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The rise of online learning during the pandemic: a study of its challenges and opportunities

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Abstract--This article critically examines the change of mode of education to online during the global distress of the pandemic. Even though India has achieved milestones in innovation and advancement of technology for the purpose of education and has been on the path of growth, there is still a sector of disadvantaged people who are left behind in this whole race. This article then focuses on the digital divide caused to the disadvantaged sector of people and to find out the causes of their disadvantaged state to find workable solutions for improvement of it. It examines the pros and cons of the Online education by reviewing relevant literature as well as through the insights and results given by 82 participants who took part in the online based survey. According to the collected data, the loopholes

due to which the online education is deemed less effective are examined. It is a well-known fact that the online mode of education made it less costly and available to a lot of people regardless of their age. Through the results and analysis of which it is understood that online classes lack a lot of factors that make education effective. Online classes during the pandemic are mostly attended by students in houses which lack proper ambience for learning and the lack of opportunity of face-to-face interaction with fellow learners and the mentor causes disinterest among learners. The suggestion to decrease the digital divide and possible methods to improve the effectiveness of the online classes are discussed.

Keywords---online classes, COVID-19, lockdown, online learning, traditional learning, digital divide, internet connection, EdTech, students.

The coronavirus pandemic has brought lockdown and shut to the offline system of working. This affected the way of earning in an outrageous way. In an average, 1.2 billion youngsters are seeking their schooling and higher education. The offline mode and the distant education was the only two ways introduced to the world. From past few years with the development in technologies many young start-ups introduced online learning, but students always choose the offline mood. But with the urgencies related with covid the online mode is the only way left to endure the education. As seeing the current situation and the evolution of new variants each month, online learning is going to stay for longer. This shift from offline to online had affected drastically across 186 nations from minor to major educational institutions.

With this unexpected shift away from traditional format of learning it created chaos. Not only children who are leaning to learn but to the teachers also. The young generation tend to get used to technologies in a better way but experienced teacher who spend their half of life teaching offline, got to see a lot many troubles. Another point to look is students coming from diverse financial backgrounds, earlier providing fees would give them equal way of learning experience. Since the online mode require equipment such as high-tech laptops to excellent internet connection. Not every child can afford the same, along with the environment for attending classes. Despite of these differences the child will be judged equally according to their grades. Thus, the question arises if the ways of learning are not equal anymore then how the child can be expected to perform the same as of a child with all the facilities will do.

Earlier majority of the educational institutions were not equipped with the technology and internet. But the sudden shift to online classes due to pandemic ensured that all the educational institutions approves and evolve themselves according to the need. But many are still struggling to bring out any progress which is affecting the students. Many institutions are having their own system of classrooms conducted and managed all online, others are using the google supplied systems which has a lot many loopholes but manageable. Before the

compulsory progress, online courses came in many structures, from Monstrous Internet based Open Courses (MOOCs) to single modules or full web-based unhitched male's and graduate degrees being offered on the web. They had been routinely used in teaching methods like mixed learning and flipped homeroom. Online classes are currently the main choice that instructors need to educate.

Being In India where the diversity in socio economic status is brings a lot more issue. There are many who even cannot afford to get offline learning. Now when the society is totally forced to function in an online mode this bring lot more issues to poorer section of the society. At least by providing fees the educational institute was providing everything needful. But now with the same fees structure the students are obliged to get same facilities at their homes such as Wi-Fi and technical equipment's. The main purpose of this research is to critically understand the new mode of learning apart from being offline. The challenges and new opportunities attached with the new way of offline learning. How the differences can be justified and corrected if we are adapting the online learning in a longer run. The Digital Divide based on the socio-economic status and the social justice attached to it. The research will highlight and understand the student's perception towards the new adaptation of learning to the previous one.

Literature review

Online learning has become the new normal owing to the pandemic of Covid-19. Although online learning practice is appreciated to have kept the education sector from collapsing during the lockdown period, it has several drawbacks and issues. As we are nearing the end of the pandemic, the effectiveness of online teaching practice and credibility of online degrees are beginning to be questioned. Several studies and research have been conducted to find and acknowledge the problem and to find possible working solutions to the identified problems. The advancement of technology in the last decade has enabled us to continue education even when the entire world was implementing closures of all institutions and lockdown of cities. There was a time when the use of electronic gadgets like mobile phones, tablets and laptops by students were banned from educational institutions but during the global distress of pandemic, they have proved to be the saviour. Even then, the online mode of education has several flaws which affect its reliability and quality. To continue to teach or learn in online mode effectively, users needed excellent quality smartphones or laptops which must be compatible with the software's of the teaching platform. Users must also have access to internet connection of good bandwidth and sufficient data. Online classes also require users to be in a place where the network is uninterrupted and is stable.

