iJRASET
International Journal For Research in Applied Science and Engineering Technology



INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 11 **Issue:** IV **Month of publication:** April 2023

DOI: https://doi.org/10.22214/ijraset.2023.50316

www.ijraset.com

Call: 08813907089 | E-mail ID: ijraset@gmail.com

International Journal for Research in Applied Science & Engineering Technology (IJRASET)
ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538
Volume 11 Issue IV Apr 2023- Available at www.ijraset.com

E-Learning: A Study on the Covid Pandemic

Shilpa Bhatia[1], Madhumita Mahapatra[2], Vanshika Vats[3]
Manav Rachna International Institute of Research and studies

Abstract: ***E-learning is changing the face of usual classrooms and making education more approachable than ever before. While many academic units have started blended learning. Still a lot of academics are stuck with old ways of learning. The sudden pandemic of Covid19 tremble the entire world. In a way that the World Health Organization (WHO) has declared it as a pandemic. This situation challenged the education system all over the world and forced educators to shift to a remote mode of teaching overnight. This research aim to show the emerging e-learning trends in the education sector. This research paper also put some light on the internet as an educational tool, growth of e-learning and growth of EdTech start-ups during the time of pandemic. In this research paper we analyse the responses of second and third year students of business studies department.***
Keywords: Online Education, Covid19, E-learning, Internet, EdTech, Education System.

I. INTRODUCTION

In past many years, the internet has grown from nearly non- existent to the largest and most accessible database of information ever. It has changed the way people used to socialized, do business, and also that way they used to learn. E-learning is changing the face of usual classrooms and making education more approachable than ever before.

Online education is a form of education where students learn through their mobile phones or personal computers with the help of internet. Online learning is an electronically supported learning that rely on the Internet for teachers and students to interact with each other and to distribute the class materials online in the form of PDF, e-textbook or online presentations, etc. With online education, students can learn anywhere or anytime they want with the help of good internet access and electricity. E-learning also includes audio, video, text, virtual training environments and live chats with professors. It is a really good learning environment with much more flexibility than a usual traditional classroom. When used to its full potential, online education has been shown to be more effective than face-to-face instruction. It can be engaging, fun and fit to almost everyone's schedule. Due to Covid-19, Online education has increased than ever. The Covid-19 pandemic has forced many schools and colleges to remain closed temporarily. Because of which various schools, institutes, and universities have discontinued in-person/face to face teaching. And as per the assessment of researchers it is uncertain to get back to normal teaching anytime soon. This will going to have a negative effect on learning opportunities. Due to the fear of losing the semester, it has decided that online mode of learning is easily accessible, affordable and can even reach to rural and remote areas. Online education is relatively cheaper mode of education in terms of the overall cost of institution-based learning. With e-learning students can learn anytime, anywhere. This type of learning environment can increase the learning potential of the students with developing new skills in the process. The government also recognizes the increasing importance of e-learning in this dynamic world. E-learning is serving as a remedy at the time of crisis like pandemic.

A. How It All Began

There are many examples of the usage of machines and tools in education throughout the history. But e-learning in modern sense of the term is relatively a new concept. Television based classes and projectors have been in use since the 1950s. However, one of the first instances of online education in the world can be traced in 1960, at University of Illinois, USA. Though the internet was not invented back then, so students started learning from computer terminals that were interlinked to form a network.

The first ever completely online course was offered in 1984 by University of Toronto. And then the Electronic University Network was established in 1986, for being used in DOS and Commodore around 64 computers. Three years later, the University of Phoenix became the first educational institute in the world to launch a wholly online collegiate institution, offering both masters and bachelors degrees. The was the beginning of a resolution back then whose potential was unknown to the public.

In early 1990s, The Open University in Britain was one of the first Universities in the world to begin online learning. And currently, the Indira Gandhi National Open University (IGNOU) in India is the largest University in the world with around 4 million students enrolled, most of whom currently receiving education through online methods.

