SMART LEARNING SOLUTIONS IN EDUCATION TO OVERCOME PANDEMIC

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ABSTRACT
A year back, all areas of the world were battling against Covid-19. Coronavirus had spread in the whole world. It affected every one of the zones of the economy. Social event emergency looked at the world as a whole. More than one billion youths were in danger of falling behind, considering school terminations containing the spread of COVID-19. Nations have been acknowledging eliminated mentoring programs to keep the world's youngsters learning. In any case, valuable, the world's kids – especially those in less honoured families – don't have web access, PCs, TVs, or even radio as well as students. Now education can be possible not only in one country but also in others.

Now, in this pandemics timing, all the countries have updated their existing learning methods. Due to that critical timing, many universities and schools had changed their conventional assessment method. They had adopted many online evaluation tools. Online teaching was a new technique and platform for both teachers to get an education from one place to another. Everyone can get an education from any time anywhere with innovative learning solutions in an online manner. With the advent of technologies and contemporary society, a good education can confront several challenges, like educational theory, instructional technology leadership, teachers' learning leadership, instructional structures, and academic ideology. This manuscript made an effort to solve this pandemic situation by using various gadgets in smart learning and positive and negative aspects.

Keywords: Covid-19, Pandemic, Education, Smart Learning Gadgets, Impact, Suggestion, Improvement and significant learning.

INTRODUCTION
The COVID-19 pandemic was the first and critical wellness emergency. Numerous countries had resolved to close schools, schools and colleges. Because of this emergency, everywhere in the world region was influenced by this pandemic. All the economy of the world had impacted and got down. The public authority has chosen to run on every exercise prudently to overcome this pandemic situation. Because of this Covid-19 pandemic, colleges and other informative foundations have changed to cutting edge based preparing for training. Brilliant schooling is another worldview in worldwide instruction. The goal of intelligent education is to improve student's nature or long-lasting learning. Due to COVID, a significant problem was felt by families all around the world. At that time, most guardians, kids, students and teachers were unaware of untested, incredible scale
This manuscript incorporates various innovative and discussion devices to become more acquainted with the methodology to change/keep up the necessities of multiple understudies underneath one umbrella. The improvement of new applied sciences empowers students to explore more noteworthy adequately, effectively, deftly and quickly. Students use intelligent gadgets to get the right of section to computerized assets through Wi-Fi local area and to drench in customized and consistent learning. Keen schooling, an idea that portrays dominating in advanced age, has acquired broadened consideration. This paper examines the meaning of sharp preparing and presents an applied system.

Online schooling is elementary on a worldwide premise; however, it has many accomplishments in India. In school, its degree is uncommon; however, virtual examinations extend in metropolitan urban areas and Universities. In any case, because of lockdown circumstances and pandemic circumstances, India's Government has now made arrangements for different correspondence methods on the web/virtual instruction. In the lockdown period, 3-4 months, absolutely exercises were shut. The entire world’s economy is getting slow because of the present circumstances. Before this pandemic situation, there was hardly such type of devices used. These are brilliant board, shrewd class, zoom class, Google meet, study hall, WebEx meet, etc. The majority of the educators in elementary and higher schools were uninformed about the utilization of these devices. In any case, somebody said exceptionally evident, "Need is the mother of innovation." The government has started advancing the work at home and made it in India by web-based programming.

Yet, presently the situation has been changed. Nowadays, there are numerous made in India devices available. Nowadays, India has created innumerable items which had imported by different nations. India is getting self ward and produce their products. Because of this essential planning, numerous colleges and schools have changed their traditional appraisal strategy. Now they have embraced multiple online assessment apparatuses.

The government has decided to run on all the activities tactfully to beat this pandemic, overcome this, and create smoothness. In this pandemic timing, education got a new paradigm to inform of online education. Now everyone is aware of how to overcome this type of situation.