The lack of either of the above-mentioned factors may put the user in a disadvantaged state. To understand previously collected data and to find other factors affecting the quality of the online education, we have conducted a review of relevant literature of the concerned topic of study. Apart from the availability of gadgets and a stable internet connection, there are several other factors that affect the quality of education supplied or received. One study conducted by

T.Muthuprasad et. al, focused on this aspect and have produced several factors from the perspective of online learners.

To achieve this, they have conducted an online survey in which the sample consisted primarily of students pursuing education online. A total of 307 students have taken part in the survey in which the sample were segregated and analysed based on their degree, sex, and place of residence. Out of data collected from 307 respondents, the team have segregated the data into five different themes and nineteen different subthemes. According to it, the nature of content provided by the staff, the learning environment and infrastructure of the learners, competency of the staff to be approachable and useful, the readiness of the student to learn and the follow up measures taken by the institutions to make things efficient are examined. The study was restricted only to students from agricultural streams.

It focused only to examine from the perspective of learners and not the instructors. The study discusses the deprivation of education of learners from less privileged sections of the society, its area of sampling is limited to supply much information. In another study conducted by Wadhwa et al. in 2020, a total of 301 participants including students, teachers and parents of school-going children have responded. The study puts forward some pros and cons of online classes in which major factors supporting the online education and drawbacks of it are discussed. The team conducted a survey with nineteen questions which cover some trivial issues. Based on the observation of the obtained results, the team have organized the results into five different themes along with a general opinion. The discussion is about physical and psychological issues affecting the desired outcome of the online classes.

It also arrives at conclusion by viewing the technological as well as environmental aspects and also it mentions how social skills were affected too. Apart from the technical issues that hinder the process of online education and the outcome of it, the study discusses the personal issues that affect both the students and the teachers. The study also discusses physiological effects on a student caused due to sitting in front of an electronic gadget for a prolonged period and psychological effects attributed to the lack of time to spend with family or lack of in-person socialization. It is mentioned that the emission of greenhouse gasses are reduced significantly because teachers and students need not commute to the institution for education. The fact that the lack of access to good internet connection is affecting the productivity of the students in many ways. The study concludes with a four-point implication which lacks focus in any direction, and it also lacks to provide with methods for the betterment of the issues discussed. The study also lacks the perspective of social disadvantage faced by students from less privileged parts of the society. Higher education system in India is the third largest in the world next to China and the United States (Naik et al, 2020). The team also conducted a survey in which 874 people, the students, teachers and parents of school going children have taken part.

Overall, the study shows that more than half of the learners and instructors were not satisfied with the process and outcomes of online mode of education. The ten questioned survey focuses on the level of satisfaction of learners and instructors

based on the effectiveness of the online classes. The wide range of sampling included undergraduate as well as postgraduate students and professors too. The survey also emphasizes the fact that the closure of educational institutions and nation-wide lockdowns have sent students to their homes where they do not have necessary things to continue education online.

The Government's role in supplying education online is very crucial for the betterment of any nation. In India, one such initiative towards delivering education online for free is the programme called SWAYAM (Study Webs of Active learning for Young Aspiring Minds) in association with the Ministry of HRD. The programme offers several Higher secondary level, graduate, and post graduate level courses for free. According to Jindal et al. two thousand courses are offered online through SWAYAM and approximately 150 million students across the globe are enrolled in different courses (Jindal et al. 2018). The team conducted non-empirical research in which several literatures on the concerned stream were reviewed and analysed along with the fact sheets and primary sources.

The study discusses the growth of online education in India not only during the pandemic, but also over the past decade. Jindal et al. put forth that the penetration of the internet in India, saving money and time, ease of doing courses for working professionals, Initiatives by the government of India are some factors of growth. The study also addresses factors of hindrances namely insufficient digital infrastructure, limited social interaction, questionable credibility of degrees, lack of motivation during these trying times and language barrier. Although several studies and research have been conducted on the credibility, satisfaction, effectiveness and factors of growth and hindrance of transition of education into online mode. There is less emphasis on the digital divide of online education in which people from less privileged and neglected sectors of the Indian society are left behind. This problem should not go unnoticed as education is the only thing that can alleviate people from ignorance and lead us in the path of growth.

Research objectives

The study is aimed to cover major challenges faced by the student during the pandemic. The objectives of the study are as follows:

- To critically understand the Online learning and its problems and challenges on education sector.
- To observe the class difference and digital divide in India.
- To assess student's perceptions towards online learning compared to traditional classroom
- To analyse the present situation of Indian education system and its future perspectives.

Research Methodology

The methodology used in research is the most suitable approach taken to collect the data, analyse the data and best represent the data collected. The questionnaire has been used to collect the data and analyse it. 10 questionnaires were created specifically to study the aspect of a pandemic on education in detail. Aspects covered in the study are- Education loss during the corona crisis, Online education and its challenges that arise in a sudden shift of education to online mode. It is a systematic method to study the data collected from the subject and to fulfil the objectives of the study. The questionnaire has been created through Google forms.

