

Consequence of Pandemic Covid-19 Education Sector in India

Prof. Dr. Pravin Hiranman Tamgadge

Assistant lecturer SSBESs, ITM. College Nanded SRTM University Nanded.

Abstract:

The pandemic Covid-19 has spread over whole world and forced and compelled the human society to maintain social distancing. It has significantly disturbed the education sector which is a critical element of a country's economic future. February 11, 2020, the World Health Organization (proposed an official name of the virus as COVID acronym for Coronavirus disease 2019. It was first identified in Wuhan, China on December 31, 2019. First death by COVID 19 was the 61-year old man in Wuhan, China 2020. WHO declared COVID-19 as a pandemic on 2020? The first case of the COVID-19 pandemic reported on 30 January 2020 in the state of Kerala and the affected had a travel history from Wuhan, China. The first death due to COVID-19 was reported in India on March 12, 2020. It has affected more than 4.5 million peoples worldwide (WHO). COVID-19 and its Impact on Education System in India. The petrifying and the extreme impact of COVID-19 has shaken the world to its core. Additional, the higher a part of the Governments across the globe have quickly closed academic establishments making an attempt to comprise the unfold of the COVID-19 pandemic.

Keyword: COVID-19, pandemic, digital technologies, e-Learning, Artificial intelligence.

INTRODUCTION

The pandemic Covid-19 has spread over whole world and compelled the human society to maintain social distancing. It has significantly disrupted the education sector which is a critical determinant of a country's economic future. February 11, 2020, the World Health Organization (proposed an official name of the virus as COVID acronym for Coronavirus disease 2019. It was first identified in Wuhan, China on December 31, 2019. First death by COVID 19 was the 61-year old man in Wuhan, China 2020. WHO declared COVID-19 as a pandemic on 2020? The first case of the COVID-19 pandemic reported on 30 January 2020 in the state of Kerala and the affected had a travel history from Wuhan, China. The first death due to COVID-19 was reported in India on March 12, 2020. It has affected more than 4.5 million peoples worldwide (WHO). COVID-19 and its Impact on Education System in India. The petrifying and the extreme impact of COVID-19 has shaken the world to its core. Additional, the higher a part of the Governments across the globe have quickly closed academic establishments making an attempt to comprise the unfold of the COVID-19 pandemic. In India as effectively, the federal government as a facet of the nationwide lockdown has closed each academic institution, as a consequence of which, learners going from school-going kids to postgraduate college students, are affected. The UNESCO report estimates that the Covid pandemic will adversely have an effect on over 290 million college students throughout 22 international locations. The UNESCO estimates that round 32 crores college students are affected in India, incorporating these in faculties and faculties. here fore, the government has provide you

with e-learning program. These measures have been met with overwhelming response by college students with some new companies witnessing as excessive as 25% uptick in e-learning. Distant studying appears a viable reply for college kids throughout this time as they provide handy, on – the-go and reasonably priced entry to classes. E-learning additionally comes as an attention-grabbing and interactive various as in comparison with classroom educatin.

Objectives of the study:

1. To know the positive and negative consequence on higher education in india.
2. To know the way the pandemic has transformed the education sector across the world.
3. To know the digital technologies used to cope up with the present crisis of COVID-19.

Methodology:

Data and information presented in current study are collected from various reports prepared by national and international agencies on COVID-19 pandemic. Information are collected from various authentic websites. Some journals and e-contents relating to impact of COVID-19 on educational system are referred.