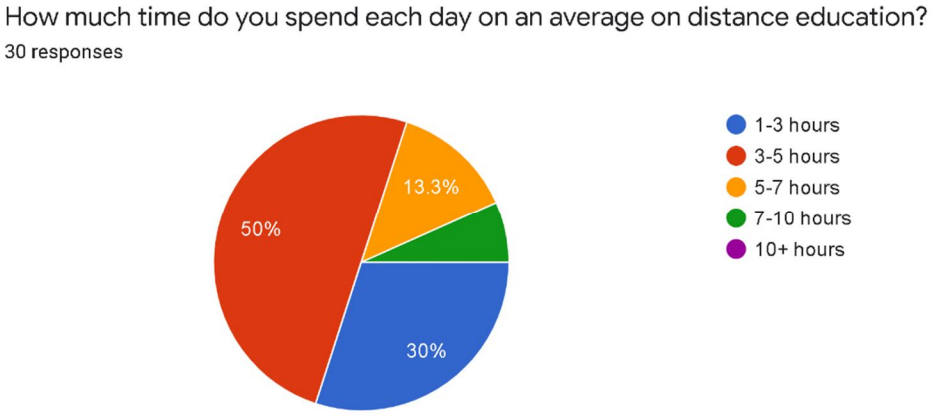
Here are some responses on what people think about distance education and is it effective or not in their view.

©IJRASET: All Rights are Reserved

B. The Internet as an Educational Tool

The Internet is already a basic element of education in developed nations, and we can be certain that its worldwide educational significance will continue to increase throughout the decades. Internet has always been like an educational tool for everyone around the world. Many people would argue that the main characteristics of the Internet are with the basic concerns of education. Both the Internet and education are concerned with the creation of knowledge, communication and the information exchange.

People have become even more rely on the internet since the beginning of coronavirus pandemic. The COVID-19 pandemic has drastically changed the way we used to live our lives on the daily basis. Many of us now working from home, turned to telemedicine to see a doctor, students are learning from home through their laptops or mobile phones and using online communication tools to talk with friends. This resulted in a significant increase in internet data usage over the starting few months of the pandemic. And now internet traffic is generally 25% to 30% higher than it usually used to. Here, is a research survey on people responding to the question when we asked them about how much time do they spend each day on an average on distance education? 50% people said 3-5 hours, 13.3% people said 5-7 hours and 30% people said 1-3 hours, other remaining said 7-10 hours. Now we can measure it by this response their approximate usage of internet per day if we go on the distance education basis. People daily spend this much time or maybe more on their distance education.



C. Growth Of E-learning

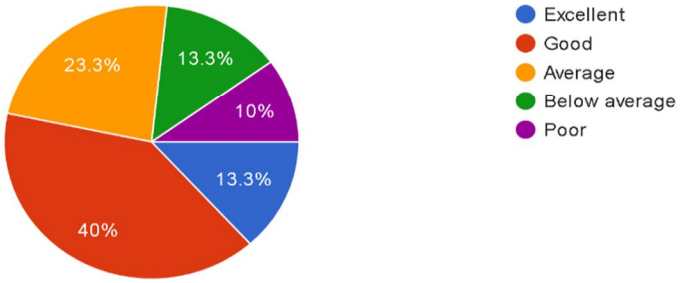
Before even the COVID-19 pandemic started, the e-learning industry has already made a mark in the education sector. In the year 2019, e-learning had already enjoyed high growth and adoption, with educational technology investments reported at around $18.66 billion. And with the ongoingcoronavirus exposing the vulnerability of physical classrooms due to which students turned to online education mode, as well as the recent technological improvements that make e-learning feasible, online education is composed to experience exponential growth, with projections for the market that seems to reach around $350 billion by 2025.Also,the introduction of Massive Online Open Courses (MOOC) has opened new opportunities for e-learning, offering online degrees and micro-credentials to students who successfully complete courses. And by the end of 2019, MOOCs accommodated 110 million learners and launched over 2,500 new courses, 11 online degrees, and 170 micro-credentials. In 2019, the global Online Learning Markets size was 171 billion and is expected to grow at a CAGR of 10.85% from 2019 to 2025.

