Online Education During COVID-19 Lockdown Period in MBA Colleges : An Analytical Study Conducted in Kochi

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Abstract

The educational structure from elementary to tertiary stage crashed during the lockdown period of Novel Coronavirus epidemic (COVID-19) not just in India but around the globe. This research discusses online teaching-learning modes used by M.B.A. teachers and students in Kochi. The aim of the paper was to examine the necessary essentialities of online teaching-learning in education amid the COVID-19 pandemic and how current resources of educational institutions can effectively turn formal education into online education with the aid of virtual classes and other pivotal online tools in this constantly evolving educational environment. The paper uses an analytical methodology to study what teachers and students feel about online teaching-learning modes with simple percentage tool, and indeed how online teaching-learning modes are put into action. The purpose of this study is to draw a complete picture of ongoing teaching and learning activities during the Novel Corona epidemic so as to resolve disruptions and return to standard practice in educational institutions.

Keywords : **Covid-19, HEI (Higher Educational Institutions), learn from home, online teaching, online teaching tools, pandemic**

I. INTRODUCTION

According to Remuzzi and Remuzzi, contagious diseases are a serious illness caused by extreme Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2), which originated in Wuhan city of China. It has already taken on alarming proportions, affecting almost all the continents, and has killed millions [1]. Schulten also observed that the pandemic due to its magnitude and fierceness caused a major global health emergency. This is after almost a decade after the influenza HINI pandemic. The emergence of the Novel Coronavirus caused major world economies to fail and alter social rituals [2]. UNDP report stated that due to the technological automation of labour, the International Labour Organization projected that 195 million jobs would be eliminated [3]. According to De Brouwer, Raimondi, and Moreau, it was observed that the aim is to control the COVID-19 crisis, which is highly favored, or use a fire/gaseous measure [4]. Now the lockdown is a novel term that has been brought up in the corona pandemic. In reality, the move is a state of emergency action put into effect by central and state governments to restrict citizens from leaving their domicile areas resulting in declaration of a global pandemic that requires patients to be quarantined. The coronavirus triggered a state-wide lockdown which started on March 25, 2020 for 21 days on April 15, 2020 for 21 days, on May, 4, 2020 for 14 days, on May 18, 2020 for 14 days, and then on June 1, 2020, for containment. Khachfe, Chahrour, Sammouri, Salhab, Makki, and Fares [5] found that protection over COVID-19 disease outbreak can be better accomplished by strict safety precautions such as avoiding social contact, following medical advice for quarantine, and ensuring good hygiene and sanitation.

Chatterjee and Chakraborty [6] and Dhawan [26] observed that technological advancement has been made in education in the last few decades and it proved useful during this crisis. Andrew proposed that many other online resources are available for online education [7]. It was a challenge for universities to chart their online educational activities. According to Lassoued, Alhendawi, and Bashitialshaaer, academic staff confronted a wide variety of logistic, technological, financial, and social problems [8]. Huang and Islam found that contagion and lockout effects have impacted

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the mental health of people around the world. Many students suffer from tension and anxiety [9][10]. Problems with learning online can also make students feel alienated. Furthermore, some students are not as familiar with emerging technology. This distinction between the digitally advanced and the digitally naive has occurred in the past as well.

According to UNESCO, the number of out of school children is even greater than 264 million [11]. Martinez observed that as the COVID-19 pandemic spreads, there has been a growing shift towards online teaching because of shutdown of schools, colleges, and universities [12]. Therefore, it is a good time to update our educational system to meet the needs of our changing times. Less formal education is also affected. The presumption is that formal education in classes is superior to online learning due to teacher-student relationship. However, after the COVID-19 crisis, online education changed from classroom to virtual classes on Zoom etc., as well as the change from in-person seminars to webinars. Initially, non-formal curriculum was thought of as correspondence, distance, and e-learning, but now it seems that e-learning will overtake the formal education system if this condition persists for a long time. Some of the most common online communication platforms would change the destination and direction of the whole education system around the world in post-COVID-19 era.

Lederman had established in his research that because of the COVID-19 crisis, teachers and students alike have embraced the interactive academic experience as the greatest good of online teaching-learning process [13]. Digital skills of students are on the verge of cyber danger, but with the right teaching, students can learn new digital skills and pass those skills onto others. Coronavirus threatens the educational system at the kindergarten level to the tertiary level. Some people believed that it would make them more popular with the public.

