Digital approach in Education system due to COVID-19

Mayank[1] and Rachana Arya[2]

[1]Department of Biochemical Engineering, B.T.K.I.T, Dwarahat

[2]Department of Electronics and communication Engineering, B.T.K.I.T, Dwarahat

Abstract

The most excellent gift for human being is the communication given by God. By the intonation humans can perform well to communicate to the world. Except from the sleeping hours humans can used their whole time to communicate from others by different means like texting, voice messages, reading writing or like engaged on video calls. With the help of communication we can express our feelings to others and vice-versa. Nowadays digital medium is also an essential tool for expressing our views to the world. The most significant tool for this is the technology advancement in different areas of information. When discussing about the technology the different aspects are storing the information, exchanging and processing it.

Key words: digital approach, future learning, group activities and teaching methods.

1. Introduction

Digital learning is also a part of exchanging the information among us. Digitalization of schooling is a dominant movement in expressions of renovation and innovation of education upbringing. Digitalization is a way to transform all information to the digital one. It can also change the traditional face to face learning that was typically used in India. It can force the teachers to improve the academic model to enhanced connectivity with students. This new approach will definitely affect the futuristic learning.

In this Covid pandemic all the Schools, universities and colleges are based on digital learning with no other choice to adopt the online mode. Technological advancement is the only way to teach students at the present time but keep in mind the physical and mental health is also an important aspect. Continuously watching the cellular phone is harmful for our body. And the difference between information and noise content is also a challenge for the kids.

2. How Digital Education Is Transforming Teaching Methods

Schools are slowly looking at technology as an opportunity to develop teaching methods and resonate with students on a technology level. Despite the consequences, approximately each person carries smart phones. Generally all are using search engine as our library and Wikipedia as encyclopedia. Online dictionary and Kindle as our textbook. To incorporate these changes schools and colleges have to change many things as mandatory. Some categories are mentioned below:

a. Develop Smart Class rooms

The traditional teaching was with blackboards and chalks. Then the markers and white board come to existence. But these teaching aids are currently a thing of past. Now the teachers have to shift to LCD projectors, Videos and online meeting applications to teach. Lots of schools are now shifted to TV or over head projector: that is attached to the whiteboard to shift a regular classroom to an interactive online session. By the use of both technologies students have to pay more attention towards classes.

b. Individually Updated through Digital information

In this technological world things are become easy to approach and it will easily outdate. The knowledge is not the slave of the hardcore books. So to deal with new information and update the students with new technologies is the major concern. The best way to guide the students is to helping them to refer the correct books and websites. To reveal your sources to the student makes them more comfortable to learn.

c. Convert Books To PDFs

Most of the books are available as digital mode. By changing the hand written notes to PDF, text the information in accessible format will help the students and they will easily accessed on their devices. It is a productive way to encourage the students to study better.

d. Encouraging students for online Test

By conduct online mock tests, online quizzes and random presentations can be a productive learning environment for the students. For kids some online puzzles are also the fun elements. Involving them to create some group activities definitely shape their mind.

e. Conducting Webinars

In the conventional teaching method, some students are really noisy and make others to distract with the topic. By the present teaching method (webinars) they have to be attentive by participating in the questionnaire. It is just like a two way communication in spite of single one. By the help of the smart classrooms it is easily monitored the performance of the students.

f. Supporting online Research

Online explore is trending. Students are good in Market Research and make money easily. Encouraging them for online research before the coming classes is an excellent way to keep them busy

for the upcoming topics. By praising their achievement in groups is enhanced their capability for the research.

g. Creating Communities

The communication between a teacher and student does not enclose to the school or in classroom. By the help of online communities groups of students stay connected, share some projects, notes and discussed about any topic. By the help of different technological platforms, teacher set a goal to the students to share their ideas and queries. In this format, the educators customize the syllabus base on the student's learning.