Literature Review
In this competitive era, not only foreign countries but also India takes advantage of this e-education teaching. Innovative learning is helpful to connect with the student into powerful, productive and significant learning. What's more, open framework engineering is needed to more readily uphold the coordination of expanding interfaces, advanced gadgets and diverse learning information. Kumar, Kalra, Sharma & Gupta (2019) have expressed their views on online education sources and an analytical study about your tube channel. Sahu 2020 explained in this article the impact of the coronavirus on education, students' mental health status and academic staff. He also discussed what the academic team should take precautions and responsibilities for conducting rich, practical learning and smooth running of schools and universities? In this article, Rashid & Yadav (2020) expressed the negative impact of offline learning and the significance of online learning for the higher education system. This manuscript gives some post-pandemic suggestions to sustain the
students learning outcomes and quality standards of education. Lim M (2020) explained the online teaching condition on the pandemic time. He said that online learning is not a new methodology for the education sector\textsuperscript{14}. Some educators are known to it, but some were unknown from its methods. Those who were unknown from it have cope up with this situation. He also explained the anxiety of students regarding the outbreak of pandemics during the examination. So, academics should clearly explain to them the instructions regarding administration, assignments and assessment. Mishra, Gupta and Shree (2020) studied the online learning process in pandemic and its application modes in Mizoram\textsuperscript{17}. They have both types of data, quantitative as well as qualitative, studied in their research article. Rayner and Webb (2020) discussed the rapid changes in each era in pandemic timing, new platforms for sports management education and this pandemic impact on developing professionals in the coming decades after coronavirus\textsuperscript{2}.

**Preparation in education sector by school/colleges administration**

In reaction to the large demand, numerous on-line studying systems have supplied unfastened services, in addition to systems which includes in various online education platform. Few universities and governments are offering virtual units to college students in want, which includes in New South Wales, Australia, there are nevertheless a few metrics that imply that the pandemic can bridge the virtual divide. For people who can use the proper generation, there's proof that on-line studying may be made simpler in lots of ways. This is mainly due to the fact the educational international has the cap potential to analyse extra speedy on-line; e-studying takes 40 per cent to 60 per cent much less time than in very antique classrooms, due to the fact college students can analyse at their very own pace. Go returned and re-read, skip, or speedy apprehend what they want. However, the effectiveness of on-line studying varies via way of means of age group. The backside line for younger humans, particularly very younger humans, is they want a based environment, due to the fact younger humans are extra without problems distracted. In order to make on-line studying absolutely better, it's far essential to paintings collectively to provide this structure, and to head past the reproduction of bodily lectures/lectures via video functions, however to apply numerous collaborative tools\textsuperscript{10}.

**Emerging Global Education Trends from COVID-19**

**Rapid Educational Gaps:** Educational inequality is rapidly emerging across associated grades in an unprecedented way, especially anywhere it was already high before the pandemic even in covid 19 before leaving up. Five billion college students in early 2019, the world came to terms that the education systems of too many countries did not provide the standard education required to ensure that everyone had the talents necessary to thrive. The poorest children in the world bear the heaviest burden. The pre-pandemic analysis estimated that 90 per cent of youth in low-income countries, 50 per cent of youth in middle-income countries, and 30per cent of youth in high-income countries have not mastered the basic secondary-level skills needed to thrive in work and life. Children in the poorest countries of the world health organization are left behind. The planet bank’s “2018 world development report” called it a “learning crisis”, so the global community mobilized to seek additional funds to support the global education system\textsuperscript{11}. The 2016 report of the board of education “generating learning: investing in education for a changing world” emphasizes that technology is constantly changing the nature of work, and its ever-widening skills gap will hinder the country’s economic progress. Catch up with the growing investment in education in these countries. However, for some children in wealthy communities around the world, school education has never been higher
than during the entire pandemic. They receive tutoring from teachers hired by their parents with some of their favourite friends at home. Some people have established learning modules through social media platforms that guide only a few students at a time and agree on teaching schedules and activities. These people believe that during the pandemic, the capsules promote social interaction, enhance learning and reduce the burden of childcare. However, they generally do not include households with lower financial earnings. Although these children's educational experiences are wise extroverts in themselves, they represent a troubling global trend: the enormous acceleration of educational disparities. While by 2020, 25 per cent of low-income countries offer any form of distance learning, and most of them have used television and radio, 90 per cent of high-income countries are providing learning opportunities from distance. According to US federal agencies, during the covid-19 college closure period, one in ten of the poorest children in the world's largest economy had little or no access to technology to the learning. UNICEF estimates that 463 million children, at least part of the planet, most of them in developing countries, cannot learn remotely through radio, television or online content. However, this does not account for the creative use of offline texting, phone calls, and e-learning. Many teachers and educational leaders have measured the use of golf clubs in rural and low-income communities.

