IJREAT International Journal of Research in Engineering & Advanced Technology, Volume 7, Issue 5, Oct - Nov, 2019 ISSN: 2320 – 8791 (Impact Factor: 2.317) www.ijreat.org

DIGITAL IMPACT ON EDUCATION AND LEARNING

¹Mr. Swapnil Justin, St. Aloysius College, Jabalpur, Madhya Pradesh, India.

Abstract

This paper expresses personal views and documental study about the impact of covid-19 on Higher Education . During this pandemic we all are forced to move towards the era where things have to be done through digital medium. Although every essential of life cannot be achieved through digitalization but it does ease the pain of what we go through in our daily life. Same in the field of education it came up as a strongest support in our life but still we have to analyze the ups and downs of this solution, is it good or not, is it sufficient or can it replace the traditional methods?

Keywords: Higher Education, Covid19, Education in covid, Education in pandemic, Digital Education.

INTRODUCTION

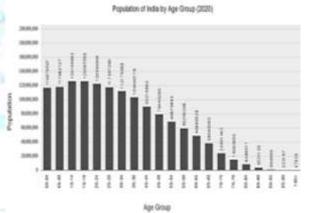
Y ear 2020 may not be the best year for everyone because of the COVID-19. We all are going through tuff time and during lock down most of the things are going on hold for uncertain time period. This situation forced many of us to move towards nontraditional digital modes and medium to accomplish various tasks and jobs. Similarly, the education field also going through a situation where we have to put efforts and look for alternatives to keep the education system on track. Most of Colleges and Universities have started working with Online Teaching and evaluation.

Because of COVID in a very short time period, most of the faculty members are bound to teaching through various digital resources and students have to stay at home and take the courses through the internet. This paper identifies the difficulties faced and strategies to be followed during lockdown for keeping Education and Academics running smoothly.

There is a long gone debate on which is better, traditional method or digital way, and also the future of Examination and Evaluation whether it should be digitized or not. While faculties struggling with looking new ways of managing this sudden change to online education, students are stuck to their mobile phones and computer screens only. If the lockdowns were to continue for some time, what would be the shape of Higher Education in there after? How would Higher Education be affected? What are some of the serious issues that require our attention? And what does this mean for the students?

BACKGROUND

Population of India is 135.26 crores (2018) and India had 37.4 million students enrolled in Higher Education in 2018-19. India's student population in Higher Education grew by 800,000 in 2018-19.as you can see below the number of college going student is quite high in India which require enormous Educational organizations along with huge number of instructors and educators.



This challenges us to improve our education services to provide a good quality education. Digital education is one of the concepts that can be used to achieve this goal. It is also the solution for the barriers we face while giving this service in physical traditional way.

CURRENT STATUS

According to the CISCO and DSIM reports we are quite rich in term of internet usage by the citizens of our country. This indicates the digital progress of our nation and that we are quite capable of providing digital resources to our citizens/students.

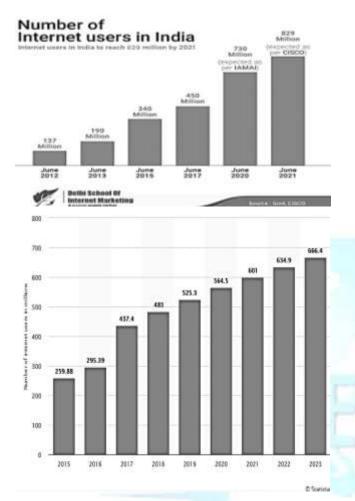


Figure 1 : Number of internet users in India from 2015 to 2018 with a forecast until 2023 (in millions), Source @Statista 2020.

This data shows that India does have capability to provide internet based services to every citizen of the country. This opens up the path for digital education to shine.

POSSIBILITIES IN THE FIELD OF DIGITAL EDUCATION

A. Transformation of the face of Education Methodologies

This new trend can change the face of education and learning. Apart from traditional methods we will be having quite wider range of scope for learning through degree oriented courses, diplomas and specialization courses. Learners will be able to choose what they want to learn instead of opting for fixed traditional curriculum scheme.