During the forecast period, APAC is expected to get the highest growth rate ever that will give market vendors many more opportunities. Digital literacy and awareness of the benefits of using smart devices in modern classrooms will going to have a major effect on the growth of the e-learning market share in this region. The e- market share of North America's accounts for approximately 40 percent of the global e-Learning market. Also, the region is expected to grow rapidly during the forecast period due to the effective training and development programs adopted among the various organizations for their employees. The corporate sectors are also effectively engaged in enhancing their employee training programs that can lead them to higher production.

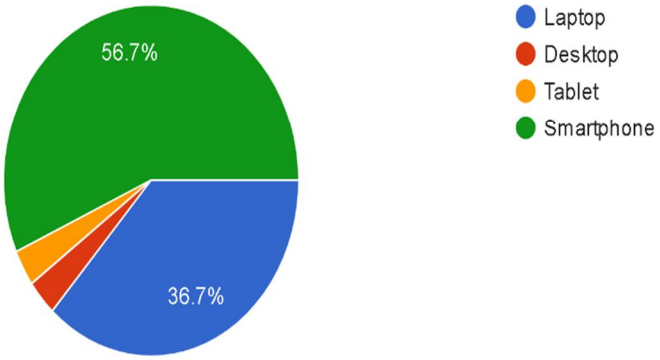
Here are some responses of research survey on how people feel about online learning or you can say distance education. During the pandemic like covid19, many people have changed their point of view about e-learning in their own different ways.

Figure:1

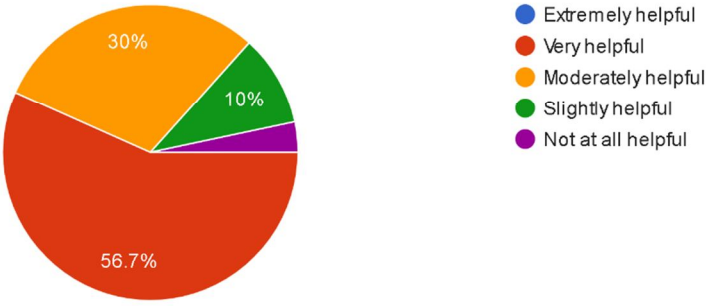
How do you feel overall about distance education?
30 responses



What device do you use for distance learning?
30 responses



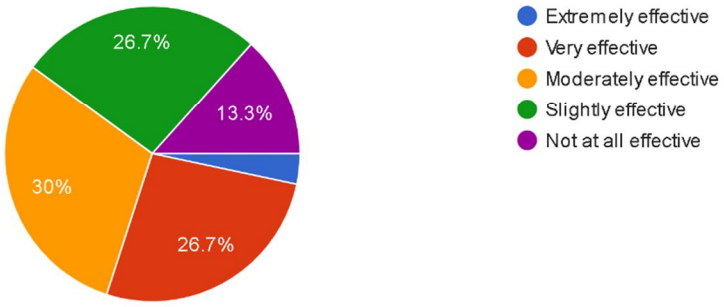
How helpful are your teachers while studying online?
30 responses



©IJRASET: All Rights are Reserved

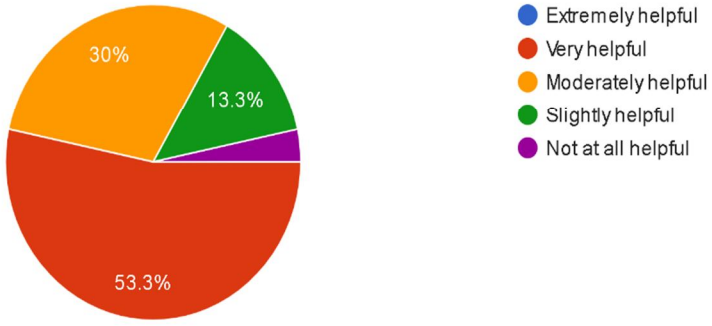
How effective has remote learning been for you?