**Moment of Leap:** Innovation is suddenly attracted from the edge of many education systems to the middle, and it is possible to discover new forms. If it continues, it will make it easier for children to obtain associate degree education and prepare them for our continuous changes. This unprecedented educational disparity accelerates and requires a new response. In our on-going educational innovation work, we believe that there are square samples of new forms or methods. If the scale is expanded, it may be possible to rapidly accelerate or leapfrog progress. Two years ago, in "jumping inequality: creating education to help children grow strongly", we tended to establish a leaping path for the birth of a map to use educational innovation to narrow the education gap faster. We tend to believe that after 20 years in the 21st century, the goal should be to have all children become long-term learners and develop comprehensive skills and abilities, from achievement to problem solving and cooperation, which must enter an ever-changing environment. Work in the world and become a constructive voter in society. We tend to generalise educational innovation as inspiration or technology, which does not adapt to the current environment, if it does not adapt to the earth and we predict that those innovations that can help provide a broader menu of learning options are those that can help make a leap in education, namely:

1) Innovative educational methods in direct teaching help children not only to remember and perceive analysis and creation;
2) Recognize new methods from learning based on measures and old approaches;
3) People and positions are extremely diverse, with teachers trained to assist and support school learning;
4) Make full use of technology and knowledge to allow time to adapt, not just replace simulation methods.

There is proof from the United Kingdom to Nicaragua that kids collaborating in diverse mastering possibilities outdoor of school, from conventional extracurricular sports which includes tune instructions to non-formal training projects, may be very useful in improving capabilities and
abilities. Instruct marginalized kids. However, till recently, the pattern of enjoy from the nearby mastering atmosphere turned into very constrained. One of the possibilities provided via way of means of the COVID19 pandemic might also additionally in reality be a possibility to apply the brand new electricity and manner of wondering among colleges and groups to paintings collectively to assist kid's mastering. We generally tend to argue that considering public universities are chargeable for all or any kids, any training device that seeks to bridge the widening hole have to be with inside the centre. We generally tend to emphasise the inventive use of technology, in particular thru transportable communiqué with parents, for example of strategies that emerged for the duration of the pandemic, which, if maintained, can supplement and beef up kids’ mastering in public universities. We generally tend to understand that the unit place of the highlighted examples is best growing. As the occasion unfolds, there’s greater to recognize how they paintings and one of a kind examples. For this reason, we generally tend to suggest recommendations to differentiate that the brand new approach can be continued. We generally tend to accept as true with that assisting and strengthening the innovation of the educational core, in particular the interplay with inside the coaching approach can be much more likely to retain to assist the developing school. We additionally generally tend to assume that instantaneously urgency entails the benefit of incomes an associate's diploma and the immutable approach of mastering powerful strategies in actual time; therefore, the development of clinical concepts have to be observed via way of means of any bounce ahead efforts to check and accurate strategies in actual time.

Use public universities: Placing public colleges with inside the centre of the instructional device due to the fact they play a critical function in identical possibilities in all dimensions of society Public universities play a critical function in decreasing disparities and strengthening of social cohesion. Public universities in a few international locations are required to offer offerings to all kids and younger human beings, no matter their origin. These universities will convey collectively human beings of various backgrounds and aspirations to offer social blessings that permit human beings to mature thru a not unusual set of values and statistics. These values and statistics can create a greater cohesive and unified community. The non-public zone performs a totally critical function in training, from advocating for the authorities to put money into amazing public universities to assist the monetary and social balance of principal international locations, to serving the progressive academic version of unbiased universities. In a few low-profits international locations, reasonably-priced personal Universities have increased in current years to satisfy the long-status demanding situations confronted via way of means of governments with constrained price range and / or ability to boom academic possibilities. Several households in growing international locations, from Chile to Bharat, from the Federal Republic of Nigeria to the Republic of Kenya, favour to ship their kids to personal universities which can be reasonably-priced and commonly for profit. Indeed, the improvement of personal universities in low-profits international locations has completed the project of growing generic number one training in a few places. In a few international locations/regions, the improvement of personal universities has now no longer grown to be one of the regulations guiding the pupil choice method or the charges that the college might also additionally charge. A stressful unintentional effect of the unregulated increase of private training is expanded educational isolation primarily based totally on socio economic traits and one of kind backgrounds. In a few international locations, the choice of college students via way of means of personal schools is supported via way of means of a whole lot of factors, in addition to academic ability, non-spiritual beliefs, and socioeconomic background. Therefore, the variety of personal Universities is frequently
much less than that of public Universities. In addition, admission might not be primarily based totally completely on grades. In high-profits and centre-profits international locations, the non-public zone intervenes to offer to assist college students input selective academic institutions. Since those offerings are a piece expensive, they'll select rich households which can assist their college students input the "appropriate" college, apart from low-profits households. For example, with inside the United States, records from the National Centre for Education Statistics suggests that there are greater public universities than personal colleges: in 2017, 67 per cent of personal instructors and college students have been white, in comparison with best 48 per cent of public universities. A growing variety of analyses display that isolation could have a terrible effect on kids' academic and social outcomes. In fact, the innovative practices show that the square measure of covid19 college closures has laid the foundation for advancing education development, as we will discuss below.