B. Availability, affordability of education and ease of Adoption

As per the statistics mentioned before India is a country with vast population. A huge chunk of population of India lives in rural or remote areas where making education available is a great task and providing Higher Education is a milestone to achieve but we also cannot ignore the fact that technology is booming vary rapidly in these areas also.

The statistics also says that India is one of the countries where internet service can be provided at very low cost. Internet is full of varity of services and most of them are way cheaper than traditional means. It makes the digital or online education way more affordable for everyone.

Using digital modes for education comes with another advantage that not only the verity of modes and tools are available but it is supported in different languages are also. Students can look for the content in their preferable language or can choose modes they find comfortable and as it helps them to adapt the course, mode, language they are comfortable with.

C. Outcome based learning will we encouraged

Just because we are able get access to varity of content and courses.it will encourage the trend where students will do courses which will help them to get employed or enhance their knowledge or educational status. It will support the long distance education concept.

DIFFICULTIES AND ISSUES TO BE FACED

A. Not every region or person have digital resources

Although we are living in 21 century but are we still at the level where we can say that every single person in every single location have access to all these resource, I believe we cannot. Still there places where even the basic resources are barely available or are in poor condition or quite far from reach. Same is applicable to internet also because internet is the backbone of digitalization. it is impossible to provide online digital education to those students who live in these places. Because some students live in far rural areas and travel very far to get educated now there are possibility that some of them have walked toward their home during this pandemic and will be disconnected from digital mediums because of the unavailability of resources. There is also a possibility that students do not have access to those high-tech or latest platforms to support latest /costly modes or tools of learning.

B. Complex tools or non tech friendly people

Sometimes medium of teaching or the platform which is being used for teaching is so complex that it becomes very difficult to use. In addition to this these tools do not have much options or expressive

IJREAT International Journal of Research in Engineering & Advanced Technology, Volume 7, Issue 5, Oct - Nov, 2019 ISSN: 2320 – 8791 (Impact Factor: 2.317) www.ijreat.org

tools/options that make them limited. If student or educator belongs to a non tech friendly environment so he/she need proper support and training about it. Similarly in higher education we have to train instructors and learners to get involve with higher level of tools and techniques that is beyond quiz and other basic methods. They have to be indulge with practical and experimental methods and should be evaluated though methods which will force them to discover and learn.

C. Authenticity issue of Information and Evaluation problems

As we know in this age of technology we are quite enriched with the information and its availability but because we have resources to develop and distribute the information over the network without any hazard, another issue arises that is "what is the authenticity of the information?". As we all are free to develop and upload information, who will do the scrutiny of information on internet for its reliable and authenticity. So the authenticity of information is a big issue that we face now days.

Talking about online evaluation the first tool that comes up in our mind is quiz i.e. a digital format that contains multiple choice questions. Although we have other options like question-answer, digital assignment and so on but the problem with these modes is that the answer provided by students cannot be analyzed for originality or being non-copied pasted. Students can do copy paste for these answer and evaluator would not have many tools to verify that also in institutes they don't have high tech mechanisms to validate students remotely and when student are present physically front of you they cannot catch him cheating. So the success of evaluation is again dependent on the sincerity of students. One solution to this problem is the evaluation should not be in textual form it should in the form of problem solving task so student will have to learn to solve issues but again it is impossible to create numerus unique task for every individual.

D. Dependent on other resources like electricity, platform etc.

One cannot ignore the fact that availability of Internet is dependent on other elements or resources. Likewise online teaching learning process is also dependent on platform, technology and many other factors, so there should be alternatives or backup methods or resources to cover up the loss.

E. Self-motivation and Communication

When it comes to online education then it necessary that student has to be self-aware about online learning because in this scenario he or she have full freedom of choosing and adopting modes and methods. It is there responsibility that they do it with full devotion and make proper decision regarding what they want, they have to be active participants for quality learning, and this is no more obvious than in online coursework.

The change in traditional method of teaching and learning causes great impact on the communication and understanding between student and teacher. In traditional method teachers have live reactions to observe the students understanding and issues to resolve it then and there but in online class's scenario it is not possible. In online class we lose that emotional and human feel to understand student's status and progress. So it requires feedback from student and it have to be continuous and time bound so that teachers can monitor the issues and progress of students.