30 responses



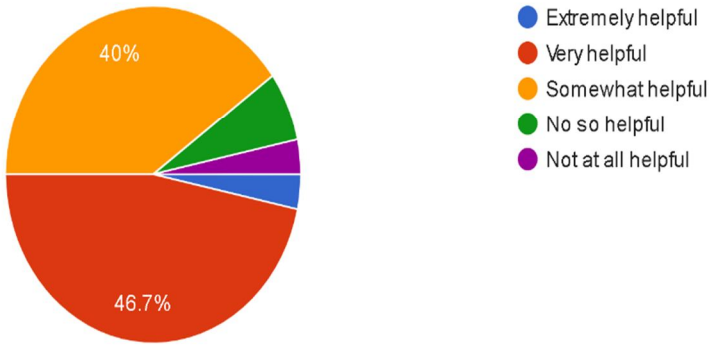
How helpful your university has been in offering you the resources to learn from home?

30 responses

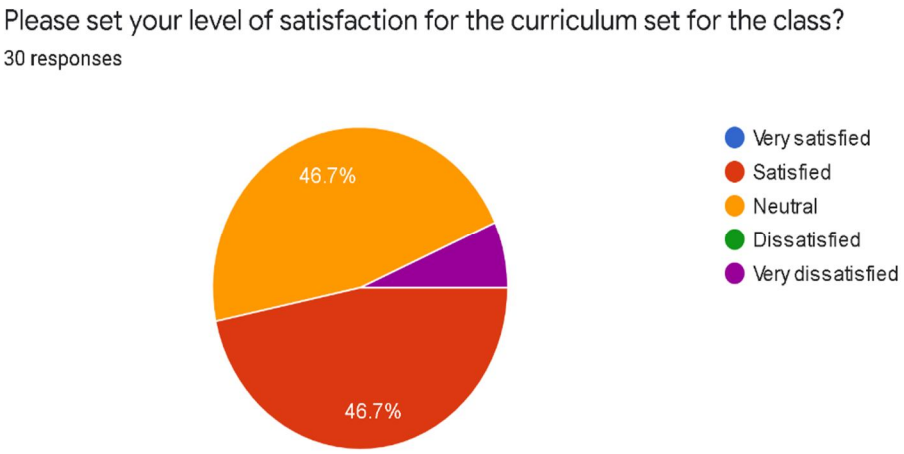


How helpful was the class materials provided to you?

30 responses



©IJRASET: All Rights are Reserved



In figure 1, it is shown that 40% people feel good about remote learning. In figure 2, we see 56.7% people use smartphones for remote learning and 36.7% people use laptops. In figure 3, it is show that remote is been moderately effective for 30% people and very effective for 26.7% people. In figure 4, 56.7% people says that teachers have been very helpful while studying online. In figure 5, 53.3% people says that their Universities have been very helpful in offering the resources to learn from home. In figure 6, 46.7% people says that the class materials that are provided to them were very helpful and 40% people thinks it was somewhat helpful. In figure 7, 46.7% people are satisfied from the curriculum set for the class.

D. Growth of EdTech Start-ups

EdTech has grown a lot over the years. In the past years, during the 1100s writing slates were used in Indian school. In the 1440s, worlds first printing press was invented by Johannes Guttenberg. In 1600s, Abacus helped us understand the fundamentals of maths. And in 1913, Thomas Edison promoted the film clips as a substitute for teachers. In 1927, Sidney Prissy invented the world's first teaching machine called the MCQ machine. In the 1960s, online education was originated at the University of Illinois. And in 1994, the journey of EdTech began in India with the launch of Edu comp.

In the year 2019, Byju's became one of the most valued EdTech companies. And from then the competition for Byju's got increased.