**Smart Classroom:** A smart schoolroom may be a technology-enhanced learning schoolroom that enhances teaching and learning digitally. The schoolroom has integrated digital displays, tabs, whiteboards, helpful listening devices, and alternative audio/visual elements that build lectures easier, engaging, and interactive.

**Interactive white Boards:** The board had developed by PARC around 1990. This Interactive white board is also referred as smart board or interactive board. It can be in form of large interactive display whiteboard. It will either be a standalone touch screen pc used severally to perform tasks and operations, or connectable equipment used as a touchpad to manage computers from a projector. They are utilized in various settings, together with school rooms, the most negligible levels of education, in company board rooms and work teams, in coaching rooms for skilled sports employment, broadcasting studios, etc. The first interactive whiteboards were designed and made for use in the workplace. This board uses for little cluster conferences and round-tables. An interactive whiteboard (IWB) device will either be a standalone pc or an outsized, functioning touchpad for computers to use.

**Smart Projection Systems:** A technology that's less costly and straightforward to use. A sound projection system has taken the globe of education by storm. Such type of device has been super well-liked in colleges and schools. It will flip any flat surface fully interactive. These projection applications touch, draw, annotate, and know the thrill of seamless writing on interactive surface exploitation. The natural bits of your fingers or associate technology stylus are the features of this projection. It comes with a package suite, Intellispace, engineered thoroughly for teaching and learning.

**High Definition Advanced Cameras:** A budget-friendly, however novel device that may facilitate actively interact students, document cameras permit academics to show worksheets or a live dissection on the massive screen. These permits for active discussion and collaboration within the schoolroom, cluster exercises, quizzes, and annotations have often been displayed with the camera rather than individual paper sheets. This camera conjointly helps lecture rooms go the simple way and help the students become more attentive to the setting by adopting environmentally friendly technology with minimized paper wastage.
Laptop, Tablets, Android Phones and eBooks: Online education has already existed in developing countries. Availability of computers, laptops, or tablets in developed countries school rooms is relatively standard. Now laptops and tablets are used mainly by students in computers because laptops and tablets are moveable devices. Laptops, tablets and android mobiles or phones are beneficial devices in academics. With these devices' help, students can watch the video lectures and do the assignments and project work. Digital textbooks or eBooks are very common in abroad countries, but now in COVID timing, it has also been accepted in India. These gadgets are a new pattern of studies. With the help of this study method, a student can teach anytime, anywhere, any place. Various book options are open in this type of study\(^\text{21}\).

Smart Speakers with Wireless Microphones: Traditionally, Auditorium lectures and large lecture halls have been held with microphones speakers' help. But now the time has changed. Now, this is a time of artificial learning and Machine learning-based. Now high-quality speakers with wireless microphones are available in the market\(^\text{22}\).

Smart Tables: These types of tables are like a digital wall. This type of table is fit for all age’s person. Innovative tables have more configurations than smart boards.

Head Phones for Noise- Canceling: Studying in your residence hall are often troublesome if the TV, radio and your roommate’s rip-roaring friend’s area unit all distracting you. Noise-cancelling headphones will assist you to target your preparation and tune all of these annoying sounds out\(^\text{23}\).

Smart Lights: Mood lighting is its field of study in school. However, there's a lot of sensible lighting than date night. Blue lights are established to extend focus, which might build realistic lights handy. With this device, you'll be able to integrate your light-weight bulbs with the device and alter your lighting with an easy verbal command.