- National Repository of Open Educational Resources (NROER) portal provides a host of resources for students and teachers in multiple languages including books, interactive modules and videos including a host of STEM-based games. Content is mapped to the curriculum for classes 1-12, including aligned resources for teachers. It has a total of 14527 files including 401 collections, 2779 documents, 1345 interactive, 1664 audios, 2586 images and 6153 videos on different languages. Website: <http://nroer.gov.in/welcome> Higher Education
- Swayam is the national online education platform hosting 1900 courses covering both school (classes 9 to 12) and higher education (under graduate, post graduate programs) in all subjects including engineering, humanities and social sciences, law and management courses. The unique feature is that, it is integrated with Diksha portal contains e-Learning content for students, teachers, and parents aligned to the curriculum, including video lessons, worksheets, textbooks and assessments. Under the guidance of its national boards of education (CBSE) and NCERT, the content has been created by more than 250 teachers who teach in multiple languages. The app is available to use offline. It has more than 80,000 e-Books for classes 1 to 12 created by CBSE, NCERT in multiple languages. The contents can also be viewed through QR codes on textbooks. The app can be downloaded from IOS and Google Play Store. Website: <https://diksha.gov.in> or <https://seshaqun.gov.in/shaqun>
- e-Pathshala is an e-Learning app by NCERT for classes 1 to 12 in multiple languages. The app houses books, videos, audio, etc. aimed at students, educators and parents in multiple languages including Hindi, Urdu, and English. In this web portal NCERT has deployed 1886 audios, 2000 videos, 696 e-Books and 504 Flip Books for classes 1 to 12 in different languages. Mobile Apps is available. Website: <http://epathshala.nic.in> or <http://epathshala.gov.in>.
- National Repository of Open Educational Resources (NROER) portal provides a host of resources for students and teachers in multiple languages including books, interactive modules and videos including a host of STEM-based games. Content is mapped to the curriculum for classes 1-12, including aligned resources for teachers. It has a total of 14527 files including 401 collections, 2779 documents, 1345 interactive, 1664 audios, 2586 images and 6153 videos on different languages. Website: <http://nroer.gov.in/welcome> Higher Education

- Swayam is the national online education platform hosting 1900 courses covering both school (classes 9 to 12) and higher education (under graduate, post graduate programs) in all subjects including engineering, humanities and social sciences, law and management courses. The unique feature is that, it is integrated with

Review of the Literature:

Thanks to various online platforms, the way educators provide high-quality education is changing dramatically (Tadesse & Muluve, 2020). The use of these platforms has become a necessity in the past couple of years due to the restriction on physical gatherings imposed owing to the Covid-19 pandemic. Most countries have had to close schools, training institutes, and higher education institutions due to lockdown and social separation measures enforced in reaction to the Covid-19 outbreak (Preeti, 2020). According to Tadesse and Muluve (2020), the instructional machine and educators have embraced “Education in Emergency” through unique online systems.

Movement restrictions not only impacted the learning of learners, but also affected the measurement of their learning. The lockdown brought changes to the lesson delivery mechanism as well as assessment and evaluation. Numerous examinations and evaluations have been canceled or postponed due to educational institution closures (Mohammad Izzamil et al., 2021). Many colleges and universities have transitioned from conventional classrooms to online classrooms and from offline to online examinations by utilising online assessment tools (Chung et al., 2020). However, online evaluation tools can have drawbacks

Abdul Rahman et al. (2021) noted that the inability of instructors to boost and sustain student participation also is a problem related to E-learning. They also highlighted that attracting and engaging students in the online learning process was the most challenging. This is also previously stated by Ab Wahab & Mohamad (2022) who discussed the absence of engagement from the teacher’s standpoint. They claimed that when educators are unable to see their learners’ faces, they cannot detect symptoms of attentiveness or inattention and hence are unable to intervene swiftly.

Additionally, difficulties might occur due to a lack of desire and a feeling of alienation and isolation, as learners see themselves as an online component (Sahu, 2020). Learners perceived it to be less appealing than other modes of instruction, unfriendly to learners, and insufficiently participatory to foster a sense of connection with educators and peers through social media platforms such as Facebook, WhatsApp, WeChat, and email (Haleem et al., 2020). Meanwhile, various issues have been identified, including learners’ attitudes, personnel resources, time limits, lecturer self-efficacy, and technological difficulties (Zhu et al., 2018).

Here are some ways the pandemic has transformed the education sector across the world:

1. A comprehensive range of distance learning tools:

As soon as the pandemic struck, one of the main priorities for schools became to make certain learning continuity for the students. During this time, many college and schools shifted online using tools such as Google Meet, Microsoft Meeting etc. to ensure that the classes could continue without disruption. In areas with limited internet connectivity, local governments launched radio and television programs, together with the distribution on print materials to ensure uninterrupted learning.

2. New methods of assessment with learning management software:

While many schools closed or canceled exams, many institutes also opted for alternative modalities, such as online testing and exams. In online testing, the students' progress is monitored with the help of learning management systems and apps. This ensures rapid learning assessments and helps to identify learning gaps faster than the traditional methods.

3. Improvement of new tools and resources to endorse inclusive learning:

As countries adopted distance learning practices, students with disabilities faced and struggled with many barriers. This prompted many organized to innovate and develop tools and technological resources for learners with disabilities and their parents. This included enhancing accessibility features, such as audio narration, sign language video, and simplified text to ensure that learners with disabilities could continue their studies.