F. Technical and other difficulties

Technical problems deserve their own mention because when they occur they can have an immediate, massive impact on students. For online teaching to be effective certain level of facility with computer and Internet technology is needed. Because online courses are especially reliant on educational technology, instructors are in the exciting (and sometimes daunting) position of having to continually retrain in order to run their classes.

In some of online courses, instructors teach with fixed limited material. In these courses, instructors face the issue of lack of empowerment. The task of generating new materials or adjusting the materials from face-to-face classes to an online setting can be very challenging. This could happen because proper technical training and other support is not been provided.

One of the major challenges with online education is the changing role of the Teacher. The major roles of online instructors: pedagogical, social, managerial, and technical responsibilities. Educational purposes of online teaching are mainly fulfilled through performing pedagogical tasks only. IJREAT International Journal of Research in Engineering & Advanced Technology, Volume 7, Issue 5, Oct - Nov, 2019 ISSN: 2320 – 8791 (Impact Factor: 2.317) www.ijreat.org

G. Social Isolation

Although digital education can take education to a whole new level but still it lacks the human touch and emotions. Digital Education can make you literate even can provide you content to grow your soft skills and other human skills but still it has its own limitations. Digital Education can give you verity of options but it also increases the level of isolation that can limit development of various soft skills like public speaking, presentation, networking and many others. It doesn't matter how high-tech digital modes or mediums we use they cannot replace live learning environment with machine learning.

H. Non Practical Approach

Most of the digital content available are more theoretical and less practical even if it does provide you tools then it would be costly or way too complicated to learn. Most of the times it provide you the concept but cannot inculcate practical skills. For example to perform a surgery you need practical training under proper guidance because surgery is learnt through practice not through theory.

CONCLUSION

We have to be resourceful when it comes to utilize digital resources to educate. In the last few weeks education institutes are at their best to adopt this alteration. But how many had anticipated with this change, how to apply these quick into more sustainable approaches? It encourages and inspires us to generate suitable and accessible resource of knowledge and expertise for society. Education institutions plays main role in enhancing the quality of online education by providing support to instructor and learners. When it comes to online digital education we have to be sure about the quality of it by ensuring the quality of content and progress and involvement of learners. our country also need to work on providing these digital resources to the places where it is still a dream so every learner can learn without facing any difficulty. We have to be careful about choosing modes and methods because there is difference of learning speed and methodologies in school and college going students. Education institutes should look for proper methods and tools are appropriate, easy, affordable those and understandable for both instructor and learners. Online education can change future of education system we just have to work to resolve certain challenges to

accomplish this dream of digitalization in education to its fullest.

REFERENCES

- Sun, A., & Chen, X , "Online Education and Its Effective Practice: A Research Review", Journal of Information Technology Education: Research Volume 15, 2016, 157-190.
- Crawford, Joseph; Butler-Henderson, Kerryn; Rudolph, Jürgen; Glowatz, Matthias, "COVID-19: 20 Countries' Higher Education Intra-Period Digital Pedagogy Responses", 2010-04-01.
- Mansureh Kebritchi, Lilia Santiague, "Issues and Challenges for Teaching Successful Online Courses in Higher Education: A Literature Review", Journal of Educational Technology Systems 46(1):4-29 · September 2017.
- Allen, L., Kiser, B., & Owens, M. (2013). Developing and refining the online course: Moving from ordinary to exemplary. In R. McBride & M. Searson (Eds.), Proceedings of society for information technology & teacher education international conference 2013 (pp. 2528–2533). Chesapeake, VA: Association for the Advancement of Computing in Education (AACE).
- Allen, I. E., & Seaman, J. (2010). Learning on demand: Online education in the United States, 2009. Retrieved from http://sloanconsortium.org/publications/survey/learn ing_on_demand_sr2010.
- Li, Y., Wu, S., Yao, Q., & Zhu, Y. (2013). Research on college students' online learning behavior. e-Education Research, 34(11), 59–65.