Smart Laptop Stand: Dormitory room desks aren't sometimes massive. However, a laptop computer stand will elevate your laptop computer and make additional space for your faculty materials. This stand is adjustable and includes USB ports, audio ports and cable organizers\(^\text{24}\).

Impacts of Covid-19 on Education

Positive impact
1) In the duration of pandemics, students took the benefit of online teaching without any loss.
2) To defeat the pandemic situation, our government and numerous people came before for penniless people help.
3) The Indian government has provided and started many free online Massive courses and e-learning programs for students.
4) Various e-innovation, e-dominating free projects and Massive open online courses (Moocs) like SWAYAM, NEPTEL, COURSE ERA, EDX, UDEMY, FUTURE LEARN and others, have been given by the public authority in that timing.
5) As before pandemics, very few people were aware of virtual learning, but now most people are aware of it.
6) Now there is no compelling reason to travel to another country to get higher education, and anyone can get an education in India and from abroad.
7) The government has also provided TV, radio and mobile-based learning programs.
8) With the help of an e-learning programme, students can save time and money.
9) Girls’ students can take this opportunity of online competitive learning anytime, anywhere with safety.
10) In this pandemic period, people are becoming aware of increasing their immune system by Yoga, exercise, walking, jogging, and other manners.
11) People were taking domestic and natural treatment at their homes during the lockdown period.
12) Those students want to do something for competitive examination; they can benefit from this lockdown duration to save their travelling timing.
13) Online learning is more accessible, convenient and flexible than offline learning.
14) In online teaching, students have more options and time to learn, do other activities, and provide self-study opportunities.
15) With smart learning tools, students can take the benefit of flexibility in work and time.
16) Now a change came in the education pattern. Now students can learn Artificial intelligence and Machine learning, such type of advanced courses started from junior classes to higher classes due to COVID. These subjects will be mandatory for all the students and enhance their knowledge from their junior ranks.

Negative impact
1) By online learning, average and lower grade students’ benefit from a good percentage, but higher students have not got the highest rate.
2) Proper face to face interaction is not possible in online teaching between students and teachers.
3) Internet connectivity is a significant issue in India.
4) Many families can't manage the cost of the different devices obligatory for online training, such as Android versatile or advanced cells, burrow cushions, PC, I-telephone, scratchpad and so forth.
5) Every kid ought to get versatile for going to the online class. In this way, the prerequisite of the number of mobiles is additionally a primary consideration for going to the live virtual class.
6) Many people have lost their jobs in this pandemic timing
7) Many parents, students, kids and teachers were unaware of the use of smart devices.
8) Remote zones dominating instruction had got helpless outcome in this essential planning.
9) Various eyes strain related issues are come to know by online teaching.
10) Those guardians who have matured understudies under kinder nursery have dealt with the issue of how these children go to the online class?
11) Brain strain issues, back issues are likewise looked at by individuals.
12) Disputes cases are expanded in numerous families during that lockdown period.
13) Technical issues are again a significant issue for online training, and numerous individuals are ignorant about adapting to this innovation.
14) Many businesses and organizations had closed down because of that long-duration lockdown and pandemic.
15) Due to the lockdown period, different activities like tournaments, competition exams, and many more were postponed and cancelled.
16) Due to this online education in lockdown duration, students have gotten lethargic and unpunctual.
17) Maximum Students can't be reached by the transmission and Internet-based inaccessible learning approaches either based on the shortfall of fundamental mechanical assets at home or because the gotten plans did not engage them.
18) Due to this long lockdown duration, many people have gotten slower, lethargic, and not punctual.
19) In lockdown duration, unemployed cases increased. Due to this, robbery, divorce and disputes cases increased
20) Due to lockdown, starvation cases increased, and people departed at their native place.
21) Students were not serious about online learning. So, it is a significant loss for all the youngsters' future.
22) Those persons with a medical history and a minor immune system have increased transmission chances.
23) Students who are not interested in studying are weak; you cannot force their online education.
24) Internet Wi-Fi and speed charges bear by both students as well as teachers.
25) Difficulties faced in laboratory practices by online teaching.
26) In online learning, students have faced the problem of effective communication.
27) Learning by this method, some students having loneliness sense and feel the absence of cooperation.
28) Due to following the COVID-19 instructions by wearing the continued mask, some cheek is getting blackish.
29) Due to hands' sanitization, the hand's skin is getting dry and rough again and again. It may be harmful to skin diseases and cancer.
30) There is a drawback of online examination that no one knows who is giving the exam. These people may be students' friends or relatives.