4. Assist for the teacher's needs:

From the onset of the pandemic, teachers were immediately tasked with implementing online classes without sufficient guidance, training, or resources. Teachers across the globe were largely unprepared to support this continuity of learning. They were forced to adapt to new teaching methodologies overnight. This highlighted the need to give teachers training in basic digital skills and alternative methods of education delivery.

5. Online appreciation for teachers and educators:

As students continued to struggle to learn from home, across the world, there was an outpouring of parents' gratitude for teachers, their skills, and their invaluable role in student well-being. Traditionally, the teacher's role in the student's life was rarely recognized. The pandemic forced society at large to recognize that schools and teachers play an important role in the student's academic life, helping them form bonds with their peers, build confidence and help them fulfill hopes and dreams.

6. The changing role of parents in education:

For decades' parents played the role of mere spectators in the education of students. However, the pandemic has forced many parents to take a more active role in the education of their students. Whether it is supervising the students during online classes or simply homeschooling the students, the pandemic has made parents and teachers allies as they work together to meet the students' pedagogical goals.

7. Increasing disparity between students:

The current crisis has exacerbated the pre-existing education disparities by reducing the opportunities for many of the most vulnerable children, and students, especially those living in poor or rural areas. The lack of smartphones and devices for online education, especially amongst the underprivileged has led to a loss in education for many. These learning losses threaten to extend beyond this generation and erase decades of progress, especially in the case of girls and women's education. The Covid-19 pandemic has had a major effect on education – both positive as well as negative. But these changes have also highlighted the promising future of learning. Today, the need of the hour is to accelerated changes in modes of delivering quality education, through the use of digital resources such as learning management software. However, it is also imperative that children and youth affected by a lack of resources or enabling the environment not to be left behind and get access to learning. Another key learning is the need to give the teaching profession better training in new methods of education delivery, as well as support. Last but not least, we must not forget that the COVID-19 crisis and the unparalleled education disruption is far from over.

Trends in online Videos teaching that is defining K12 education in 2020

1. Recorded lectures:

Recorded lectures help students to revise the topics later and is also helpful to the students who missed the live class. Also equally helpful to the students who attended the class but didn't get time to take notes of all points discussed during the class. Recorded lectures also helps students with learning difficulties. Those who have dyslexia find it easy to learn from recorded lectures than from live classes. Recorded lectures are also a great way to access the lectures of previous years and also helps the institution to show the lectures from teachers who are no more working in the institution.

2. Augmented Reality:

Augmented reality provides interactive animations embedded within the environment with the help of devices that can be worn by the users. Augmented reality teaching is different from virtual reality teaching. This method is costly at the moment because of the requirement of hardware devices for each user. But this has not stopped teachers from trying it in their online video teaching. Even teachers in remote villages of India had tried implementing augmented reality in their classrooms. The augmented reality method also provides students an opportunity to create their own content.

3. Artificial Intelligence:

Artificial intelligence is now everywhere including classrooms. By integrating artificial intelligence with video teaching, the videos can be delivered in a more impactful way to the learners. The AI will learn which videos students are watching, which videos they are skipping and within videos, the specific content and time the students are focusing on, etc. All these observations by AI provide feedback to teachers for improving video creation and also helps the learners automatically based on their individual learning methods.

4. Personalized learning components :

Each student learns in their own unique method and pace. It is impossible for teachers to manually give individualized attention to each of these students. But with the basic knowledge in student psychology, teachers can personalize the learning modules by broad student categories and with the help of AI it becomes further easy to personalize the learning modules to different students. The AI learns automatically when the student learns and improvises the personalization's on the go.

5. Gaming based learning :

Usually, it is boring and difficult for learners to sit through hours of video lectures in a single day. But if a game-based approach is given, the same students who stopped learning after a few minutes will sit for hours on the topic of learning and participating in tests for the learning outcomes. This method has its own advantages and disadvantages. Teachers are anyhow implementing game-based learning in their online video teaching strategies. Game-based learnings also train the students to collaborate, communicate, interact, and work in teams. What really happens in online video teaching is not game-based learning, but gamification of the video and other content being delivered by the teachers and consumed by the students.

