

A Study of Effectiveness of Online Teaching-Learning within the University during Lockdown Period

DR. REENA GREWAL

JC BOSE UNIVERSITY OF SCIENCE & TECHNOLOGY

ABSTRACT

Due to covid-19, almost all over the country everything came to halt including educational institutions. Perhaps that has given an ample time to educationist to target methods of teaching learning apart from physical classroom teaching and to form it effective and convenient for college students by using e-learning tools like Google classroom, WebEx, ICT, AV tools, zoom platforms. Moreover, online or digital teaching is not in the least a brand new emergent mode; rather it has always been a popular choice of the many to teach and learn English language. This study is an interpretation of online teaching-learning modes embraced by the JC Bose University of Science and Technology for the teaching-learning process and subsequent semester examinations. So to attain this purpose a sample survey has been conducted to review the effectiveness of online tools used for teaching and learning within the university. In all 200 participants both from the faculty members and students were assessed to grasp the hypothesis that online teaching learning affected teaching but resulted in scoring good grades at the examination. Moreover, this paper employs both qualitative and quantitative approach to check the perception of teacher and learner towards the online tools and identify the explanation behind scoring good grades. Students with diverse backgrounds, unique lived experiences and varying abilities; these factors affect how they learn so through this paper it is also being attempted to bring out good solutions and enhancements in online acquisition by offering ample practice in reading, speaking, and, listening.

Keywords: Educational institutions; online classroom; interpretation; Effective teaching.

Introduction

Covid-19 has thrown the entire world into a quagmire, with no apparent solution in sight. Wuhan, China, was the site of the first recorded outbreak. This infectious disease was officially named Covid-19 and SARS-CoV2 on February 11, 2020. The original cause of viral transmission to humans, as well as whether the virus became pathogenic before or after the spillover case, are still unknown. When a person who is infected coughs, sneezes, or talks loudly, hundreds of millions of virus particles are released into the environment through respiratory droplets, where they can remain infectious for days. Smaller droplets will stay suspended in the air for up to 20 minutes or up to 48 hours on surfaces indoors, while larger droplets settle on all surrounding surfaces. COVID-19 may be caught by others. The whole nation came under this corona virus, people started questioning the government and In the meanwhile, the education system was also abrupted.

The Haryana government on 22 March announced a lockdown in seven of its 22 districts. Apart from essential services, other things were announced to be closed. As the COVID-19 pandemic spreaded, schools, colleges and, universities were forced to shut down and there has been an increasing move towards teaching online for an indefinite time (Martinez, 2020). Therefore, it was the time to rethink, reframe and rebuilt the education system and fulfill the requirement of not only the learners but also to provide the best platform for the next generations. In the mid of this ruckus, university teachers have to decide which platform they think is appropriate for the learners. Moreover, learners have to be ready to adapt to this changing technology and the whole paradigm of education. YMCA University of Science and Technology (YMCA UST), situated in Faridabad, is also known as J C Bose University of Science and Technology. The aim of creating this institute was to impart high-quality education to the students of country. There are 18 affiliated engineering colleges to YMCA UST. The University was established in 1969 and has been recognized by the University Grants Commission. It has been approved by AICTE and accredited by NAAC. At the University of JC Bose, both teachers and learners were quick adapting to this transition from offline to online mode.

The teachers started exploring all forms of platforms available online. Platforms like Zoom, WebEx, Google meet, Google classroom were used initially. Later an online portal through which the teachers keep a record of personal and student progress information was improvised to communicate with the students. For this same reason, the IT department of the university developed and launched a new platform DLMS (Digital Learning Management System) for catering to teachers and learners. This Research highlights the teacher's and learner's perception of the effectiveness of these tools and problems faced by students and teachers during lockdown. Despite all the problems would they recommend having hybrid teaching-learning post-pandemic?

Objectives

1. To explore the various modes of online teaching and learning during the lock-down period.
2. To examine the teacher's and learner's knowledge of digital tools used during the lockdown period.
3. To study the views and problems of teachers and learners faced in the online learning system during lock-down.

Literature Review

The data used in this study were mainly drawn from research and literature on online teaching and learning during the Covid-19 pandemic. A large portion of the planet, in particular, is under quarantine due to a significant outbreak of the Corona virus. It's an

