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Digitalization of education in India

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Abstract

Many changes have occurred in different Indian education system. From Guru-Shishya system of conducting the class in open garden under the trees to class room lectures, presentation form of teaching with the aid of LCD touch-screen projector to online notes and now instant Whatsapp messages is the buzz word among the students. Whatsapp has gained the status of being authentic formal means of communication among the students and the academicians. Screenshots have taken off the business of many of the photocopy outlets operating within many school and college premises. Indian subcontinent is comprised of diverse population belonging to various ethnic and cultural groups. Apart from these differences, the most visible difference that makes a direct impact on the Indian education system is the diversity in purchasing power and affordability. This paper emphasizes analyzing the nature of the modern education process in India where diversity is seen not only in culture and ethnicity but also in purchasing power and affordability of the Indian people.

Keywords: Digitization, Education, Digital Education and cloud learning

Introduction

India is a vast country with diversity in culture, language, heritage etc. and so is its education system. We have schools with all digitized air-conditioned classrooms and there are also schools emphasizing on value education following Gurukul System where students are taught under the trees despite of having world-class infrastructure. At the same time there are schools which emphasize on books and physical development of students by conducting in-house activities whereas others can afford international exchange programs and have been able to send their children even to NASA. On the other side we have schools where students struggle for books.

India holds an important place in the global education industry. The country has more than 1.4 million schools with over 227 million students enrolled and more than 36,000 higher education institutes. India has one of the largest higher education systems in the world. However, there is still a lot of potential for further development in the education system.

Higher education system in India has undergone rapid expansion. Currently, India's higher education system is the largest in the world enrolling over 70 million students while in less than two decades, India has managed to create additional capacity for over 40 million students. At present, higher education sector witnesses spending of over Rs 46,200 crore and it is expected to grow at an average annual rate of over 18 per cent to reach Rs 232,500 crore in next 10 years. India's IT firms are working with academic institutions and setting up in-house institutes to groom the right talent as these companies move to Social media, Mobility, Analytics and Cloud (SMAC) technologies.

Background of Digital Education

Printing press changed the world of education forever. Six centuries later we are undergoing another transformation and this time everything is going digital. Leading this second wave of technology backed empowerment; Educomp has taken education from the paper to the pixel.

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As a pioneer in bringing digital education to the Indian classroom, Educomp has brought about a radical change in the traditional ways of teaching with its exemplary innovations in the digital space.

Educomp smart class is known to have brought about a radical change in the traditional ways of teaching with its exemplary innovations in the space of digital content usage in the classroom. Science at senior grades can now become even more exciting with atoms bursting at an arm length with Educomp's 3D Lab.

Keeping in mind the need for a global proficiency in English, the Educomp English Mentor Lab has been specially designed to combine a unique methodology with language learning tools that enable students to internalize sentence patterns and practice reading, writing and verbal skills on their own. The first of its kind in the world, it offers a bouquet of education solutions that comprehensively assist schools to leap frog towards an enhanced paradigm of teaching and learning. The quality of education and increasing learning outcomes are the offshoot of amalgamation of never before features, allowing the schools to integrate, nourish, create and enhance a 360 degree relationship with all stakeholders while keeping the student at the center of the learning experience. With League India Schools, educomp soared further with not just a basket of best in the class education solutions but also transformational best practices that allow schools to adopt The League India stamp. As a value added distributor to fliplearn.com, Educomp is on a firm straddle of the 21st Century learning platform marking the future of Education, with ubiquitous flip from traditional to digital tools that seamlessly hop from mobiles to laptops and tablets.

1. **Educomp Smart class:** Educomp smart class is the industry pioneer in the use of rich multimedia content as a teaching tool inside the classrooms in India. It's a revolutionary in-classroom technology leveraging a large repository of digital content across virtually all subjects from kindergarten to grade 12.
2. **English Mentor:** English mentor is an English Language Lab which has been designed keeping in mind the education requirements of English language learners from grade one to ten. It offers a self-paced environment that allows users to correct mistakes, practice correct pronunciation and move on towards coaching in public speaking with confidence.
3. **Educomp Smart class 3D Lab:** With 3D lab complex Concepts become easier to comprehend. When abstract concepts come alive, students can almost feel that they are a part of the subject itself.
4. **Educomp Insight:** Insight is a scientifically designed assessment system that evaluates the academic competency of the student. Insight assesses students on 10 skills and 35 sub skills making it one of the most comprehensive assessment and counseling systems.
5. **Educomp Smart School:** A first of its kind comprehensive School Solutions through which schools enhance the quality of learning providing path-breaking features. It allows schools to create, integrate, nourish and enhance a 360 degree relationship with all the stakeholders while keeping the student at the centre of the learning experience.
6. **League India:** The vision for league INDIA is to build a vast fraternity of new age schools, recognized and respected for their distinct positioning and adoption of

well researched best practices that encompass the League INDIA institutions.