The digital divide in India

- Attending online classes for many hours of web association, peaceful environment and minimum of one smartphone is requirement of each student, which everyone cannot afford in the rural and semi-rural India.
- In India, as everyone has not the identical socio-economic standards and ought to be compelled to concentrate of domestic chores, members of the family, manage with restricted space, restricted budget and poor infrastructure in rural areas would cause them to leave and ignore the education.
- The digital divide in our country has not only excluded of students from poor and weak backgrounds from digital education but also, forced many underprivileged students to anxiety, depression and suicide.
- In the state of Kerala, a fourteen-year girl committed suicide and the reason was shocking. And the reason was that she was not been able to attend her online classes. (The Hindu). A 16-year-old student (class 10th student) from Chirang district, committed suicide as he was not having a smartphone to attend classes and examinations organized by his school in online mode.
- A 10th class student end up her life at Bali district because of she had not th privilege to attend online classes and failure in her examination was haunting her.
- Thus, the pandemic has exposed the deeply stock-still class distinction and gap between the wealthy and poor in the Indian society.
- A Survey Conducted to know briefly about how many students are getting good internet connection for attending online classes. More than 40% of student responded that they are not getting a good internet connection regularly for attend online classes.
- With Covid-19, we tend to area unit seeing however yesterday's disruptors can become today's lifeguards. While mainstream establishments once viewed online education as a threat, it has come back to their rescue. With the choice of taking a web category reception or engaging from home per your own convenience, now could be positively a time for self-contemplation. The government can have to be compelled to take robust, although scheming call concerning investment in education within the returning time.

Post-Pandemic Challenges on Education sector

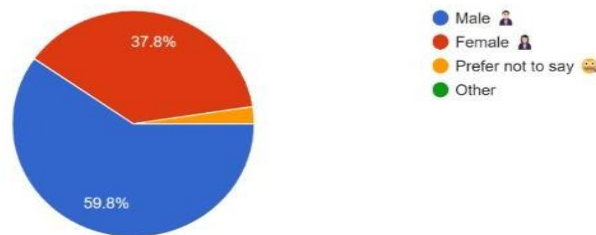
- Mainstream learning setting v/s digital learning setting.
- Increment on investment in facilities to develop a correct learning platform.
- Workshops for the educators and conjointly the technical staff to increase their digital skills.
- Limited duration for the educators to finish the syllabus.
- Reduced practical demonstration of practical courses.
- Delay in Fee payment of schools, colleges and other institutional authorities.
- Impact on placements and Internships.

The pandemic impacted negatively on active study hours and also affected our social life interactions. In response to lockdown, the shutting down of school, colleges and universities have introduced socio-economic problems like student debt, health problems, anxiety, depression etc. The Survey conducted for evaluating the cost of study in pandemic reveals that 44% of people believes that it is like the normal changes, 37% believe that it is less than the normal and only 22% believes that it is increased.

Data collection and analysis

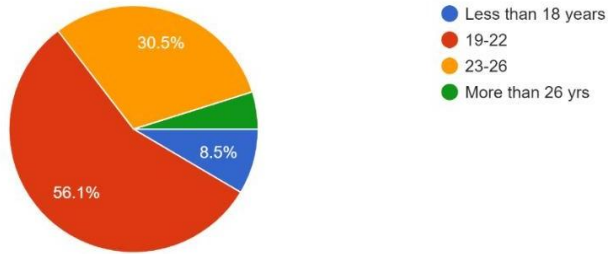
An academic survey was prepared with 24 Questions to get overall insights about the Rise of Online Learning. These questions were qualitative as well as quantitative in nature. The survey was conducted from eighty-two students from different universities, colleges, and schools across India to get an overall perspective of students with online mode of education. This survey was strictly conducted for academic purpose only.

