need to get in sync with the new technology era.

3. GOVERNMENT SUPPORT

The adoption of smart education system in India is predicted to increase with a CAGR of 16.76% during the period from 2016 to 2020. The aim of government to raise its current gross enrollment ratio to 30 per cent by 2020, will boost the growth of the distance education in India. Government allotted a huge sum for the development of smart learning, only to encourage the distance learning providers and e-teachers to utilize the funds in educating India smartly:

Technology as a boon `

Technology has been proved to be a huge revolution in the field of education, be it the newly joined school kids or the great scholars and researchers, technology has tamed them all. Smart boards, digital podiums, smart class ICT and visualizer have pushed the chalk and duster culture to the walls. Children tend to have their interests inclined more towards technology than to the limited exposure they get through the traditional education methods.

Culture adaptation:

The recent market research report from Technavio predicts the smart classroom market in India to grow at a CAGR of more

than 20% during the forecast period of 2016 to 2020. People are keen to adapt to the online culture, which is encouraging the deepeners to come up with next level eLearning methods, formulas and websites. Especially the 3D learning experience is known to help students to learn in a virtual environment, allowing them to get into the depth of the subject.

Educator-Technology partnership:

Educators have realized the importance of technology in today's education, thus they have adopted the new change taking place in and around the globe. A study reported that about 85% of educational institutions believed that it is important to provide a fostering environment that has the right mix of technology and education in Uttar Pradesh.

Multiple apps for providing solutions of problems:

There are multiple apps for providing solutions of problems related to mathematical, physics, chemistry in different methods, all thanks to the app culture. These apps by edupreneurs give them exposure in the market as well as encourage others to move forward in the technology era. Nothing stops for anybody, if you stick to obsolete methods, your business remain under the heap of dust, when others run over your hard earned name and fame, because change is the only constant.

Silicon India (Sep 2003) reported that Embalam, a village in India, southern India with population of 7000, with 600 of every 1,000 families living below the poverty line. They speak no English and most have not studied beyond high school. But they man one of the 12 spokes, called Knowledge Centers of Information and Communication Technology (ICT) enabling rural development program. Each centre is inter-linked through wired and wireless communication devices. According to Silicon India (2003), the project has won two major international awards, the Motorola Gold Award 1999 and the Stockholm Challenge Award 2001 under the "Global Village" category.

4. IMPACT OF SMART CLASS

It enables the teachers "to quickly assess the aptitude of the student, how much of a particular lesson student has been able to understand and grasp. There might have been conventional thinkers who still believe in the traditional teaching method, yet adoption with the help of digital tools, teaching can be far more interesting and valuable for the new age generation."

E- Smart Book

As the previous subsection shows, it is difficult to talk about digital textbooks as a single concept because of how greatly the platforms differ in features and functionality, and how books utilize the available features. Consequently, this thesis looks at only one series of books, on a single platform. This means that any results will inherently only apply to that series of books and that platform, and that any comparisons to other digital textbooks and their platforms must be done with caution. The book series in focus for the present investigation is Skills, a series of textbooks for vocational English in upper secondary school in Norway ("SKILLS - engelsk for yrkesfag,"

n.d.). Skills are available as a digital textbook on Gyldendal's own Smartbok platform, as well as in paper form. In addition, there is an online digital resource website called the resource bank that provides digital resources for both the digital and paper books. This section will look at how these three parts of the system work.

5. POSITIVE EFFECTS OF E BOOKS

Easy accessibility: Compared to their conventional cousin, E-books can be easily accessed from the website. Some of them are free; therefore, you can download them on the computer without the fear of intellectual copyright violations. After downloading, you can disconnect the internet and read the book on the laptop or your PDA.

Environmentally friendly: E-books do not require cutting of trees as they are devoid of papers. A soft copy of the system is needed to read the content. Therefore, they do not cause harm to the environment.

Cost effective: Hard copies are costly because they require papers for printing the content. E-books are cost effective as they exist in the virtual world. People can easily use different devices to read the content while they are on the move.

Storage: People require large cupboards to stock the books, but their electronic counterparts do not face such problems. The user can increase the secondary storage capacity of the computer to store thousands of E-books. It is a cheaper option preferred by the users. Portability: In order to carry a hundred books from one place to another, you may require transportation. In contrast thousands of E-books can be stored on a tablet while you are traveling. They provide portability and access to information at the press of a button.

Easy to use: While reading E-books people can instantly jump to any page according to their choice. In conventional books, you are required to flip through the pages in a sequential manner to find the required content.

Boon for the elders and disabled: It is possible to resize the font of the E-books on the computer benefiting people with weak eyesight due to old age. Disabled users can download software that would turn E-books into audio versions.

Changing dynamics in education

The changing dynamics in education sector and "shifting expectations for the learning environment require universities to examine teaching and learning practices. The forces of change in higher education system seem to be the need of the hour. However, universities are addressing this shifting landscape with a positive outlook. Digital Learning is organizing Higher Education Knowledge Exchange Program in Jaipur on 21st February which brings key decision makers and leaders in the higher education sector on one platform to discuss the short-term and long-term objectives for strengthening the higher education system" with the help of digital tools. As Malcolm X has rightly put, 'Education is our passport to the future, for tomorrow belongs to the people who prepare for it today. 'The best thing about education system in India is that it prepares the foundation of a child's education very neatly by giving equal

importance to the basics of all subjects in the early stages of education.

