ISSUES, TRENDS & CHALLENGES OF DIGITAL EDUCATION: AN EMPOWERING INNOVATIVE CLASSROOM MODEL FOR LEARNING

Ms. Shikha Dua[1], Ms. SeemaWadhawan[2], Ms. Sweety Gupta[3]

[1]Assistant Professor, Rukmini Devi Institute of advanced Studies (India)

[2,3]Research Scholar, Amity University (India)

ABSTRACT

With passage of time, the education system all over the world has gone through a dramatic change. The traditional education system no longer fulfills the modern day complex needs where everything is dynamic and evolving at a very fast pace. There is a huge amount of transformation that takes place in the present world in every nanosecond. Therefore, a new and modern way of education is required to handle such transformation arising as a result of creation of huge amount of information in a systematic manner. Thus, to resolve the shortcomings of the traditional education system, the world is moving towards digital education which addresses all the issues and challenges of traditional education. Digital Education can be defined as the use of a combination of technology, digital content and instruction in the education system to make it more effective and efficient than the traditional education system. Through this research paper, an attempt has been made to discuss the upcoming trends in digital education system that will shape the future of our coming generations for the better.

Keywords: Education System, Digital Learning, Technology, Digital Education

I. INTRODUCTION

Indian economic growth from past two decades has led to an aspirational middle income society, which in turn has increased the demand for quality delivery and facilities at all levels of education. Government's SarvaSikshaAbhiyan started in 2001 aimed towards universalisation of elementary education in the country followed by RashtriyaMadhyamikSiksha not met the quality parameters as several reports and studies indicate. These movements have directed the parents across income levels to send their children to private schools instead of government schools, and supplementing classroom instruction with tuitions. Today, one of the most striking trends in Indian school education is the increase of private sector participation.The number of schools, colleges and universities is so big that no one can question the top class education. We have around 1.4 million schools, 35,500 colleges, and 600 universities; still our graduate's employment rate is inadequate.

Majority of private schools deliver higher quality education as gauged by educational outcomes such as performance on board exams and evidence from standardized assessments. However, these schools are yet faced with various challenges such as complex regulatory frameworks, high infrastructure costs and limited

autonomy.Education system of India is one of the largest education systems and India is known for this. The number of schools, colleges and universities is so big that no one can question the top class education. We have around 1.4 million schools, 35,500 colleges, and 600 universities; still our graduate's employment rate is inadequate. This inadequacy of our graduate employability shows the lack of educational infrastructure.

The objective of this research paper is to understand and review the role of schools and education in digital era. The problem of education is far beyond technology. As per the researches done earlier Indian schools are focusing more on K-12 learning and creating a collaborative knowledge creation culture of learning.With internet facility being enjoyed in each sector, education industry is no behind. E-learning plays an important role in handling the issues and problem of teaching today. With hi-tech network and multimedia, the education sector has emerged to be one of the fast emergingfields. Technological advancement has enabled our Indian classroom to be tech savy. With the use of technology in education sector, there is anmajor change in the teaching and learning methods, styles, and content across many schools in India. Today, cloud technology is being explored by students, wherein they can easily submit and review their assignment regularly. With the inclusion of these facilities in a digital learning environment, the classroom becomes much more comfortable and welcoming to students.The Y-Generation of today is much smart in using all the technological gadgets like computers, laptops, iPads and mobiles, so by adopting these same technology into the classrooms makes them feel easy and conversant.

We nurture our Y-Generation into more responsible citizens by teaching them the social and epistemological agreements of an increasingly global collective. Critical thinking and the ability to exert the academic languages with which we articulate ourselves are the key skills which enable us to remain flexible in the face of a perpetually changing world. Assessing the changing requirement and the dynamic nature of the human experiences for our students, mentors, teachers, administrators, and policy makers should focus on the technologies for bringing and vital change and giving new learning experiences to our students.

"Students, educators and parents agree – we need a different kind of learning experience to prepare students for the future"

With the objective to make the rural India A part of digital age, Prime Minister Modi's administration has launched the Digital India campaign. Some of this campaign's targets include providing broadband connectivity to a quarter of a million rural villages by 2019 and making wi-fi connections available in schools.