Gender
82 responses



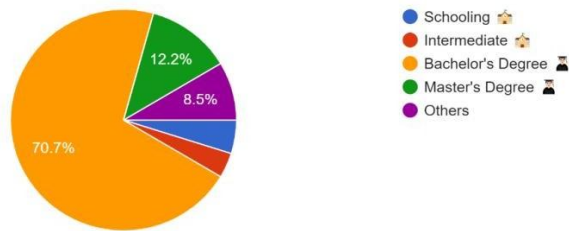
Age

82 responses



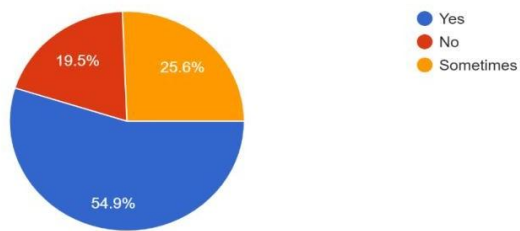
Your Main Field of Study

82 responses



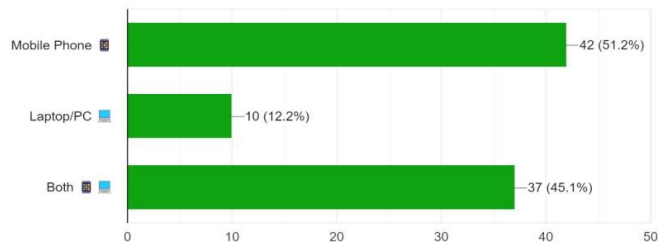
Are you attending Online Classes?

82 responses



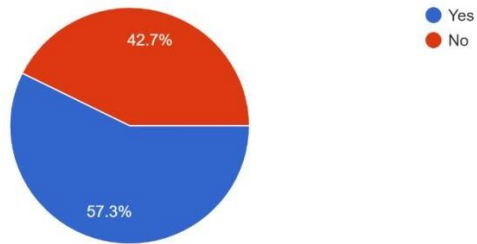
Which device do you use to attend your online classes?

82 responses



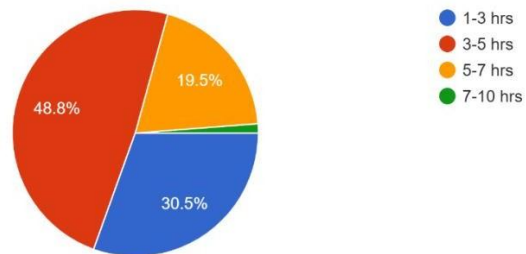
Do you have a separate room to attend your classes?

82 responses



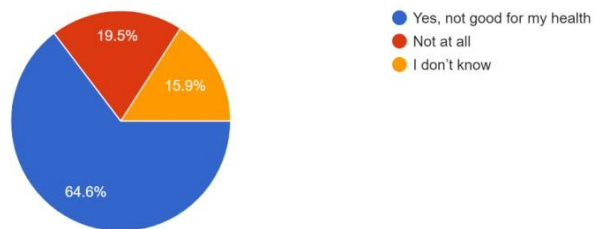
Are you getting good internet connection for attending classes?
How much time do you spend each day on an average on online education?

82 responses



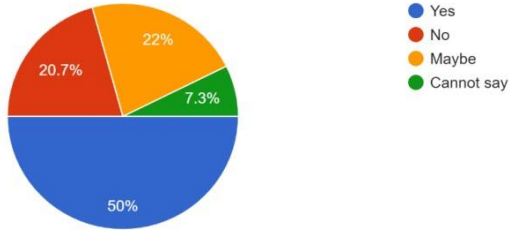
Are you facing any health issue due to online classes (back pain, neck pain, eyes strain, insomnia etc.)

82 responses



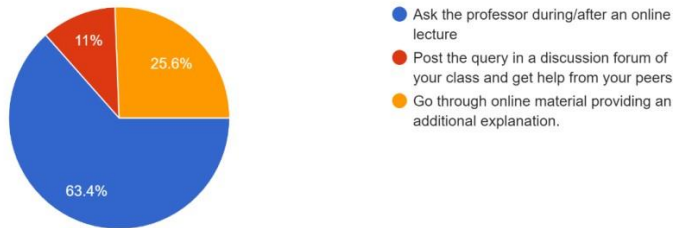
Do you feel proper platform for attending online education during the pandemic was provided by your school /college?

82 responses



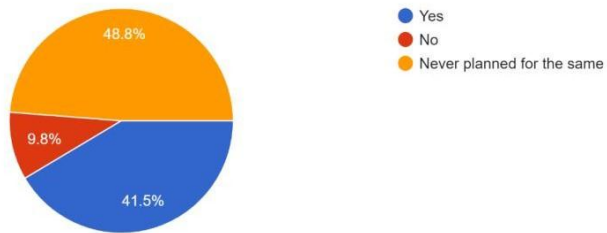
Do you feel that from now onwards, the education should be conducted in online mode only?
 What is your most preferred method for clearing doubts in online learning?

82 responses



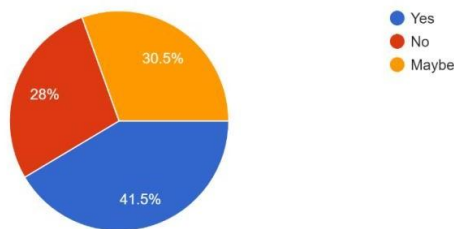
Has Pandemic affected your study abroad  plan?