3. challenges associated with digital transformation

Changes are never easy for everybody especially for humans. They cannot easily adopt the changes in the conventional system. There are significance challenges to make this digital transformation easy and adoptable.

a) insufficient Internet dispersion

According to facts collect by the National Sample Survey (a part of the Survey on Education 2017), merely 43% of households in India have access to internet. Partially some of the family members have internet connections on their Smartphone devices. In the rural areas 5 to 10% students are having internet connections: this situation is quite surprising. These statistics clearly said that more than 50% of the kids will be missing the online learning process.

b) Slow Internet Speed

For online teaching process or delivering videos requires high speed data connection. It is an important part of the online education system. Most of the students in India are living in rural regions so that internet connectivity is also a major concern for them. By the different studies it may clear that only 43% students (rural areas) have internet connection at home, in spite of that 69% of students live in urban areas have the internet connection at home. By the absence of sufficient speed the idea of online learning will not work.

c) No Standard Policy

Digital culture is not about of videos on whiteboards by teacher going on the internet. It is regarding appropriate platform, equipment, tools, interactivities, references extras. In our country we need accurate policy for digital edification, content, communication, and infrastructure.

d) Lack of Social structure

Municipal educational institutions have to play a commendable role in social enclosure as well as comparative equality. This is a where all communities, classes communicates each other. It plays an important role of personality development and team formation. That plays an important role for life which might be lacking in online education.

e) Teacher and parents Training

We know that teachers are the main building block for any education system. They looked after the psychological and emotional health of the students. They also work as a strength bond between them. The majority of the teachers and parents are not gadget friendly and deficient in the essential knowledge regarding technology. Without adequate training of the teachers and parents the learning possibilities are not up to the mark. Teachers training on these aspects are necessary to educate children's through online mode.

f) Concern of Parenting

After lockdown, keeping these students at home is a challenge. When their parents are working and returning to their work place the safety and security of child is a major concern. What the kids are doing with their smart phones, health hazards are different concern of them.

Summary

Classroom teaching, exchanging notes, chalks markers and blackboards are the history form past one year. Most of the colleges are equipped with interactive boards where teacher can draw and drag different shapes and equations. Online virtual labs are also available for students. They can learn in 2D and 3D models. Many of the schools and colleges are providing tablets and laptops as teaching aides. By the help of MOOC courses, learners can study any language, any subject any future courses without depending on text books. On the other hand it is little expensive and time consuming approach. Digital culture enlarges efficiency and yield of the students. The key advantage of digital education is it prolonged learning opportunity for teachers as well as for students. Intermingle of technology and edification has made learning available to all. By the collaboration of traditional method to technology makes classroom learning to new heights.

References

1. Claudiu Coman, Laurent,I @ al," Online Teaching and Learning in Higher Education during the Coronavirus Pandemic: Students' Perspective" Sustainability, 12, 10367; doi:10.3390/su122410367, 2020

2. Sobaih, A.E.E.; Hasanein, A.M. @ al," Responses to COVID-19 in Higher Education: Social Media Usage for Sustaining Formal Academic Communication in Developing Countries", Sustainability, 12, 6520, 2020

3. Shivangi Dhawan," Online Learning: A Panacea in the Time of COVID-19 Crisis", Journal of Educational Technology Systems 2020, Vol. 49(1) 5–22, 2020

4. Affouneh, S., Salha @ al,"Designing quality e-learning environments for emergency remote teaching in coronavirus crisis", Interdisciplinary Journal of Virtual Learning in Medical Sciences, 11(2), 1–3., 2020

5. Favale, T., Soro, F., @ al, "Campus traffic and eLearning during COVID-19 pandemic", Computer Networks, 176, 107290, 2020

6. Liguori, E. W., & Winkler, C.,"From offline to online: Challenges and opportunities for entrepreneurship education following the COVID-19 pandemic", Entrepreneurship Education and Pedagogy. https://doi.org/10.1177/2515127420916738 ,2018)

7. Bareq Raad Raheem and M.Amirullah Khan," The Role Of E-Learning In Covid-19 Crisis", IJCRT | Volume 8, Issue 3 | ISSN: 23202882, March 2020

8. Pravat Kumar Jena," Online Learning During Lockdown Period For Covid-19 In India" International journal of Multidisciplinary educational research, ISSN:2277-7881; Volume:9, Issue:5(8), May 2020

9. UGC notice. LET COVID 19 not stop you from learning- ICT initiatives of MHRD & UGC. Retrieved on April 16, 2020 from https://www.ugc.ac.in.

10. World Bank. How countries are using edtech to support access to remote learning during the COVID-19 pandemic. Retrieved on April 16, 2020 from https://www.worldbank.org/en/topic/edutech/brief/how-countries-are-using-edtechto-support-remote-learning-during-the-covid-19-pandemic