The coronavirus crisis has been a major impetus in enhancing the learning process in many regions not just for students and educators, but also for investors and EdTech start-ups. In the year before pandemic we already saw high growth and adoption in online education technology, with global EdTech investments reaching around €15.87 billion in 2019. EdTech start-ups can expect significant growth during coronavirus because more people have turned to digital education as a solution. It has increased the adoption of digital technology in education with global EdTech investment on track to grow by approx. 15% in 2020, a prognosticated €6.4 billion. The virus caused worldwide school closure in 190 countries. In this situation, EdTechstartups are helping many schools and universities as much as they can to adapt and evolve. In primary and secondary education, startups like Kognity or Lix Technologies are helping with course materials, textbooks. Lix technologies is a Danish based startup, which is focused on creating a learning platform for students also it is a platform that can be used for accessing textbooks. And on the other hand, kognity technologies provide with a amazing way of attempting questions in their own time and getting automatic feedbacks, which makes them know about what they have learned and not learned. In higher education, we can see startups like Grad Uway or Teacherly they are providing students with digital-first academic support and accessibility. As for adult learning, it is now much easier to get access to e-learning with increasing online courses from traditional institutions. Also, the online courses providing with certificates, students can now learn new things and get certified in that particular course, they can learn from many platforms like NPTEL, MOOCs and Alison courses, etc. The current coronavirus pandemic has accelerated the transformation of education and technology startups in this sector have grown exponentially which means that EdTech is here to stay and the way students learn will never going to be the same.

©IJRASET: All Rights are Reserved | SJ Impact Factor 7.538 | ISRA Journal Impact Factor 7.894 |

II. FUTURE OF E-LEARNING IN INDIA

E-learning will be going to play a major role in our education sector in coming years. It is already started growing due to current ongoing coronavirus pandemic. At present, students of all age groups are getting the exposure of online education and they are finding it fascinating to study online and learn new things because it is new to them. Several business ventures have entered the online field with their mobile apps, which are very much user friendly and new mobile games, online meeting apps, etc. Because nowadays people are using more mobile apps for their meetings and learning. All these things are possible due to better technology and networks. Students understand faster and much easily through visualization or practical examples, since the visualization play major role in learning and the demo is not possible, here animation comes into picture to solve the issue. It helps to give better understanding to the students and with this current situation we can say that in India online education will going to see a considerable growth in coming years. Almost every city in India is using online modes for there education or business, communication, sales, payments through electronic mode etc. After seeing today's world, we can say that the future of e-learning is very bright.

III. CONCLUSION

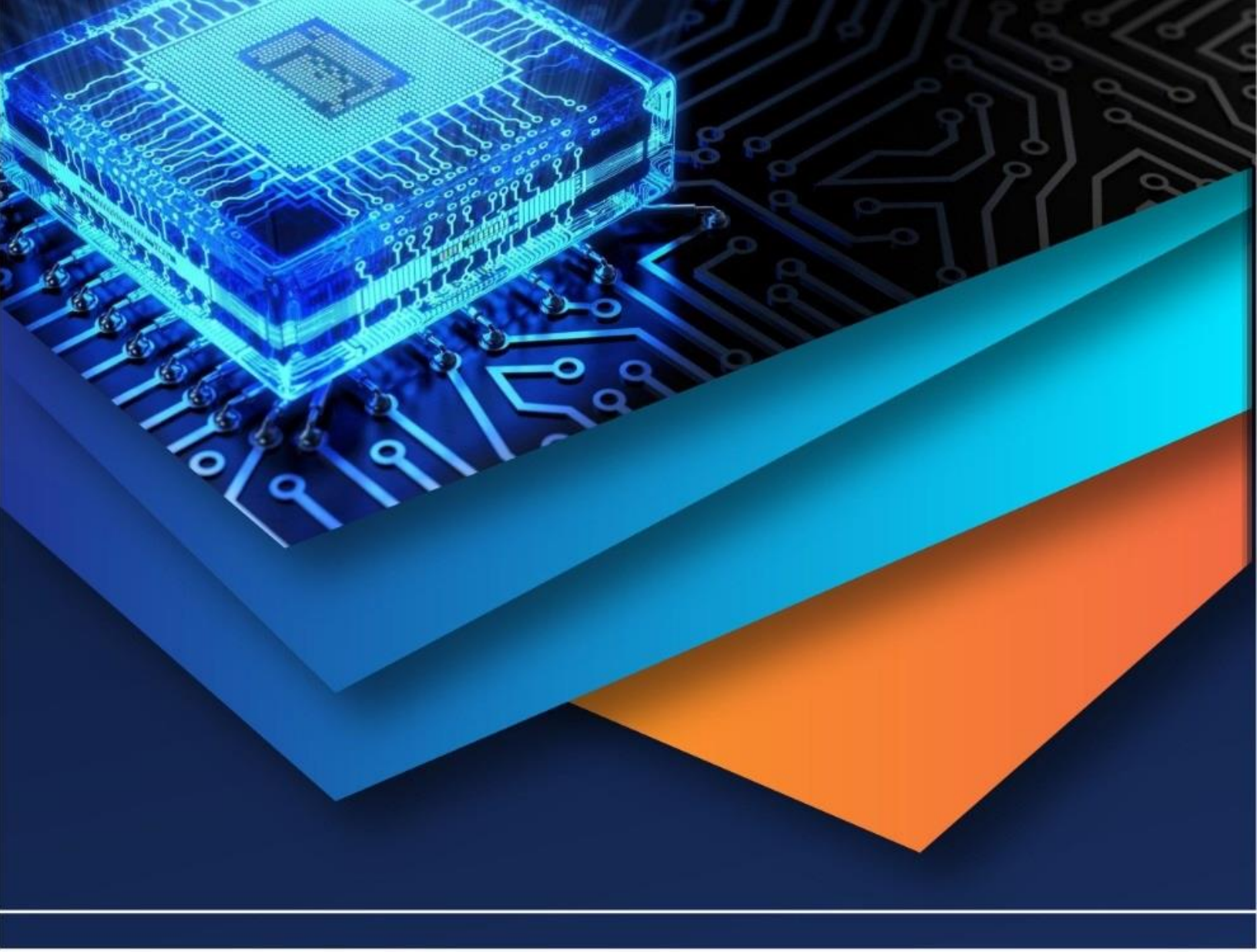
In comparison with the traditional methods, e-Learning often provides additional qualitative advantages in the form of learning anytime anywhere because its flexible, access to worldwide mentoring tools for optimal skill growth, learning different things at the same time and administration as well as control of the training calendar from various locations.