82 responses



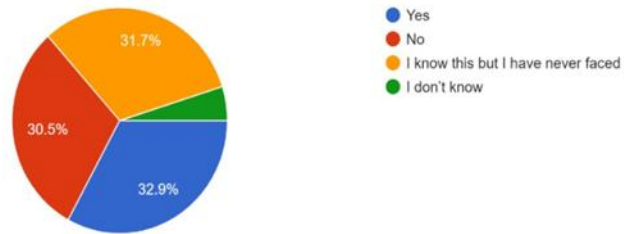
Would you be interested in studying, if your program was offered online?

82 responses



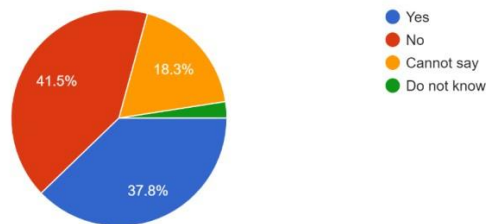
Have you ever faced Zoom raiding/Zoom bombing (the unwanted, disruptive intrusion, generally by Internet trolls, into a video-conference call)

82 responses



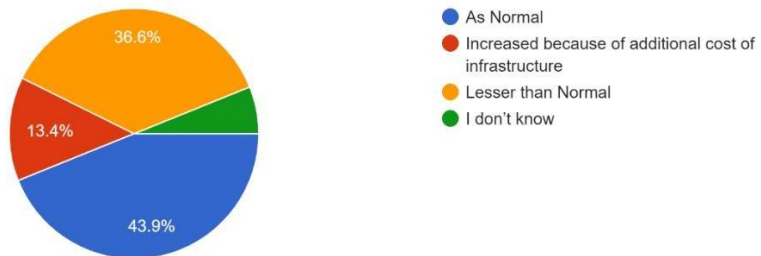
Do you think you were effectively able to communicate, ask questions and learn properly in online Education mode?

82 responses



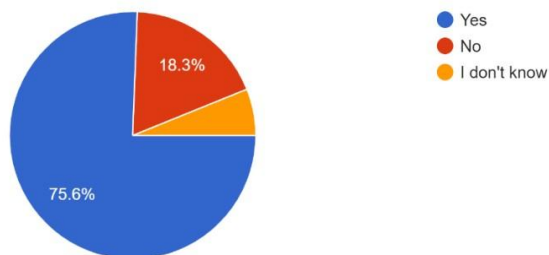
What is your current cost of study in Pandemic?

82 responses

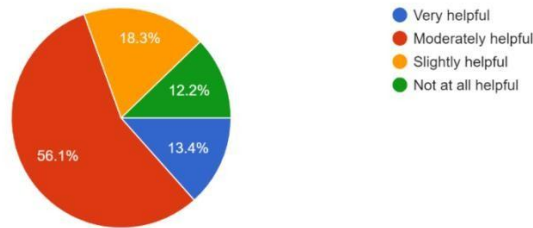


Do you think that online classes have affected your social interactions (friends, family etc.)?

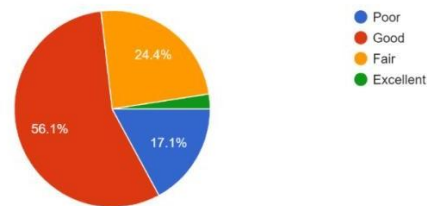
82 responses



How helpful your [School or University] has been in offering you the resources to learn from home?
82 responses



How do you feel overall about distance education?
82 responses



Results & Discussion

All the questions of our survey were designed to get the maximum information about the unique perspective of students about the beginning of the new era of digital education. During the Covid-19 pandemic, a nationwide lockdown was imposed which pushed our education sector to function in online mode, willingly or unwillingly. The process of digitalization was clear because of rapid growth in information technology, but due to the lockdown, it resulted in a sudden transformation. This sudden transformation had affected the students differently as our society is uneven, i.e., divided into different class and category. This survey was designed to see this pattern of behavioural change and the opinion of students for online education. The first four questions were based on the individual information like name, email id, age, and gender. Around 60% are male and 40% are female have filled this survey. Most of the students are in the range of 19-22 years (56.1%) and around 1/3rd of the students are having age of 22-26 years. It means that most of the students in this survey are either in graduation or post-graduation.

In the next question, it becomes clear that majority (70.7%) are in bachelor's degree, around 12.2% are in master's degree and around 10% in schooling. In the sixth question, we asked them about their present mode of education. Around 55% are attending consistent online classes and 25.6% are occasionally attending their classes. It also reflected the fact that in most of the educational departments, hybrid mode of classes are being held in which students are been given choice to attend online or offline mode. 19.5% are attending offline classes. The line graph in the next question shows that around half of the students use

mobile device (51.2%) and 12.2% of the students use laptop device for attending online classes. Forty-five percent of the students use both these devices to attend classes. Most of the students are dependent on their smartphones to attend online classes. It is also clear from the fact that the sales of smartphone in India during covid-19 pandemic faced 12% annual growth rate [1].