6. SIGNIFICANCES OF EDUCATIONAL TECHNOLOGY

Educational technology analysis forever had degree formidable agenda. Typically, it solely aims at hyperbolic efficiency or effectiveness of current practice, but usually it aims at education modification. Whereas it's going to be thought-about as a method science it together addresses basic problems with learning, teaching and social system so makes use of the entire vary of recent science and life sciences methodology. We sleep in a very dynamic world capsulated by just about endless amounts of knowledge. Riding the coattails of data is all of the technology we have at our fingertips.

For as prevailing as technology is presently, is it commutation real lasting education? Can technology have a neighborhood in our classrooms? any level-headed skilled would agree that kids ought to be able to use technology to be competitive inside the geographical point once graduation. With all the trends and advancements in technology no one can argue that we'll go backwards from here the kids seem to basically get pleasure from it and area unit excited concerning exploitation it. Those interested by grip technology ought to be compelled to coach themselves on what's out there. Here could also be a small sliver of the advantages we tend to tend to achieve from exploitation technology to show people.

School districts across the country are not created equal. There is so much disparity in educational resources depending on the wealth, or lack thereof, depending on certain areas. Students using technology in low income districts gain significant skills and advantages in the learning process. Using the same technology is an equalizer for disadvantaged students. Future: The world is moving towards technology at a breakneck pace. Educators have a responsibility to introduce, encourage, and help students master technology, as well as subjects, as it applies to school and the future. Technology will be used in every aspect of the professional lives of current students. So upon graduation, whether the next step is college or career, technology will be used daily. Why not use it daily in school? Mobile: Using technology the classroom can be taken anywhere. With all the knowledge and resources contained and deliverable on demand in a mobile device, students can learn at home or in the "field". Mobile technology allows for greater collaboration between students promoting strong foundations in group work. Motivation: Technology tracks and reports student's progress instantly. What fun is running a marathon if you don't know how long it takes.

Runners can get instant feedback for hundreds of data points as to their condition. This feedback provides instant motivation to improve performance. Similarly, students who use technology are motivated to improve performance. Just like they do at home on their gaming consoles. Trying to beat high scores at home and trying to beat high scores in math use the same psychology. Social: This runs along the same lines as motivation. Creating a social element to educational technology can allow

for healthy competition amongst peers both in the same classroom and across the country. Performing well and earning badges to gain virtual social status is of the heart of many social applications today. Personal identities do not have to be used, instead students could use avatars to hide possible confidentiality breaches. Using technology to make education have social elements can make learning very addictive.

The Significance of Educational Technology in Teaching Learning process

The savings which result from using technology can come in many facets. On a basic level technology can replace infrastructure. Desks, books, lab equipment and other items are a heavy cost burden on schools everywhere. Technology and devices can help save on these costs. In addition, geographically isolated or economically disadvantaged children can benefit from access to online software or resources which would be cost prohibitive without technology. On the other hand, updating software and educational content is not as expensive or cumbersome. With the help of technology course curriculum can reflect real world data. In some applications students can be exposed to real-time information.

Assessing students' performance can be done instantly with technology. It's more than just tests scores, simply understanding students grasp of the subject in real time can be done on tablets in classrooms. A classroom could be questioned with a multiple-choice problem. Students could then input their answer and the feedback score is instantly given to the student and teacher. Corrections can be made long before examinations.

Information and Communication Technology Schemes for Schools

The ICT Schools scheme was launched in 2004 by government of India, with a vision to provide opportunities to students to develop their ICT skills and to enhance the use of ICTs to aid the teaching learning process. This scheme supports the procurement of computers, peripherals, software, connectivity, digital laboratories etc. The scheme is presently being implemented in all the states and union territories of India, in each government and government-aided secondary and higher secondary schools. It is has become a popular and compulsory feature of almost all private schools whether affiliated to ICSE, CBSE or state board. The scheme aims to set up SMART schools in addition to basic ICT equipped labs, in KendriyaVidyalayas and NavodayaVidyalayas, both central government school systems, which will act as "Technology Demonstrators". It can guide to diffuse ICT skills among students of neighboring schools.

7. CONCLUSION

Quality of education in government run schools with a skewed teacher-student ratio is not appropriate. The lack of basic amenities like library, clean toilets, and playgrounds further add to the drop out ratio. Private schools in a rat-race to raise margins commercialize education and display a pathetic apathy towards admitting children from the weaker sections as specified by the RTE act. In the present ambience of poor teacher-student value

connect and stress on conventional rote-learning the student is immune to the passion, zeal and excitement that must be part of their learning in Uttar Pradesh.

The emergence of e-Books as textbooks among the school children requires all parties (i.e. teachers, technologist, parents and even policy makers) to think how to adapt themselves in using e-Book. While e-Book will not replace print books soon, it will be used to complement print books. In classrooms, teachers and students will start to value the convenience and accessibility of e-Book. Technologists can expand e-Book usage among many school children through creating awareness of e-Book usability. Parents will be exposed to the latest development in education technology. The development and publishing process of text books into e-Book may be different from one country to another. In Malaysia, this process is subject to the control of the Ministry of Education which has full copyright of the publication. These days technology has made it possible for all of us to communicate with people all over the world through email, instant messaging, Skype, social media, etc. The advancements in technology have greatly influenced the various fields like Healthcare, Education, Communication, Manufacturing, Banking, etc.

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