For any change, both internal and external pressures drive the transition, which is defined by the three-step change management theory, which includes freezing, change, and refreezing. COVID-19 resulted in unexpected and unintended offline teaching, which was followed by online teaching because of the uncertainty of following the conventional model. Stanovich, Siegel, and Gottardo said that in today's scene it is quite impossible to take classes in normal mode amid the COVID-19 outbreak in which sustaining social distancing is a frozen move that allows a measure of motivation and readiness to stakeholders [14].

Online education is giving students the feeling of psychological protection in the middle of a conflict. It is about replacing the traditional audit, which has now been imposed on auditors, with other methodologies such as self audit or adapted audit. The analysis is often to improve the model. Change is not a discontinuous occurrence but a continuous operation. For any shift in mindset, we need to have a suitable perspective, an individual attitude, and a fresh, and a positive approach towards online teaching. The education revolution by Tam and El-Azar advocated three developments that will take place in the future, that is, technological advances, heightened public-private partnerships, and the digital divide [15].

After spending over a year on online courses, a paradigm change has occurred. Now online courses are recognized as having a near-permanent value. The integration of technology into our teaching and learning process helps students adapt to new ways of learning.

Programs and policies on online teaching-learning in higher educational institutes (HEIs) in India

The government of India has started thinking more gravely on the issue of ICT and the use of online education at the tertiary level. Furthermore, it is reflected that drafting new education policy 2019 was an effective and constructive phase in the time of this pandemic.

Government of India's study 'Webs of Active-Learning for Young Aspiring Minds' (SWAYAM) is a programme to make free online courses available for all. SWAYAM Prabha, a network of 32 DTH (Direct-to-Home) channels is dedicated to telecasting high-quality educational programmes. SWAYAM is a professional development programme to support primary school teachers in the fields of Maths, Science, and English. Electronic-Post Graduate Pathshala (E-PG Pathshala) was a high-quality online education programme operated by the University Grants Commission (UGC) that offered online curriculum in 70 subjects. e-Pathshala was initiated by the Ministry of Human Resource Development and the National Council of Educational Research and Training in November 2015. We were not ignorant of the problems and opportunities of online education.

India's supreme regulatory authority of higher

educational institutions and university, the UGC has taken the present educational scenario very seriously and has resolved the deadlock of completing courses and exams during ongoing semesters. UGC ruled that all the universities in India are now required to complete 25% of their course online, and 75% of their courses face-to-face [16]. Using online training tools during this kind of scenario will not be easy to handle in teaching and learning situations.

The danger of the pathogen, the dreaded Coronavirus will mean challenges that include schooling, hands-on learning, laboratory work, library study, peer tutoring, remedial teaching, research, and creativity. Thus, the proposed solution is to maintain balance between online and offline schools (hybrid mode).

Implementation of e-learning in M.B.A. Colleges

The difficulties felt in the introduction of the transition process in the education system after COVID-19 can be attributed to the novel perspectives of online education and their technical complexities. As part of the growing education in India, early education was thought of as online courses. In COVID-19 times, online learning and teaching have become a huge obstacle for stakeholders to deal with, and stakeholders are not potentially fit to adapt to the new educational situation. Thus, effective implementation of educational reform requires a change in teaching pedagogy.

Online education opens many opportunities for improved teaching and learning, but there are many limitations to consider. Fig. 1 describes the method of online teaching and learning. The idea is to have the system include professors taking classes and students taking notes, and then have the system adapted for online teaching and learning. In the face of COVID-19, educational systems realized that teachers and students need to change online teaching and learning tools in order to meet existing educational needs. Teachers and students are skilled in using social media. Social media acts as an online educational tool. Cisco WebEx enables students to use online platforms to learn.

Future Learn said that there are some helpful educational applications, such as Office 365, and Google Classroom that can be easily downloaded for free and are relatively easy to use [17]. Smartphones are prevalent among stakeholders, while laptops are the only tools required for e-learning.

All the governments including the Union and Kerala governments agreed on introducing online education for the country in the current situation. Various national, state, and university level teachers and student associations are half-heartedly supporting the vision of online teaching keeping in mind the readiness for online teaching mode, push for improvement, and availability of resources. To match the action plan, teachers have planned and educated themselves individually for using online teaching modes. College administrators and Information & Communication Technology (ICT) specialists assisted the stakeholders and managed the transition process. The study has not been undertaken, but a couple of studies are being done online for coursework during COVID-19.