The next two questions were asked to check the study environment and the standard of internet connection. Around 57% have a separate room or area in their home to for study and rest of the 42.7% must adjust with their siblings or other family members. Naturally, learning requires attention of a student and to concentrate while sitting with other family members or siblings (who might also be attending online classes), it is a challenging task. Along with that, around 40% (29.3% + 9.8%) students are not getting good and stable internet connection. There can be two reasons for this response. Firstly, the students do not have stable internet connectivity (cheap internet package or network issues) and secondly, the students are living in regions with instability like the state of Kashmir or regions affected with Naxalite-Maoist insurgency.

The rise of online classes has also increased the average screen time of students due to online classes. 48.8% of students are having average screen time of 3-5 hours and around 30.5% are having screen time of 1-3 hours. There are even many students (19.5%) who have running screen time of 5-7 hours. And it is important to highlight the fact that the mentioned screen time is only just for online classes out of overall usage of their smartphones. The pie chart above (for Q.11) shows that majority (64.6%) of the students are facing health issues from their increased screen time. Also, a survey conducted by students at Spring Dale College (SDC) chain of schools reported that apart from lethargy, exhaustion, irritation, and obesity, 54-58 percent of students have suffered significant physical strain, eyesight issues, backache, and headaches because of postural disorders [2]. Also 19.% are not at all feeling any health issues due to online mode of classes and around 16% are not even self-aware about themselves.

The data from next question shows that half of the students believe that a good platform was supplied for the by their respective school/college/university authorities with multiple features to increase student participation and interaction in the class. And equally half of the students feel either the platform provided to them was not efficient or they are not sure about it. The next question was asked to see the interest of students to continue with online classes in future. The pie chart shows that only a few students are interested to continue with online classes and majority are not in favour of this, directly or indirectly. 46.3% have given a balanced answer which signifies that a lot of improvement is still needed in the digitalised education. The data above shows that around 63.4% students clear their doubts by asking their respective teacher within an online class. And around 1/4th of the students do not ask questions and just go through online study material to find solutions.

In India, many students have plans to study abroad to enhance their career. But the pandemic has interrupted many plans for this. The data above reflects the fact that 41.5% had plans to go abroad but it was cancelled or postponed due to

lockdown and more than half of the students do not have any such plans. The next question was designed to get input for a contemporary problem of zoom raids or zoom bombings. The zoom raids are unwanted intrusion done by some hacker or more commonly some YouTubers to make their content viral. The pie chart above shows that 32% have faced some sort of unwanted zoom raiding and 30.5% have not faced anything such things. Around 31.7% have not faced but they are aware about zoom raiding, most from some viral zoom raid videos.

The next question was asked to know whether they would have been interested to study the same programme if it was offered in online mode. Surprisingly, around 41.5% choose the option to still study the programme if it was offered online and 28% rejected this idea. In the next question, a conflicting response was seen. Around 41.5% students believe that they were not able to communicate and learn properly and 37.8% affirmed that online education is more effective. The next two questions were asked to find the social and monetary impact of online classes. The data above shows that 43.9% students believe that the cost of their studies is normal and not changed. And 36.6% students think that their cost of studies has decreased. The plausible reason for this can be the cost cutting from the hostel, mess, transport, and other expenditure which is not needed in online classes. Also, around 13% students claimed that their cost has increased due to the added cost of infrastructure. And when asked about the impact on social interaction, shockingly around 2/3rd majority feels that digital education has affected their social interaction with friends, family, and other social relationships.

For efficient online education, the resource material is especially essential element for successful learning. And only 13.4% students affirmed that their educational institutes had supplied them good study material and rest of the majority feels that the study material was either moderately helpful or not at all helpful. Now the most important question was asked from students about the future of online education and mixed response were seen. More than half of the students feel that online education is a good model for education, but it required a lot of changes to make it more engaging and effective. 36.6% students believe that both modes of education (online and offline) are important in future for better results and 8.5% claimed that online mode of education is a failed model. The last question was asked to get overall feeling of students about online classes, and it can be said that most of the students believes that online mode is good, but they still have lots of complain about this model of education. The means that online model can be good and more effective if the demands and problem of students are taken into consideration and significant changes are made in digital education to make it more engaging and interactive.

Challenges & Opportunities

Covid-19 pandemic had affected drastically on the education industry, making a sudden shift from offline to virtual phase of learning. In the process online learning tools appeared as a boon. There were magnificent investments in EdTech tools which resulted in notable advancements in technology. However, the online classes have several advantages such as easy accessibility, reducing the need to

be present in the educational institution and flexibility of length of the course and the pace of learning. It also has considerable disadvantages.