Artificial Intelligence (AI) is expected to generate several profitable business opportunities in the coming years for learning assistance. AI is useful for the prediction of learner behaviour and for personalized learning. This also helps in restoring a training cycle and in executing more positive learning habits such as self-explication and self-regulation.

To make e-learning effective in such difficult times like coronavirus, we need to focus on the use of technology more efficiently, meaning, the usage of that technology which has minimum procurement and maintenance costs then other technologies but can also effectively facilitate educational processes would be better. Before bringing in and adopting any e-learning tool or technology, its pros and cons need to be calculated. Institutions should conduct some research when they are bringing the right technology for different educational initiatives. While adopting the technology there should be proper clarity on its purpose and context like what the technology is meant to do. As several factors affect the choice of a particular technology such as security features, internet speed, internet access, availability and condition of laboratories, digital literacy levels of the beneficiaries, and many more. E-learning can also help in providing comprehensive education even at the time of crisis like coronavirus. Such systems are need to be developed in the educational institutions to make sure that no student is getting deprived of education due to their locations, social class, ethnicity, and so on. Methods of online teaching supports and facilitates learning teaching activities, but there is a dreadful need to calculate the pros and cons of technology and harness its potentials. Disasters and pandemic such as Covid-19 can create a lot of tensions and chaos; that is why, there is an important need to study the technology deeply and with due assiduity to balance these fears and tensions during such crisis.

REFERENCES

[1] Dhawan, Shivangi. "Online learning: A panacea in the time of COVID-19 crisis." *Journal of Educational Technology Systems* 49, no. 1 (2020): 5-22.
[2] Shilpa Bhatia, Bindiya Ahuja, Sarthak Matta and Monika Bhatia," E-commerce in digital India."
[3] Mahapatra, Madhumita, and Mr Saroj Kumar Das. "E-LEARNING: A STUDY ON INDIAN CONTEXT."
[4] adamasuniversity.ac.in
[5] www.guide2research.com
[6] www.eu-startups.com
[7] www.indiaeducation.net
[8] www.prnewswire.com



10.22214/IJRASET

45.98

IMPACT FACTOR: 7.129

IMPACT FACTOR: 7.429

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089 (24*7 Support on Whatsapp)