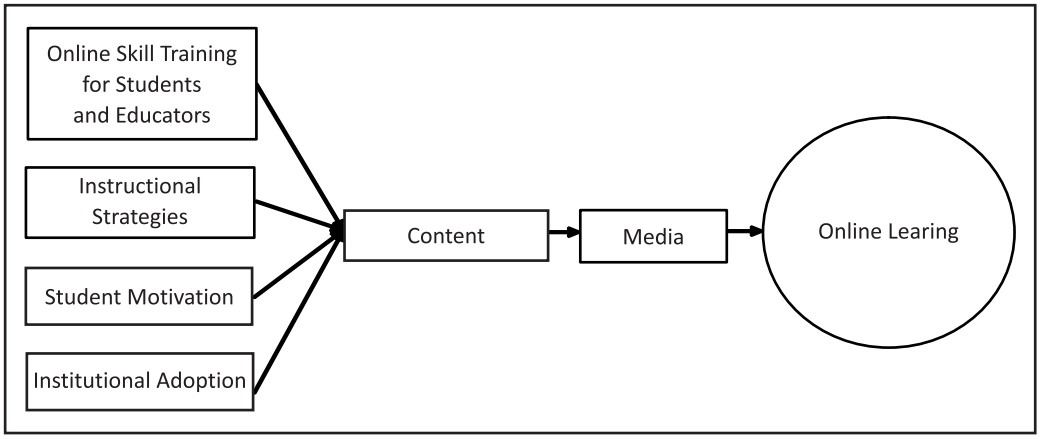

Fig. 1. Collaborative Model for Online Teaching Learning Mode

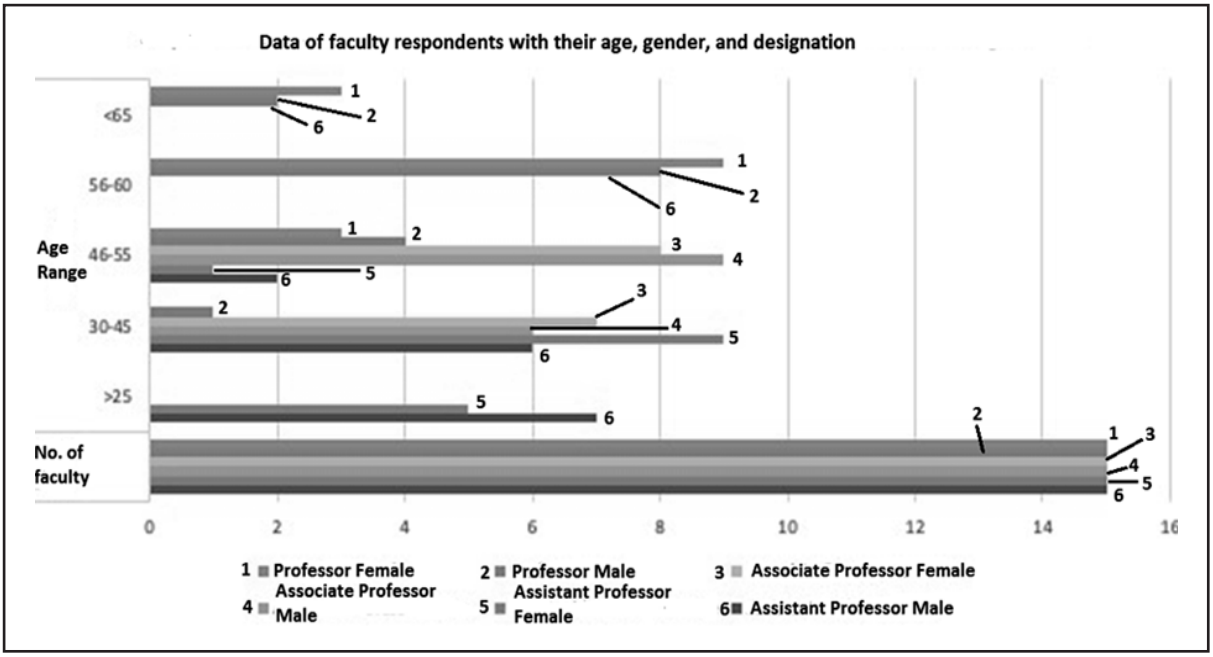

Fig. 2. Age, Gender, and Classification of Respondents who Were Teachers

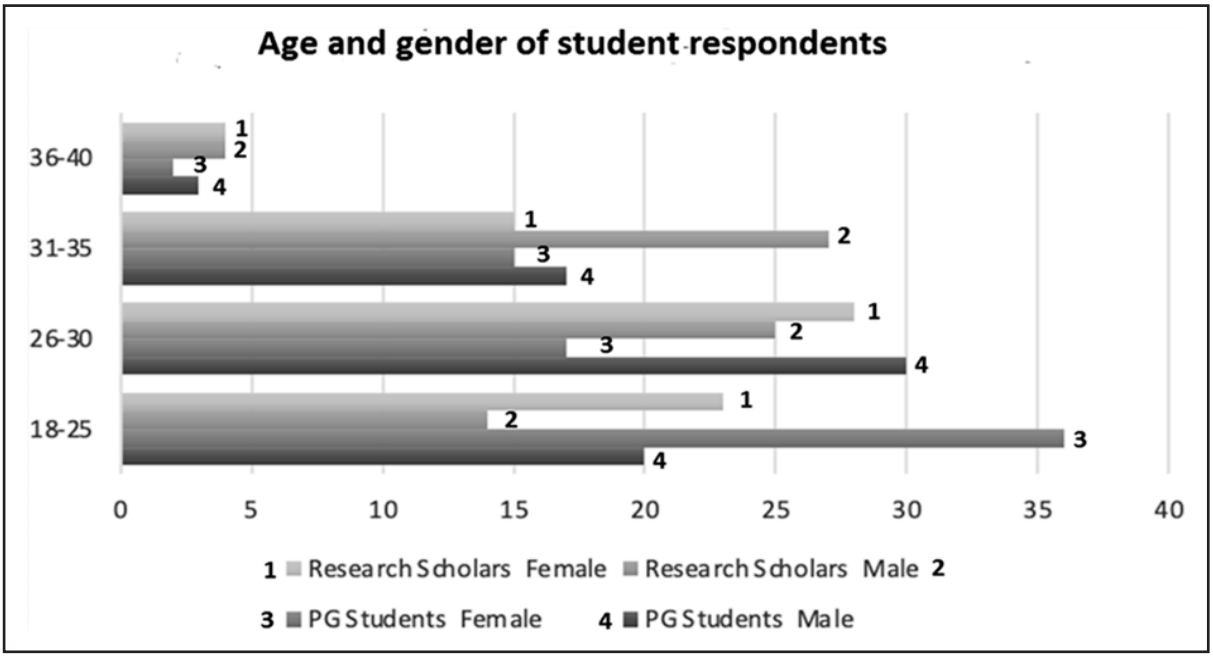

Fig. 3. Age and Gender of Student Respondents

Objectives

The objectives of this research were :

(1) To classify the different types of teaching/learning approaches used during COVID-19 pandemic.

(2) Learn the views of teachers and students about online teaching during COVID-19.

(3) The challenges facing teachers and students as they adjust to the phase of online education during the COVID-19 pandemic should be considered.

II. METHODOLOGY

Both quantitative and qualitative analysis methods were used during the HEI lockdown era. This is only a preliminary report.

M.B.A. college teachers and students were randomly selected in Kochi as the study groups. Teachers were chosen as samples of quantitative studies with three categories, namely, Professor, Associate Professor, and Assistant Professor. So a descriptive survey was carried out to determine their understanding for online teaching, with a total of 90 faculty members and 280 students. Age, gender, and appointment of teachers are given in Table 1.

In the course of semi-structured interviews with nest-compatible sampling designs (Johnson & Christensen, 2012), 30 teachers (15 male and 15 female), and 30 students (15 males and 15 females) were also chosen to collect qualitative views for the method of learning online.

For the quantitative assessment, two questionnaires were designed, one for teachers and the other for students. A semi-structured interview schedule was developed to provide teachers and students with their opinions and comprehensive details during the said time of lockdown. For quality review, their perspectives, impressions, and reflections on the online process of teaching were verified.

III. FINDINGS

***Objective* 1 :** Researchers conducted a survey in which percentage analysis was performed to understand various forms of online teaching and learning modes used by teachers and students during the lockdown in order to obtain the results of the objective.

Fig. 4 and 5 provide information about the different types of online learnings used during the lock-down time of COVID-19 outbreak by teachers and students respectively. Some private colleges have already established in house or indigenous Learning Management System (LMS). Teachers are required to log into their college LMS platform and upload the required study materials and automatically it reflects on LMS sections of registered students. There is a discussion forum which helps interaction between students and teachers on the LMS platform. As a result, it is one of the most common forms of digital education among teachers, as stated by almost all of the teachers in private colleges.