Despite various new opportunities for imparting education through online learning, there are various common and significant challenges faced by both teachers and students during this mode of online learning.

- Inability to focus/concentrate on screens: There are various distractions resulting in defocusing students like social media and other recreational websites while learning online. Teachers must make sure that their lessons must be concise, interesting, and most importantly interactive to keep students focused on the lesson.
- Indiscipline: Attendance percentages have degraded a lot owing to poor internet connection as well as uninteresting nature of the lectures hitherto. The inadequacy of tools for making learning interesting is an issue reported by teachers according to whom it leads to disinterest in the process of both teaching and learning online.
- Digital Literacy and Inequality in Internet access: Unequal supply of Internet and difficulty in accessing technology in different parts of India is a major factor affecting online education. This situation puts people in rural and remote areas at a disadvantage because these places don't have a proper internet supply and some people aren't yet acquainted with the latest technology.

Often, it is disheartening to watch an assigned video only to see that buffering circle in the center, losing interest in the video. Despite having a computer or laptop it is mandatory to have a reliable and fast internet connection before attending an online course or program. If the signals are too weak or to connect, there is no chance in succeeding online learning. About half of online students attend lectures or complete assignments given through mobile phones. More educational institutions are making online programs accessible to mobile phones and tablets. The capability of the younger generation to use electronic gadgets like computers and smartphones does not necessarily assure digital literacy. Getting benefited with online education requires practical knowledge and understanding of the devices and software applications. Learners must also know their rights and responsibilities as a student and must know the etiquettes of communication online. Additionally, students must be able to use some basic application software like Word to create documents. He/ She must master the skills of inserting symbols and hyperlinking. Completed projects must be saved and stored properly and should be sent to the professor's in-boxes. To complete an online program or even a single course, students must have a fundamental knowledge of how to operate in virtual meetings, collaborative projects, and online forums. If students lack this knowledge, it is vital to take a prerequisite computer skills course.

Sense of Isolation/ Virtual Classroom Engagement

Having physical interaction on a daily basis impacts a lot on the learning process. Being in the company of their teachers and fellow mates can teach students a lot.

However, there are few physical encounters between students and teachers during an online class. Lack of face to face interaction with fellow learners and teachers for a student might cause the feeling of isolation and can result in depression in them. Clinical depression can render it difficult for a student to be organized, complete given tasks efficiently and to remember the imparted knowledge leading to poor performance. In these circumstances, the educational institutions must provide various options and interfaces for teachers and students to interact with each other to overcome this shortcoming.

Training for educators

Institutions should possess data on mistreatment in digital modes of learning to show online. academics might have solely a basic understanding of technology however they do not forever have the resources and tools they must supply online categories. To beat the insecurity colleges ought to invest in providing academics with the foremost up- to-date technical coaching in order that they will simply conduct their online lectures.

Manage Screen Time

oldsters square measure involved regarding the mental state of their kids as a matter of proven fact that they need to pay most of the time gazing at the screen ceaselessly for a protracted time. The most concerning issue with letting younger children to learn online is the increase in screen time and reduced physical activity.

Infrastructural Problems

The advantage of online learning is it does not require buildings, big classrooms, tables, blackboards etc. which means there are no infrastructural requirements. There is a need for digital devices having adequate software, constant electricity, and high bandwidth internet supply.

Lack of political will

First world countries make technology and the internet accessible to people who cannot afford it privately by making it available in places like public libraries. Developing countries like India and Pakistan have come a long way and are developing technologically. The access of technology and the internet is easier than ever before in history for its people but it is very small in scale compared with the first world countries.

Ineffective Time Management

It has been uncovered through research that many students find it difficult to balance between their studies and other daily routine exercises. It gets worsened as the ineffective time management resolves poor sleep patterns and increased level of stress. Time management is crucial during the phase of online learning in which students must pace themselves without any support from friends or family.

Future Suggestions

The online and virtual world has a nice contribution, particularly to the academic business. Followings are helping the advantages or advantages one will derive from online learning.

Efficiency

Teachers will give lessons to students a lot expeditiously and effectively through online categories. lecturers will use a spread of online learning tools, like videos, PDFs, and podcasts, as a part of their lesson preparations and create their categories interactively. lecturers can even develop some skills of victimization. These styles of tools are on the far side of the quality textbooks.

Accessibility of your time and Place

Another advantage of online learning is that the scholars will attend their categories from where they need. Online mode of classes have made it possible to record the lectures and save them for later use. This is a great advantage as students can access the recordings and whenever and wherever they need.

Affordability

Online education is affordable and cost-efficient when compared to traditional education, online learning deducts the prices of assorted styles of facilities provided by the campuses like transportation, lunches, and so on. Moreover, all the study materials are accessible online which is economic and environmentally friendly because it is paperless learning.