Material and Methods
There were following observations which are observed during pandemic. When all the sources of education for the students were closed at once, many types of online education like you tube channel etc. were become helpful.
### Table 1. Studies by different devices

<table>
<thead>
<tr>
<th>Device type</th>
<th>Views</th>
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<th>Average view duration</th>
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</tr>
<tr>
<td>Mobile phone</td>
<td>15301</td>
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<td>00:01:52</td>
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<td>Computer</td>
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<td>Tablet</td>
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<td>TV</td>
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<td>1.273</td>
<td>00:02:23</td>
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### Table 2. Studies by different operating system

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<tr>
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<tr>
<td>Android</td>
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<td>Windows</td>
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<tr>
<td>iOS</td>
<td>474</td>
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<td>00:01:58</td>
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<tr>
<td>Macintosh</td>
<td>109</td>
<td>9.7507</td>
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<tr>
<td>Linux</td>
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<tr>
<td>KaiOS</td>
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<td>00:01:32</td>
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<tr>
<td>Smart TV</td>
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<td>0.2831</td>
<td>00:02:25</td>
</tr>
<tr>
<td>Chrome OS</td>
<td>5</td>
<td>0.1087</td>
<td>00:01:18</td>
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<td>Unknown</td>
<td>4</td>
<td>0.3394</td>
<td>00:05:05</td>
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<tr>
<td>Amazon Fire OS</td>
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### Table 3. Online Study Viewers’ views as per Gender basis

<table>
<thead>
<tr>
<th>Viewer gender</th>
<th>Views (%)</th>
<th>Average view duration</th>
<th>Average percentage viewed (%)</th>
<th>Watch time (hours) (%)</th>
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<tbody>
<tr>
<td>Female</td>
<td>35.63</td>
<td>00:02:02</td>
<td>27.39</td>
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<tr>
<td>Male</td>
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<td>26.61</td>
<td>63.14</td>
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http://www.webology.org
Table: 4. Online Study Viewers’ views as per Age basis

<table>
<thead>
<tr>
<th>Viewer age</th>
<th>Views (%)</th>
<th>Average view duration</th>
<th>Average percentage viewed (%)</th>
<th>Watch time (hours) (%)</th>
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</thead>
<tbody>
<tr>
<td>13–17 years</td>
<td>5.85</td>
<td>00:01:28</td>
<td>22.74</td>
<td>4.37</td>
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<tr>
<td>18–24 years</td>
<td>83.18</td>
<td>00:02:02</td>
<td>27.73</td>
<td>85.62</td>
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<td>25–34 years</td>
<td>8.52</td>
<td>00:01:45</td>
<td>20.58</td>
<td>7.55</td>
</tr>
<tr>
<td>35–44 years</td>
<td>2.14</td>
<td>00:01:53</td>
<td>30.64</td>
<td>2.04</td>
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<tr>
<td>45–54 years</td>
<td>0.32</td>
<td>00:02:37</td>
<td>28.68</td>
<td>0.42</td>
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Table: 5. Online Study Viewers’ views as geographical basis

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<td>PK</td>
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<td>00:02:28</td>
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</table>

Result and Discussion
As per the table 1, total numbers of views are 18267 by using the four devices such as mobile phone, computer, tablet and TV, in which 15301 views of mobile phones, 2601 computers, 328 tablets and 32 for TV device for their online classes. Mobile phone device has the maximum used for watch time and views but moderate in average view duration. Computer is come in second category among four devices on the basis of views and watch time, while first category in average views duration. In tablet and TV devices, tablet is on third rank and TV is on fourth. Views and watch time of tablet is more than TV, while average view duration of TV is higher than tablet. Total numbers of views for using different operating systems are 18267. In which by using android views are 15158, windows 2450, iOS 474, Macintosh 109, Linux 41, KaiOS 13, Smart TV 7, Chrome OS 5, Unknown 4, Amazon Fire OS 4 and by Chromecast only 1 view has shown. Maximum number
of watch time in hours and views of android system is the highest in use but moderate in average view duration. Numbers of online user’s views and watch time hours of males are more then as compared to females. While average views duration of females are higher than males. As per age criteria basis number of online users’ views and watch time hours of 18-24 years aged are the maximum in different aged persons but moderate in average view duration. On line users views and watch time hours in India is the maximum as compared to other countries. Whenever average view duration of India is on moderate based.