Despite the availability of a number of automated

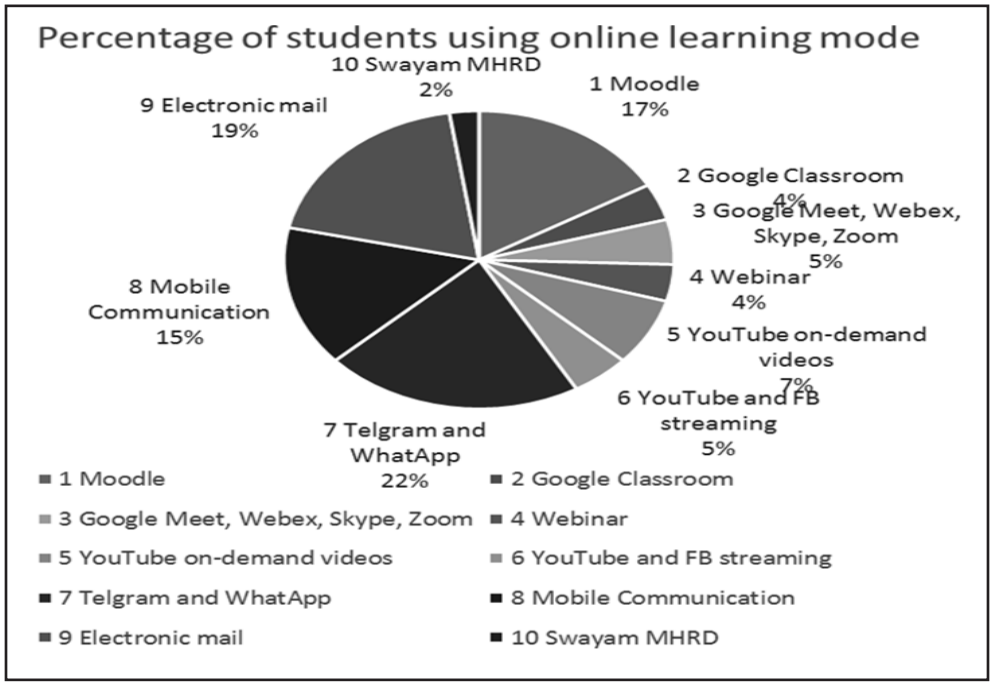

Fig. 4. Response of Students to Online Teaching Modes

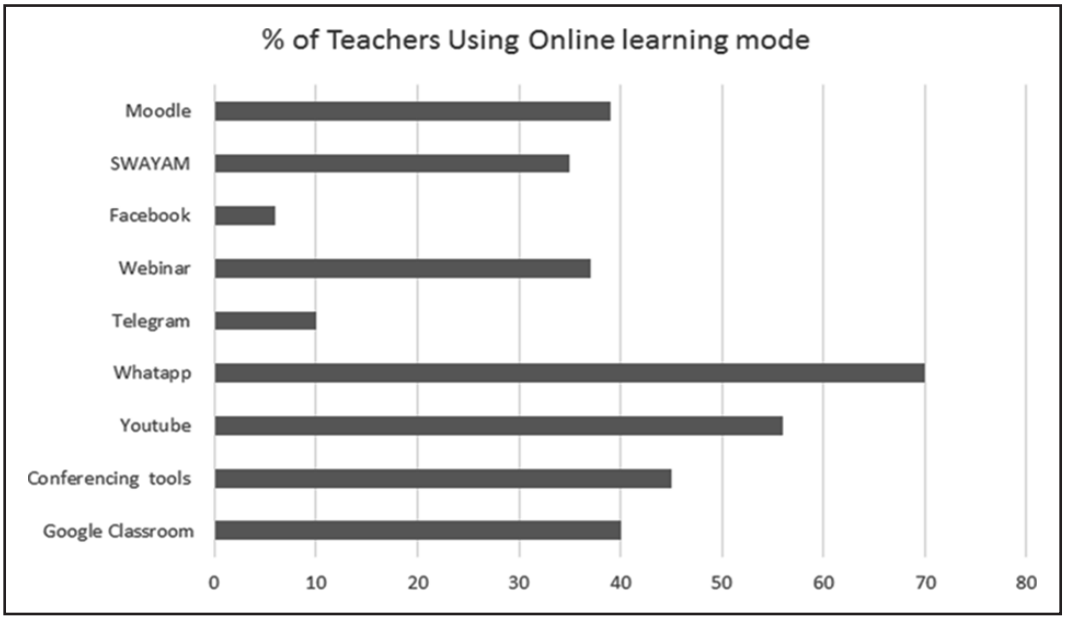

Fig. 5. Response of Teachers to Online Teaching Modes

teaching-learning tools, almost all teachers and students used informal mobile communication tools like WhatsApp to make learning groups for discussion and sharing information. Telegram was also used by some small number of teachers and students, though email was another conventional tool which was used for formal educational interactions. Google Classroom is another free software as a service (SaaS) used for giving assignments, submission of assignments, validation of doubts, and for conducting class exams. For taking online classes, 40% of teachers used Google Classroom. Conferencing tools like Zoom, Cisco by WebEx, Google Meet, and conventional video conferencing platforms like Skype were used by 45%. It was found that 37% of colleges organized online webinars with visiting professors to enhance the quality of students and teachers and this is considered as the new normal mode of online learning. Moodle was used by 17% and 39% of students and teachers respectively.

The researcher also observed that about 56% of teachers used YouTube for creating on-demand videos of their classes but a low rate of response was observed among students who used to watch on demand videos (33%). Streaming of Facebook virtual classes through OBS (Open Broadcasting Software) by teachers were 6%, while 22% of students undoubtedly have used Facebook, Social network, and media platforms for learning. 91% of educators were found to use mobile phones to communicate academic related information with their students. Nevertheless, 31% students are reluctant to use mobile communication to reach out to their instructors.

35% of educators were keen to use online educational portals to give value added courses through Swayam (Ministry of Human Resource Department) platform, and there was a slight positive response from students (32%).

***Objective* 2 :** The content review of the questionnaire on teaching and student opinion about online education has been carried out in order to obtain the results of Objective 2, that is, to research the views of teachers and students during the COVID-19 outbreak. Researchers have also gathered detailed knowledge on the basic elements of online learning and teaching experience via semi-structured interviews. The researchers had observed that an outstanding knowledge based on computers, communication skills, clear speech skills, emotive relationships, and other skills necessary to address online platform requirements, and the ability to solve small problems during and after online classes are identified as online instructional methods and talents to be taught in an online mode.

The student also gives a good respond on videos created by teachers which is particularly interesting as they can be viewed and rewound, and learned while paused. The best recommended teaching platform by