6. Promote self-directed learning:

The nature of learning from online video classes promotes more self-directed learning. The video lectures are uploaded in the learning management systems and students are advised to explore and learn in their own preferred time and location. Students start learning at their own pace and soon finds out their own best learning methods. The AI integrated into the tools also keeps a note of the same and starts delivering videos optimized to the learning methods of students. The self-directed learning method also prepares the students for their future higher education, where self-directed learning is the key.

7. Evolution in examination methods and process:

Online video teaching and implementation of AI have changed the way examinations are conducted. Examinations methods and process are always evolving and that too on the go. “Proctoring” of exams based on AI is the new standards because logistics and infrastructure are no longer a limit to conduct examinations. The intelligence embedded in to the examination tool makes sure that the examination is conducted fairly. This allows students to take the examination even while at their home and can still make the results fair.

8. Evolution of LMS to LXS :

Learning Experience Systems(LXS) is the new favorite phrase of educators and Ed.-tech companies. LXS provides rich learning experience systems for students to learn by interacting with rich and embedded media. In earlier days, the Learning Management System(LMS) included only content as it is. Text, Video, and animations used to explain topic after topic. With LXS more interactivity is given to the overall content. The help from experts are required to create content for LXS and may be costly to be implemented by all schools. But this trend is going to stay here.

9. 5G led immersive solutions for teaching:

5G haven't reached all parts of the world. With the kind of upload/download speeds 5G provides and the power of 5G this is going to change the way video teaching and other forms of online learning presently happening across the globe. Even though the 5G handheld devices are going to be costly initially, it will be implemented and tested by a few teaching experts as the future of online teaching. 2020 is a year of demonstration of 5G led learning possibilities. Many of us will have to wait before we access true 5G in our everyday life.

10. Learning becoming more optimized :

Learning is becoming more optimized with the implementation of online learning tools. With the methods explaining above like the impact of AI, the teachers across the globe can provide optimized learning experiences to their students even with the difference of resource availability across different schools and geographies.

11. The emergence of more ethical and privacy issues :

With the penetration of online teaching and learning everywhere and the speeds at which these contents are delivered, more concerns are expressed by experts regarding the ethics and privacy of these advanced technologies in the learning activities of students. As the technologies are getting implemented at a faster pace, there is not much time left to discuss these concerns in advance. The concerns arise and are expressed once the technology is implemented and students start using the same. With the availability of high-speed internet and smartphones everywhere, all teachers and students across the globe are enjoying the benefits of online video teaching. Even during the recent pandemic crisis, online video teaching proven to be a savior to teachers and students. The benefits of online video teaching are much more than support during the pandemic. Contact an expert in your network to know more.

As schools contemplate reopening themselves for traditional classes, there will be a new set of changes made in the way schools approach classroom education while maintaining the norms of safety and social distancing. These decisions made by schools and governments with regard to education during the pandemic will have enormous social and economic consequences. These implications will have lasting effects on educators, children, youth, and societies as a whole.

Positive consequence of COVID-19 on education

Though the outbreak of COVID-19 has created many negative impacts on education, educational institutions of India have accepted the challenges and trying their best to provide seamless support services to the students during the pandemic. Indian education system got the opportunity for transformation from traditional system to a new era. The following points may be considered as the positive impacts.

1. Move towards Blended Learning:

COVID-19 has accelerated adoption of digital technologies to deliver education. Educational institutions moved towards blended mode of learning. It encouraged all teachers and students to become more technology savvy. New ways of delivery and assessments of learning opened immense opportunities for a major transformation in the area of curriculum development and pedagogy. It also gives access to large pools of learners at a time.

2. Rise in use of Learning Management Systems:

Use of learning management systems by educational institutions became a great demand. It opened a great opportunity for the companies those have been developing and strengthening learning management systems for use educational institutions (Misra, 2020).

3. Enhance the use of soft copy of learning material:

In lockdown situation students were not able to collect the hard copies of study materials and hence most of the students used of soft copies materials for reference.

4. Improvement in collaborative work:

There is a new opportunity where collaborative teaching and learning can take on new forms. Collaborations can also happen among faculty/teachers across the world to benefit from each other (Misra, 2020).

5. Rise in online meetings:

The pandemic has created a massive rise in teleconferencing, virtual meetings, webinars and e-conferencing opportunities • Enhanced Digital Literacy: The pandemic situation induced people to learn and use digital technology and resulted in increasing the digital literacy.

6. Electronic Media:

Improved the use of electronic media for sharing information: Learning materials are shared among the students easily and the related queries are resolved through e-mail, SMS, phone calls and using different social Medias like WhatsApp or Facebook.