**Improvements**

The Indian government has done an excellent exertion for smoothing the schooling framework by providing virtual learning. Before the pandemic duration, Indians are not more engaged in the web or virtual schooling, of course. But, after pandemics, currently, individuals have come to think about the advantages of virtual instruction courses. In far-off territories where organization issues are a significant issue for internet learning, the public authority has given the office of savvy classes and recoded video addresses by you tube channel. By the help of recorded video lectures, a student can save their time. They can watch the videos at their convenience and comfort. The government has provided many e-learning courses and programs. For those who live in remote or hilly areas and have internet connectivity issues, the government has provided lectures by YouTube videos etc. The government is trying for students to come to schools, and all the activities will run smoothly. For conducting everything normalize, the government has issued the guidelines for all the era like schools, colleges, shops, banks, gym, malls, theatres, etc. The government is applying these guidelines strictly. The government has provided many facilities and subsidies to the public in this pandemic, like free ration, allowances in low petroleum gas, monthly instalments to farmers, and stipends in education sectors. The government is motivating all for online transactions. In this pandemic timing, online transactions have increased. Most persons are using Google pay, Pay TM, RuPay, PhonePe etc., for online transactions. In this advanced technology era, the Indian government has decided to apply some smart learning courses such as machine learning, artificial intelligence, etc., in the education sector from junior classes.

**Suggestions**

New Smart learning devices should develop by the government. Viable instructional methods ought to develop according to online classes' necessities. Mentors/instructors should prepare to help be taken by computerized volunteers to educate in regional climate and assets. First, educators ought to know by most recent innovation and urge and instruct understudies. For those understudies who have low innovation, instructors can show them by utilizing voice messages, instant messages, and calls. Instructors can use video addresses, most recent applications, innovation, and WhatsApp bunches for conversations for high innovation understudies. In this pandemic timing, students have gotten aimless and careless about their future. So for creating enthusiasm in youngsters’, teachers should motivate the students about their future scope and how they can benefit in this timing. Practical studies only by online sessions are not easy, but they can be possible by interacting in and suitable manner.

Everyone should follow up the guidelines and instructions of the government. If anyone does not follow the government's policies and education, it should be everyone's responsibility to be aware of themselves and others. Everyone should come for volunteers work. For conducting smooth teaching,
academic staff should maintain some precautions and responsibilities. The institutions or Universities should provide electronic gadgets and easy access to study material. It should be a prime duty of each academic staff to create students' interest in online learning. After completing each unit or chapter, a teacher should take a test to measure students' learning or understanding ability. A teacher should decrease classwork to reduce the students' stress. Provide e-learning study materials to students such as e-books, e-library etc. Inspirational and instructional videos for practical lessons should also provide to students. An online examination must be a provision that only a respected student gives their exam. This provision may be in the form of open the webcam during the online test. In such a manner, students will not cheat.

**Conclusion**

As per the analysis of above table 1 and 2 it has been concluded that mobile phone with android operating system is a very easy carry device and mostly used in online transaction and education. As per table 3, 4 and 5 mostly devices are used by males between 18-24 years aged persons and in India. As per the consideration of covid-19 data, it can say that now Nations don't rely upon any single far away from learning channel to show up at all young people. Additionally, developing induction to the Internet and other progressed answers for all children would be one critical long stretch that needs to diminish learning shortcomings—the preparation zone around the planet and every one of the more. Examine on to explore what has changed in 2020. However, India has prepared for defeat to Covid-19, and such types of pandemics as per the current accessible assets and innovations are available in schools. In this upset planning of Covid-19 and pandemics, the disturbance to instruction frameworks has improved overall distinctive vital offers. It gives a novel chance to experience childhood in training, the educational program, and the teaching method. Shrewd schooling framework and other savvy frameworks are more engaged about future driven. So, as per this manuscript, we should follow up on these gadgets, positive, adverse impact, improvement, suggestions and analytical study on a you tube channel in pandemic timing. It has been observed that in Pandemics timing most of the persons have used mobile device for online education with android operating system. Maximum number of online education users is males of aged 18-25 years old and maximum usage of these are in India.

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