II. EMERGING TRENDS OF DIGITAL EDUCATION

2.1 Digitalized classroom/Flipped Class rooms a growing Trend

A complete revolution in the way we learn today has been brought by Technology. Teachers teaching in the classroom can capture the students and the full strength in the class by digital screens, thus facilitating each child to get the same base content and input from the teachers. This feature of digital era has increased the Student engagement as it combines various instructional styles.

Each student gets in contact to world-class education, which is not easy to impart by the traditional white chalk and black board teaching. This new learning is more interesting, personalized and enjoyable. With this technological inclusion in the school teaching the students feel studying as enjoyable, easy, competent and

above all interesting. The aim of a teacher however should be to create such an atmosphere which makes every student want to study.

2.2 Video based learning.

Video-based learning as a part of digital marketing has geared up in Indian Education Sector and has made education engaging, entertaining and exploring. It enables learning with a pedigree of learning out of leisure with creativity, fun and entertainment on cards via the wonderful Apps, podcasts, videos, interactive software, e books and online interactive electronic boards. Children are excited and operative with interest to manage the showcase via their intelligence, exploring the weak techno skills of teachers and assist them in public with pride and honour and recognition.

2.3 Massive open online course (MOOCS) & Other distant learning programs

A massive open online course (MOOC) is an online course aimed at unlimited participation and open access via the web. India is considered to be the biggest market for MOOCs in the world after the USA. Since the population of India is huge, massive open online course (MOOC) are said to gateways for a lot of Indians in terms of bringing an educational revolution. Online distant learning programs give a great opportunity to avail high quality learning with the help of internet connectivity.

2.4 K12 sector Game based learning

K-12 School is a terminology used as Kindergarten through XII grade. Various start-up companies have been the contributor for this sector. Today the world is of Y-generation people who are acquainted with the technological developments taking around them, and they are also surrounded with the required skills and abilities. K-12 creates the game based learning environment, which enables the learner to easily get the word of education in India and give us a better self-trained Y generation.

III. ADVANTAGES OF DIGITAL LEARNING

Digital Learning has become very popular with time. The following are the advantages of Digital Learning:

3.1 No Physical Boundaries

Digital Learning has no locational and time restrictions. In case of face-to-face learning, the location limits the group of learners to those who have the ability to participate in the area. But this is not the case in digital learning. In digital leaning, there is no physical restriction and the learner can attend the sessions anytime, anywhere according to his/her comfort.

3.2 More Engagement

Digital learning is a more engaging experience as compared to traditional learning. Through digital learning, a course can be designed in a way that makes it interactive and fun through the use of multimedia. Even, the more recently developed methods of gamification can be used to enhance the engagement factor.
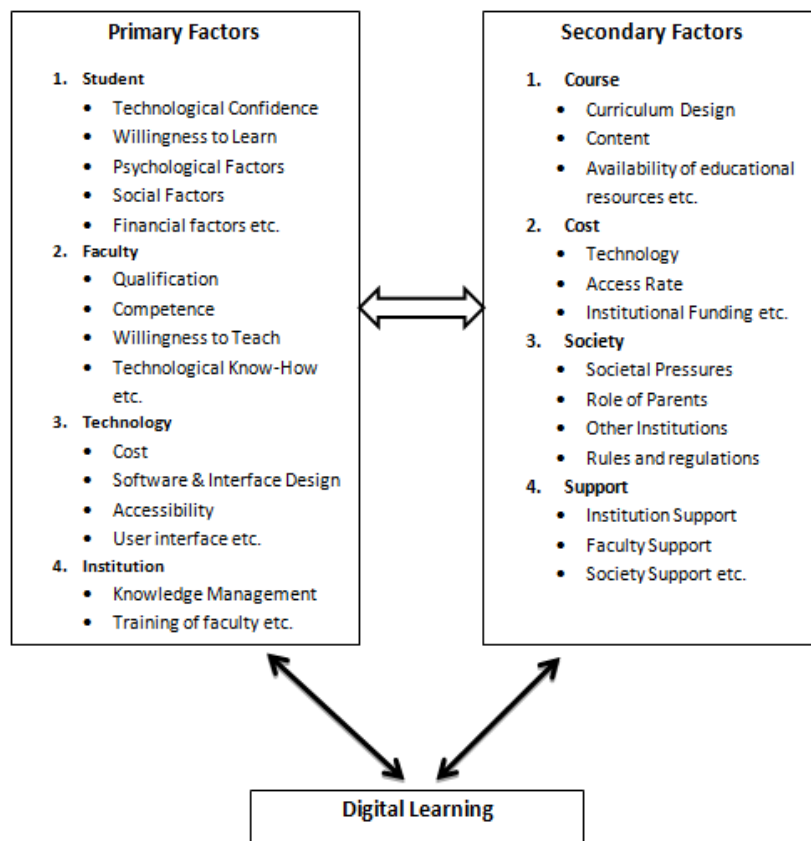
3.3 Cost Effective