Suits a spread of Learning designs

Every individual learner has a specific way of learning. Some understand the concepts better in visual mode and some through sounds. The ambience and setting of the room of learning is also very important to some learners. Some students prefer to be alone while learning because presence of other people can be distracting. In the traditional mode of learning, students with the above mentioned requirements and personal preferences had to adjust themselves to the monotonous method of education which in turn affected the overall quality of the education being imparted to them. But online teaching has made all the preferences and requirements possible by being versatile and flexible.

Less intensity

In the traditional way of learning, learners had to transit to the institution everyday and sit through several long lectures during the day and stay with the campus. At the end of the day they have to travel back to their residence, complete given tasks, take some rest and repeat it again the next day. This is a tiring process altogether. In the online mode of education, learners do all their work in their personal space. It is required for the student to stay productive and

keep track of deadlines and meet them properly. This method reduces a lot of pressure put on learners.

Better self-discipline

Self-discipline is a necessity to get benefited and succeed in online learning. There isn't a tutor to monitor the learner's progress and being in a house setting can make a student lack motivation. Being present with fellow learners might motivate students to perform well even when a learner feels a lack of motivation. But this isn't going to happen in the comfort of a home. Students have to take responsibility for their learning and stay focused or else can easily fall behind from alternative classmates.

Accessibility of tutors

Online mode of education increases the distance between learners and tutors physically but it doesn't mean they aren't approachable. Being in a comfortable space of home can enable students to easily approach their tutors without hesitation as in traditional classes.

The comfort of a personal space

Online classes don't require a student to wear crisply ironed uniforms, polished shoes and formal hairdo. Students no longer need to sit in uncomfortable school/college desks and chairs for long hours. Except for video conferences, online classes allow learners and tutors to be in comfortable clothes of their choice and be seated in.

Conclusion

India presently lacks the needed infrastructure to instruct its students digitally. we tend to would like stronger infrastructure to supply uninterrupted net affiliation and electronic devices to students if we tend to arm to slim the digital divide. Republic of India will harness this chance by producing digital instrumentation that is used for education services as it serves the twin purpose of autochthonal producing and bridging the digital divide. net services in Republic of India, too, are amongst the most affordable within the world; thus, the availability of the net are going to be cheaper. Given the push for digital skill, each producing, and service provision will lead to a meaty amendment in this e-education house.

Digital transformation is a challenge for all sectors and the eruption of the coronavirus pandemic has created instant and new challenges within the field of education. the govt., Ministry of Education and academic establishments trying all choices for transmission education through on-line modes, tv and community radio. Involvement of all oldsters conjointly plays a dynamic role in shaping their kid's skilled career. nonetheless there exist a digital divide thanks to numerous reasons such as electricity failure, poor net property in the coastal, hilly, remote areas of rural and concrete, lack of awareness on technology devices and net

access, absence of ICT coaching and support to educators and learners, economic constraints to shop for immediate, short term and future plans to alter all the education connected problems on students specially and society at massive.

References

1. Lakshman Naik, Girisha, et al. "Online Teaching and Learning of Higher Education in India during COVID-19 Emergency Lockdown." *Pedagogical Research*, vol. 6, no.1, 2021. *Crossref*, <https://doi.org/10.29333/pr/9665>.
2. Nic, Laxminarayan Prajapati. "Department of Higher Education | Government of India, Ministry of Education." *Department of Higher Education, Ministry of Education, Government of India*, www.education.gov.in/en/ict-initiatives. Accessed 1 Apr. 2022.
3. T, Muthuprasad, et al. "Students' Perception and Preference for Online Education in India During COVID -19 Pandemic." *SSRN Electronic Journal*, 2020. *Crossref*, <https://doi.org/10.2139/ssrn.3596056>.
4. Jindal, Aman, and B.P.S Chahal. "Challenges and opportunities for online education in India." *Pramana research journal*. 8.4 (2018): 99 - 105.
5. Khatak, Sunita & Wadhwa, Naman. "Online versus Offline Mode of Education - Is India ready to meet the challenges of Online Education in lockdown?" 2020. 48.
6. IANS, Smartphone sales in India grow 12% in 2021: Report, Deccan Herald, 25 Jan 2022, URL: <https://www.deccanherald.com/business/business-news/smartphone-sales-in-india-grow-12-in-2021-report-1074392.html>
7. Online classes: 55% students report health issues, Jul 25, 2021, The Tribune, URL:<https://www.tribuneindia.com/news/health/online-classes-55-students-report-health-issues-288042>

Appendix – Questionnaire

The Rise of Online Learning during the Pandemic: A study of its challenges and opportunities

Link- <https://forms.gle/Zk2TiU2d8XonCXqy6>