7. World wide exposure:

Educators and learners are getting opportunities to interact with peers from around the world. Learners adapted to an international community.

8. Better time management:

Students are able to manage their time more efficiently in online education during pandemics.

9. Demand for Open and Distance Learning (ODL):

During the pandemic situation most of the students preferred ODL mode as it encourages self-learning providing opportunities to learn from diverse resources and customized learning as per their needs. Negative impact of COVID-19 on education Education sector has suffered a lot due to the outbreak of COVID-19. It has created many negative impacts on education and some of them are as pointed below:

10 Educational activity hampered:

Classes have been suspended and exams at different levels postponed. Different boards have already postponed the annual examinations and entrance tests. Admission process got delayed. Due to continuity

in lockdown, student suffered a loss of nearly 3 months of the full academic year of 2020-21 which is going to further deteriorate the situation of continuity in education and the as students would face much difficulty in resuming schooling again after a huge gap.

11.Impact on employment:

Most of the recruitment got postponed due to COVID-19 Placements for students may also be affected with companies delaying the on board of students. Unemployment rate is expected to be increased due to this pandemic. In India, there is no recruitment in Govt. sector and fresh graduates fear withdrawal of their job offers from private sectors because of the current situation. The Centre for Monitoring Indian Economy's estimates on unemployment shot up from 8.4% in mid-March to 23% in early April and the urban unemployment rate to 30.9% (Educationasia.in). When the unemployment increases then the education gradually decreases as people struggle for food rather than education.

Unprepared teachers/students for online education not all teachers/students are good at it or at least not all of them were ready for this sudden transition from face to face learning to online learning. Most of the teachers are just conducting lectures on video platforms such as Zoom, Google meet etc. which may not be real online learning without any dedicated online learning platform.

Reduced global employment opportunity- Some may lose their jobs from other countries and the pass out students may not get their job outside India due to restrictions caused by COVID-19. Many Indians might have returned home after losing their jobs overseas due to COVID-19. Hence, the fresh students who are likely to enter the job market shortly may face difficulty in getting suitable employment. Many students who have already got jobs through campus interviews may not be able to join their jobs due to lockdown. The Indians who have been doing their jobs abroad may lose their jobs. Recent graduates in India are of also fearing for withdrawal of job offers from corporate sectors because of movement restriction in the current pandemic situation

12.Increased responsibility of parents to educate their wards:

Some educated parents are able to guide but some may not have the adequate level of education needed to teach children in the house.

13.Loss of nutrition due to school closure:

Mid day meals is a school meal programme of the Government of India which is designed to provide better the nutritional food to school-age children nationwide. The closure of schools has serious implications on the daily nutrition of students as the mid-day meal schemes have temporarily been shut. Various studies have pointed out that mid-day meals are also an important contributing factor for increased enrolment in the schools

14.Access to digital world:

As many students have limited or no internet access and many students may not be able to afford computer, laptop or supporting mobile phones in their homes, online teaching-learning may create a digital divide among students. The lockdown has hit the poor students very hard in India as most of them are unable to explore online learning according to various reports. Thus the online teaching-learning method during pandemic COVID-19 may enhance the gap between rich/poor and urban/rural.

15.Access to global education:

The pandemic has significantly disrupted the higher education sector. A large number of Indian students who are enrolled in many Universities abroad, especially in worst affected countries are now leaving those countries and if the situation persists, in the long run, a there will be a significant decline in the demand for international higher education.

16. Payment of Schools, Colleges fee got delayed:

During this lockdown most of the parents will be facing the unemployment situation so they may not be able to pay the fee for that particular time periods which may affect the private institutes.

Suggestions :