Digital learning is cost effective way of education as compared to traditional learning. This is directed towards both learners and teachers. In digital learning, here is a good chance that you don't have to pay exorbitant amounts of money to acquire textbooks for school or college. As textbooks often become obsolete after a certain period of time, e-learning is definitely a cost effective way of learning because of the reduced cost.

3.4 Comfort Zone

Comfort zone can be established in digital learning as you can study at the time that suits you. In case of traditional learning where all the students have to present in the class when the teacher is teaching. The same is not the case which digital education. In digital education, the student can study at the time of his own comfort.

Model of facilitating factors for Digital learning

IV. CHALLENGES OF DIGITALLEARNING& MEASURE TO OVERCOME THEM

Digital Learning has become very popular with period of time. But it imposes certain challenges which need to be overcome. Someone rightly said, *"Digital learning should be more about the human touch that just machines".* The following are the challenges of digital learning along with the measures to overcome these challenges:

5.1 Resistance to change

Every improvement has two sides of coin, with one leading to advancement and development and other relates to certain challenges associated with the implementation of this advancement. Unfamiliarity of employees towards technology is one of the biggest challenges of Digital Learning, which the managers need to work with it. People commonly resist change, even if the changes are superior to what they had previously. They might not trust that a technology-based learning program will be as effective as interacting with an instructor. It's a fact that eLearning implementation can create enormous change within a company, so implementers can expect to face some resistance.

To overcome this resistance certain measures can be taken

- **Refresher benefit:** Feature of multimedia learning enables to makes the material more engaging and easier to assimilate. At the time of refresher, such learning material will be at their fingertips when they want. This will enable to complete the learning within a span of time.

- **Effective communication processes: C**ommunication is the key to incorporate an digital Learning programme effectively. Communication will enable to understand and accept your digital Learning program quickly. It is important that, trainees need to know what benefits digital learning offers them, and what are the objectives, among other aspects.

5.2 Learners Motivation

Classroom which are run in the form of a seminar and discussion have the advantage of accountability and supervision. One of the common challenges in digital Learning is that, left to their own devices, employees may not explore the course material. Even worse, employees may resent using their own time to do coursework, rather than enjoying the "vacation" from their everyday responsibilities afforded by an in-person seminar. Therefore, it becomes rather important and a big challenge on how can we keep our students motivated enough to complete the course and moreover, how can we make them enjoy the learning experience?

To overcome this challenge certain measure can be taken

- **Incentives: A**ccreditation of the courses and certification gives employees a tangible goal that benefits themselves as well as the employer. More broadly, any job training that can lead to career advancement or resume building is valuable to today's employee.

- **Appealing:** One of the best methods to motivate your participants or audience is to make sure the Digital Learning courses you develop are visual and very appealing to the eye. Take a look at this **i**nfographic, where you can get ideas on how to make eLearning more attractive. \

5.3 Technological Skills of Learners

The Digital Learning implementation will be dependent upon the computer literacy of the employees using it. The ability of the learner's to access and interact with the course material dictates the utility he will get out of the program.