7. **Uni class:** Edu comp Uni Class is a teaching and learning system where a user can access a large repository of rich multimedia content mapped to curriculum. Uni class is available for Nursery to Grade twelve. The Uni Class device is similar to a set-top box and can be connected to a television, a projector or any other display appliance. It gives students an engaging and interesting way to learn.

Digitization of Education system

Educational Systems are changing their characteristics rapidly now a day. An earlier conventional education system was main medium at teaching and learning. But several internet and problems lead the cause of other educational mode. Initially private educational mode was originated to some of the people who are not able to join in regular class room based education, due to lower marks, employment, Fee Structure, Geographical conditions and working condition, time schedule universities are allowed to run private education mode, where student just appear examination for the degree based on preparation of his/her self. This teaching-learning process called Distance Education or E-learning. Internet and computer play an important role for distance education and online education. Today class, reference material, library, group discussion and other activities fully depend on and several computing tools, techniques and mechanism. Cloud computing is an important technology responsible for healthy online and distance education many ways. Today, students can order books online and may never visit the college bookstore. The card catalogue is long gone from the library, and today's research tools are more targeted and more efficient. Today's college library is often home to computer labs and tutor centres. According to director for K-12 at Educomp Solutions, more than 12,000 schools across 560 districts in India have adopted Smart class. More importantly, the number is growing at almost 20 schools a day. On average, in each of these schools eight classrooms are using Smart class.

Role of Cloud Learning: Presently, a number of our schools suffer from a low quality education delivery, primarily due to short handed staff, inefficient infrastructure, tiny classrooms and lack of teachers. Cloud computing solutions can solve many of these problems through online lesson planning tools, automating school management process, and online homework submission etc. This assurance comes from the fact that cloud solutions do not require any traditional education tools like classrooms, teachers, textbooks etc. By virtue of cloud computing, students in the near future will have anytime and anywhere access to their classrooms and teachers. The future of education is all about anytime anywhere access to content and learning. Therefore, cloud computing has got a prominent role to play in the classrooms of the future. Traditionally, lesson planning used to be done on paper in the form of teacher's diaries. It also required the teachers to either carry the diaries around or be present at the school premises. With lesson planning facility on cloud, teachers can define lesson plans for various subjects along with the number of periods required to complete the course material from anywhere and at anytime. On-demand access to lesson

plans for parents leads to better communication and well-managed education delivery. Since automation software are on reputed cloud services such as Amazon Web Services and Google Cloud, concerns about the security of the system and reliability is taken care of. From schools, let's move to colleges. Many colleges do not have sufficient hardware or software to give students a complete learning experience. This problem is especially pronounced in the technical fields.

Ultimately, technology is going to have a significant impact on teaching and learning. The power of the cloud and more consumer-orientated devices are going to make anytime, anywhere learning more commonplace and accessible to all. Furthermore, with access to free, or very cost effective, learning content now becoming ubiquitous, the role of the teacher is going to evolve and become more important than ever. In the Indian education landscape, technology is often considered as an invitation to huge investments in computer peripherals and their maintenance. The future opportunities for success or failure of students could rest in the cloud. Educational Systems are changing rapidly their characteristics now a day. An earlier conventional education system was main medium at teaching and learning. But several internet and problems lead the cause of other educational mode. Initially private educational mode was originated to some of the people who are not able to join in regular class room based education, due to lower marks, employment, Fee Structure, Geographical conditions and working condition, time schedule universities are allowed to run private education mode, where student just appear examination for the degree based on preparation of his/her self. This teaching-learning process called Distance Education/cloud campus or E-learning. Internet and computer play an important role for distance education and online education. Today class, reference material, library, group discussion and counselling and other activities fully depend on and several computing tools, techniques and mechanism. Cloud computing is an important technology responsible for healthy online and distance education many ways.

Teachers are able to beam well-known education leaders and policy makers into the classroom using video conferencing technology. It is almost like being in the same room with people whom the students would otherwise likely not have a chance to meet. Students have their laptop computers, electronic tablets, and cell phones on during class, taking notes and searching the Internet for the latest information on topics that come up in our classroom discussions. Between face-to-face class meetings, the students and faculty engage in lively online discussions on topics that are assigned or in response to questions that are asked, usually about hot issues under discussion. Every student in the class is engaged in the discussions and exchanges with the faculty and with colleague students. Today, between face-to-face meetings, we sometimes schedule a virtual class session, often involving a guest presenter, whom the students can see and with whom they can interact. These sessions can be recorded and links to the sessions can be placed on the course learning management system.

Conclusion

To make online education successful in India we need to modify the entire education sector and the mind-set of the

employers as it has not gained their favour yet. We are yet to travel miles before we reach the stage where we can proudly say certificates and degrees are just piece of papers for us we value knowledge of the person. Hence to meet the requirements of Indian students we propose hybrid model where there should be a combination of physical presence of the teacher and technology.

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