- India should develop creative strategies to ensure that all children must have sustainable access to learning during pandemic COVID-19. The Indian policies must include various individuals from diverse backgrounds including remote regions, marginalised and minority groups for effective delivery.
- Immediate measures are required to lessen the effects of the pandemic on job offers, internship programs, and research projects.
- Many online learning platforms offer multiple programmes on the same subjects with different levels of certifications, methodology and assessment parameters. So, the quality of programmes may differ across different online learning platforms. Therefore, establishment of quality assurance mechanisms and quality benchmark for online learning programmes must be developed and offered by Higher Education Institutions (HEIs) in India keeping in view of rapid growth of the online learning platforms
- Across the globe, Indian traditional knowledge is well known for its scientific innovations, values and benefits to develop sustainable technologies and medicines and this knowledge systems in different fields should be Integrated with a present-day mainstream higher education system.
- Govt and educational institutes should plan to continue the educational activities maintaining social distancing. 30-40% students and teachers may attend schools/colleges in two shifts per day to carry on educational activities by obeying guidelines for COVID-19.
- At current times, access to technology and internet is an urgent requirement. So, the digital capabilities and the required infrastructure must reach to the remotest and poorest communities to facilitate the students to continue their education during the pandemics. There is a need to deploy public funds to fix the internet gap and ensure that students continue to learn digitally. The state governments/private organizations should come up with ideas to address this issue of digital education.
- Some significant issues associated with distance learning strategies like the availability and access to digital devices with internet connectivity, the need for safe learning spaces, creating capabilities for teachers, families and students to operate and navigate digital devices, and engaging lesson plans for disabled students and other marginalized groups should be addressed by Govt. and the stakeholders.

Conclusion:

COVID-19 has impacted immensely to the education sector of India. Though it has created many challenges, various opportunities are also evolved. The Indian Govt. and different stakeholders of education have explored the possibility of Open and Distance learning (ODL) by adopting different digital technologies to cope up with the present crisis of COVID-19. India is not fully equipped to make education reach all corners of the nation via digital platforms. The students who aren't privileged like the others will suffer due to the present choice of digital platforms. But universities and the government of India are relentlessly trying to come up with a solution to resolve this problem.

The significance should be to utilize digital technology to create an advantageous position for millions of young students in India. It is need of the hour for the educational institutions to strengthen their knowledge

and Information Technology arrangement to be ready for facing COVID-19 like situations. Even if the COVID-19 crisis stretches longer, there is an urgent need to take efforts on maximum utilization of online platforms so that students not only complete their degree in this academic year but also to get ready for the future digital oriented environment. The concept of “work from home” has greater relevance in such pandemic situation to reduce spread of COVID-19. India should develop creative strategies to ensure that all students must have sustainable access to learning during pandemic COVID-19

The Indian policies must include various individuals from diverse backgrounds including remote regions, marginalized and minority groups for effective delivery of education. As online practice is benefitting the students immensely, it should be continued after the lockdown. Further detailed statistical study may be undertaken to explore the impact of COVID-19 on education system of India.

References:

1. Borkotoky, D.K. & Borah, R. (2021). The impact of online education on the university students of Assam in COVID times. *Indian journal of science and technology*. 14(3), 1028-1035. <https://www.indjst.org/>
2. Dar, S.A. & Lone, N. (2021). Impact of Covid-19 on education in India. *The journal of Indian art history congress*, 26, 2(XIV), 47-55. <http://www.researchgate.net/publication/350382831>
3. Das, M., Sultana, S. & Bhuyan, C. (2020). Covid-19 pandemic induced teaching learning experiences: So realities from Assam (India). *International journal of innovation, creativity and change*, 1-25. www.ijicc.net
4. Jena, A.K. (2021). Higher education during the time of COVID-19: A review of literature. *Zeichen journal*, 7(8), 144-165. <https://journals.sagepub.com>
5. Jena, P. K. (2020). Impact of pandemic Covid-19 on education in India. *International journal of current research*, 12, (7), 1-6. <https://doi.org/10.24941/ijcr.39209.07.2020>
6. Pokhreal, S. & Chhetri, R. (2021). A literature review on impact of Covid-19 pandemic on teaching and learning. *Sage journals*. 8(1), 133-141. journals.sagepub.com
7. Rahman, A. (2021). Using students' experience to derive effectiveness of Covid-19 lockdown-induced emergency online at undergraduate level: Evidence from Assam, India. *Sage journal*. 8(1), 71- 89. journals.sagepub.com
8. Ramakrishna, K. (2021). Impact of Covid19 on higher education in India. *International journal of multidisciplinary educational research*, 10, 3(7), 1-7. www.ijmer.in
9. Rashid, S. & Yadav, S. (2020). Impact of Covid-19 pandemic on higher education and research. *Indian journal of human education*, 1-5. <https://www.researchgate.net/publication/343820992>
10. Tari, S. & Amonker, G. (2021). Impact of Covid on higher education. *Educational Resurgence Journal*. 2(4), 1-6. [11] UNESCO, (2021). Global survey reveals impact Covid 19 higher education. <https://en.unesco.org>