To overcome this resistance certain measures can be taken:

- **Adaptability:** This eLearning challenge can be mitigated by scaling the complexity of the system to the needs of the course and of the employees. When the content being taught is fairly basic, a simple interface can be used to impart it; the complexity can be scaled up as the course material and technological expertise of the learner demands.

- **Help when required:** When students run into problems while using the Digital Learning courses, technical support services should be there, like Live chats, auto-help buttons, emails, discussion boards. Availability of digital learning facilitators available will also make them feel they are supported in the programme.

5.4 Evaluating effectiveness

Yet another important challenge of Digital Learning is the task of determining whether the course is having the intended effect. In the absence of pop quizzes and report cards, how can an employer tell whether the eLearning implementation is achieving its goals?

Solution

Assessing the result is important, it is essential to know how many employees are using the Digital Learning program, how long they spend on it, and how many complete the course, but above this it is more important to know the performance reflects their newly-acquired knowledge. If they display the skills and information gleaned from the digital Learning program in their work, then the Digital Learning implementation has been effective.

Driving New Innovations in Learning Environments

Benefits of digital content usage in the classroom	Principals who have implemented blended learning in their schools
Increases student engagement in learning	75%
Extends learning beyond the school day offering students opportunities for self-directed learning and remediation	72%
Increases the relevancy and quality of the instructional materials	63%
Provides an innovative way for instruction to be personalized for each student	56%
Decreases the traditional dependency on textbooks	51%

Source: Project Tomorrow 2015

Key outcomes of Digital learning are

- E-Learning should be more focused on knowledge creation rather than merely on knowledge acquisition. As knowledge is the integral part of this century.
- Developing collective cultural practices, physical learning is important as learning takes place between people and their cultural surroundings.
- Along with emotional and cognitive development, ell-being and Social and Emotional Learning (SEL) are also essential for the development of the students.
- Instead of computer-supported learning, it would be advisable to talk about new forms of Socio-Digital Participation (SDP). This includes media literacy, such as using social media and search engines.
- Constant reforms in schools and teacher education is essential for development. The schools are not following the important developments of society. There is no evidence that learning styles or types would be informative in designing learning environments. Alternatively, it would be advisable to observe users' motivational profiles or study orientations. Meaningful and engaging learning methods are advisable, which support collaboration and self-regulation.

VI. RECOMMENDATIONS

Young generation have smartphones, computers, laptops that are changing the way of education. They actively participate in social communication through online communities since early childhood. But the problem lies in the fact that these activities take place after the formal learning is over and there is no synchronization between this informal learning which the formal learning. Research also states that informal learning is often more engaging and effective than formal learning. Furthermore, research indicates that the students with the best skills in technology are also the ones who are often non-participative in the formal learning. To solve this issue, Social and Emotional Learning (SEL) should be provided by teachers and parents. Social and Emotional Learning (SEL) includes the skills that are needed to regulate oneself and interact with others in constructive ways.Social and emotional skills are critical to being a good student, citizen, and worker. Many risky behaviors which include drug use, violence, bullying etc can be prevented or reduced when the method of social and emotional learning is used. Social and Emotional Learning (SEL) can be best adopted by effective classroom instruction, student engagement in positive activities in and out of the classroom, and broad parent and community involvement in education.

VIII. CONCLUSION

With so many different ways to define e-learning and the educational approaches that can be taken in these learning environments, it is the conclusion of this author that e-learning is an innovative approach to learning. It is a holistic way of teaching and learning that meets the needs of today's digital natives. It is an environment made up of collaboration, choice, and an array of technological resources that supports a successful online learning experience. However, in order for learners to be successful in this learning environment the challenges to e-learning must be overcome with support and a best practice solutions. Instructors and learners must

embrace the shift away from traditional classroom practices to an e-learning approach to education. Despite the fact that today's learners are digital natives, the use of technology for e-learning can be overwhelming and provide student motivation challenges however, with the proper supports from instructors, learners can be successful within these e-learning environments. Finally, and probably the most important challenge for the instructor is to focus on the overall elements of a well-developed course. Developing a purposeful and well-defined online course, which supports the instructor and learner, means devoting the appropriate time and embedding the applicable course elements into the e-learning environment.

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