students is Google Classroom. Students had reacted in a significant way to progress of teachers in online teaching and are also happy with the readiness to learn online. Students reacted negatively to online student comprehension to a sufficient understanding and conceptual understanding with speech activities and also to the fact that they were unable to keep pace with their teacher learning behaviour.

***Objective* 3 :** With the help of perception survey and semi structured interview conducted by the researcher it was found that the biggest problem during online teaching was the unreliable network link. For listening clearly in class, students with poor internet connection should mute the video and audio of online class. Over and above, some students did not have the essential tools to join online.

Thus, technological and philosophical issues were present with online instruction. The students and their answers to the needs of online learning, including continuous power supply, and intermittent signal problems were the most challenging. The important challenges identified by teachers include level of comprehension, lack of scope for effective interaction, scope for creative teaching behaviour. Teachers could not read and change the teaching habits, since they have been unable to interpret the face and attitude of students.

The researcher observed that some dissatisfaction of teachers with students while taking online classes. Some students are reluctant to listen in the class, and the researcher also observed that students conceal themselves after joining live sessions in virtual classrooms. Some teachers and students also have concerns regarding health issues because of online classes.

IV. DISCUSSION

This article examined the experience of teachers and students during COVID-19 lockout period in the online learning process. The research offers a number of viewpoints on the challenges facing online teaching today, while retaining the analytical lens on the basis. The mixed method research analyzed teacher and student expectations that are kept in perspective in M.B.A. colleges in Kochi and Kerala. Fresh insights come to the fore as teachers and students grasp the new trend.

According to a study conducted by Mishra, Gupta, and Shree [18], multiple online teaching-learning resources such as Zoom, Google Meet, Facebook, and YouTube that were accessible to both teachers and students were used on a need based basis. Most teachers have been trained by organizations who have acquired practical experience. In preparation, the differences between online and face-to-face teaching can be published. It was a daunting job for them to use this new schooling method. At the very beginning of the lock-down, teachers decided to use WhatsApp, e-mails, and phone calls for teaching, but as time went on, these became insufficient as the lockout period was extended. Teachers received MGU (Mahathma Gandhi University) offered LMS (Learning Management System) training and other online sites have been explored in the training course. Teachers and students have started downloading online learning tools such as Google Meet, Zoom, Telegram, LinkedIn learning, Udemy, and many more [18].

In order to sustain the mental health of students in this the pandemic, the research findings of Sahu promoted proper counseling services that are provided by the university which supports my findings that counselling services are important for good health and mental wellbeing of students[19]. After the cessation of face to face class, students faced various difficulties, including social-emotional disparity, personal adaptation to daily living conditions at home, financial strain, and other issues while dealing with adverse effects of isolation [20].

Qualitative results support the findings of Ogden that efforts should be made to provide students with free access to educational services online to make the most of their time during the lockdown period [21]. Many teachers in classrooms for the first time are now seeking to grasp distance learning's ins and outs and seek free online content for schools. National School Choice Week support the view of the faculty of M.B.A. colleges in Kochi who support free access to online teaching resources [22]. However, it took time to get used to the modern way of teaching online. The study data indicates that the importance of online teaching and learning during the lock-out era has been greater understood and also criticized. This supports the findings of Lim that while efforts have been made to interact with students through digital resources via online educational platforms, without establishing certain basic features, the experience can be agonizing [23].

V. CONCLUSION

Ultimately, there is great need because students from various social-economic backgrounds apply the same pedagogic approach to bridge the distance between haves and have nots without getting faraway rural and urban affluence. Incomprehension of different populations of students can lead to skewed conclusions, especially as online learning mode that is currently in early childhood cannot fulfill its function. Thomas found that in the course of this pandemic, countries from the third world are facing paralysis in their policies in dealing with the sudden changing scenario of educational planning, management. and organization, which has fractured their technical facilities, academic efficiencies, and resources [24]. Cloud computing can be a reliable solution for fulfilling the need of software, storage services, and infrastructure of educational institutions as it is based on technologies such as the internet, grid computing, virtualization etc. [25].

REFERENCES

[1] A. Remuzzi and G. Remuzzi, "COVID-19 and Italy: what next?," *The Lancet,* vol. 395*,* no. 10231, pp. 1225–1228, 2020. doi: https://doi.org/10.1016/S0140-6736(20)30627-9

[2] K. Schulten, "Coronavirus resources: Teaching, learning and thinking critically," *The New York Times,* 2020. [Online]. Available: https://www.nytimes.com/2020/03/11/learning/coronavirus-resources-teaching-learning-and-thinking-critically.html

[3] United Nations Development Program, "COVID-19 pandemic humanity needs leadership and solidarity to defeat the coronavirus," 2020. [Online]. Available: https://www.undp.org/content/undp/en/home/covid-19-pandemic-response.html

[4] E. D. Brouwer, D. Raimondi, and Y. Moreau, "Modeling the COVID-19 outbreaks and the effectiveness of the containment measures adopted across countries," *medRxiv,* 2020. doi: https://doi.org/10.1101/2020.04.02.20046375

[5] H. H. Khachfe, M. Chahrour, J. Sammouri, H. Salhab, B. E. Makki, and M. Fares, "An epidemiological study on COVID-19: A rapidly spreading disease," 2020. doi: https://doi.org/10.7759/cureus.7313

[6] I. Chatterjee and P. Chakraborty, "Use of information communication technology by medical educators amid COVID-19 pandemic and beyond," *J. of Educational Technol. Syst.,* vol. 49*,* no. 3, pp. 310-324, 2020. doi: https://doi.org/10.1177%2F0047239520966996

[7] A. Maroko, D. Nash, and B. Pavilonis, "COVID-19 and inequity: A comparative spatial analysis of New York City and Chicago hot spots," *J. of Urban Health,* vol. 97*,* no. 4, pp. 461-470, Aug 2020. doi: https://doi.org/10.1007/s11524-020-00468-0

[8] Z. Lassoued, M. Alhendawi, and R. Bashitialshaaer, "An exploratory study of the obstacles for achieving quality in distance learning during the COVID-19 pandemic," *Education Sci.,* vol. 10*,* p. 232, 2020.

[9] C. Huang, Y. Wang, X. Li, L. Ren, J. Zhao, Y. Hu, L. Zhang, G. Fan, J. Xu, X. Gu, Z. Cheng, T. Yu, J. Xia, Y. Wei, W. Wu, X. Xie, W. Yin, H. Li, M. Liu, Y. Xiao, H. Gao, L. Guo, J. Xie, G. Wang, R. Jiang, Z. Gao, Q. Jin, J. Wang and B. Cao, "Clinical features of patients infected with 2019 Novel Coronavirus in Wuhan, China," *The Lancet,* vol. 395*,* no. 10223, pp. 497-506, 2020. doi: https://doi.org/10.1016/S0140-6736(20)30183-5

[10] M. A. Islam, S. D. Barna, H. Raihan, M. N. A. Khan, and M. T. Hossain, "Depression and anxiety among university students during the COVID-19 pandemic in Bangladesh: A web-based cross-sectional survey," *PLOS ONE,* vol. 15*,* no. 8, 2020. doi: https://doi.org/10.1371/journal.pone.0238162

[11] "UNESCO: 264 million children don't go to school," UNESCO's 2017-18 Global Education Monitoring Rep., *DW,* 2017. [Online]. Available: https://www.dw.com/en/unesco-264-million-children-dont-go-to-school/a-41084932

[12] J. Martinez, "Take this pandemic moment to improve education," *Edsource,* 2020. [Online]. Available: https://edsource.org/2020/take-this-pandemic-moment-to-improve-education/633500

[13] D. Lederman, "Will shift to remote teaching be boon or bane for inline learning?," *Inside Higher Ed.,* March 18, 2020. [Online]. Available: https://www.insidehighered.com/digital-

learning/article/2020/03/18/most-teaching-going-remote-will-help-or-hurt-online-learning

[14] K. E. Stanovich, L. S. Siegel, and A. Gottardo, "Converging evidence of phonological and surface subtypes of reading disability," *J. of Educational Psychology,* vol. 89*,* no.1, pp. 114-127, 1997. https://doi.org/10.1037/0022-0663.89.1.114

[15] G. Tam and D. El-Azar, "3 ways the coronavirus pandemic could reshape education," *World Economic Forum,* 2020. [Online]. Available: https://www.weforum.org/agenda/2020/03/3-ways-coronavirus-is-reshaping-education-and-what-changes-might-be-here-to-stay/

[16] University Grants Commission, "Report of the UGC committee on academic calendar for the universities in view of COVID-19 pandemic and subsequent lockdown," 2020. [Online]. Available: http://gnithyd.ac.in/pdf/Report_of_the_UGC_Committee_on_Examinations_and_Academic_Calendar.pdf

[17] "COVID-19: The best resources for online teaching during coronavirus," *FutureLearn,* March 19, 2020. [Online]. Available: https://www.futurelearn.com/info/blog/resources-for-online-teaching-during-coronavirus

[18] L. Mishra, T. Gupta and A. Shree, "Online teaching-learning in higher education during lockdown period of COVID-19 pandemic," *Int. J. of Educational Res. Open,* vol. 1, 2020. doi: https://doi.org/10.1016/j.ijedro.2020.100012

[19] P. Sahu, "Closure of universities due to coronavirus disease 2019 (COVID-19): Impact on education and mental health of students and academic staff," *Cureus*, vol. 12, no. 4, 2020. doi: https://dx.doi.org/10.7759%2Fcureus.7541

[20] UNESCO Int. for Higher Education in Latin America and the Caribbean, "COVID-19 and higher education: Today and tomorrow, impact analysis, policy responses and recommendations," 2020. [Online]. Available: http://hdl.handle.net/10919/98441

[21] R. S. Ogden, "The passage of time during the UK Covid-19 lockdown," *PLOS ONE,* vol. 15*,* p. e0235871, 7 2020.

[22] Nat. School Choice Week Team, "Free resources for schools shifting online during Coronavirus pandemic," *Nat. School Choice Week,* 2021. [Online]. Available: https://schoolchoiceweek.com/keep-learning/

[23] M. Lim, "Educating despite the Covid-19 outbreak: Lessons from Singapore," *The World University Ranking,* 2020.

[24] C. J. Thomas, "Coronavirus and challenging times for education in developing countries," 2020. [Online]. Available:https://www.brookings.edu/blog/education-plus-development/2020/04/13/coronavirus-and-challenging-times-for-education-in-developing-countries/

[25] A. Dhaliwal, "An Anal. of Applicability of Cloud Computing in Higher Education," *Indian J. of Comput. Sci.*, vol. 2, no. 2, 2017. https"//doi.org/10.17010/ijcs/2017/v2/i2/112042

[26] S. Dhawan, "Online learning: A panacea in the time of COVID-19 crisis," *J. of Educational Technol. Syst.,* vol. 49*,* no. 1, pp. 5-22, 2020. Doi: https://doi.org/10.1177%2F0047239520934018

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