infectious disease that spreads when you come into contact with someone who has already contracted it. As a result, the disease-affected areas have been put under lockdown. Education was changed to an online mode as a result. Online learning is characterized as learning through the use of various devices (e.g., cell phones, laptops, etc.) with an adequate internet access, in which students are free to communicate with teachers and peers (Dhawan, 2020). Over the past few decades, a significant number of alternative methods have been created to deal with issues like this if they ever arise. In developing countries, e-learning implementation faces a large number of challenges, primarily due to teachers' and institutions' limited resources, both in terms of time and money (Mirjana, 2015). Online learning is an interactive and integrated collection of tools that provides educators, learners, and others involved in education with knowledge, tools, and resources to support and enhance educational deliberations, according to SAP Litmos, an award-winning LMS. At the same time, E-learning does not have to be an all-or-nothing proposition (Barboni, 2019), while in a conventional classroom, teachers must devote a significant amount of time to preparing classes, and students must conduct extensive study prior to submitting assignments. Gmail, Google Meet, Google Classroom, and Zoom Classroom are just a few of the online options. These platforms can also be used to simplify the teaching-learning process. Teachers and students take help of podcasts, blogs, vlogs. Students also use PowerPoint presentations, books, Internet sources, marketing dictionaries, and assignments. All student activities are documented, and students receive grades for everything they do. Grades are assigned based on their activity and level of engagement. In the classroom, only midterm exams are given. There are several ways to improve grades.

Methodology

The researcher used both qualitative and quantitative methodologies to investigate teachers' and students' attitudes toward online tools and to identify the reasons for high exam scores. The scope of this research is limited to JC Bose University of Science and Technology, YMCA, a State University of Haryana.

Participants

This study included all of the teachers and students at JC Bose University. The study included approximately 100 teachers from various university courses. Similarly, 100 students from various courses took part in the study. The university has thirteen departments in total, with Associate Professors, Assistant Professors, and Research Scholars from seven of them participated. Students from graduation, post-graduation and Ph.D. programs, all took part in the study. Teachers were asked to share their online teaching experiences, and students were asked to share their reasons for achieving high grades in online mode. Aside from that, problems encountered by students and teachers are addressed, and possible solutions are proposed.

Design

The data for this study was gathered using two separate questionnaires designed for teachers and learners to investigate their perceptions of the online teaching-learning mode. Each questionnaire consisted of fifteen questions, both qualitative and quantitative, in order to learn about the experiences, perceptions, and reflections of the university's ongoing online teaching-learning. All of the respondents gave their complete cooperation in answering all of the questions honestly. The questionnaire was created with teachers and students of all ages in mind. Teachers and students were given ample space to freely share their thoughts and experiences for the purpose of research. A semi-structured interview was also conducted to gather the necessary data.

Findings

This section presents objective wise findings found by the collected data. Findings related to objective one To get the findings of objective one, the researcher performed a survey study in which percentage analysis was used to investigate the various types of modes used by university teachers and students during the lockdown era in order to obtain the results of objective one. For teaching and assessment purposes, teachers and students were given their own university-developed DLMS. Several training sessions were held to make the process easier. Several training sessions were held to assist the teachers and students. The goal was to have a smooth transition between classes. Despite the university's efforts, a significant number of teachers and students have shown an interest in learning through other online options. Initially, teachers used Whatsapp for communication before realizing that this was not a temporary issue. Teachers then used various online platforms to perform the lessons. The Google Classroom platform is well-liked by both teachers and students. It was more dependable than the DLMS and Zoom platforms, according to them. Many teachers used the DLMS platform for class assessments and assignments, but Google Classroom was used for online classes. DLMS was used by 58 percent of teachers for class assessments and assignments, while Google forms was used by 38 percent of teachers to perform class tests. However, for lectures, 72 percent of teachers used Google Classroom, citing that it was a simple platform to use and that it enabled them to keep track of student attendance. Just 12% of teachers said they used the Zoom platform for classes, but then switched to other platforms due to safety concerns. Inside the university, students attended lectures and webinars that were held online. Students were often encouraged to use research materials for additional information by requiring access to e-books and e-journals. MOOC lectures are now a standard part of university education. Many other digital platforms have been launched to help teachers and students save time. Findings related to objective two The content review of the questionnaire was used to obtain the results of objective two, which were relevant to the teachers' and students' knowledge of online resources. In addition, a semi-structured interview found that both teachers and students were wary of using online resources. The evolving pedagogy model did not sit well with teachers and students. Many of the students, who came from far-flung parts of India, struggled to get to class on time, and they often skipped the entire lecture. Students' main factors were that they lacked basic knowledge of how to use online platforms and that they did not have compatible networks. But it wasn't just students who were resistant to online learning; many faculty members were as well. Maybe they haven't used this forum before or they don't want to alter. Despite this, 80 % of teachers appear to be computer literate enough to teach online classes. Online lectures were found to be more successful by 55 % of teachers than live classroom lectures, and the same percentage of teachers were pleased with the student-teacher interaction during online teaching and learning. They said that changing one's environment is as natural as changing one's clothing. Some teachers claimed that they find online mode to be

quite comfortable as they have already been doing online courses along with their students through MOOCs and NPTEL lectures. One more point was highlighted by the teachers and students is that now a day's almost everyone has advanced machinery, so accessing classes was not at all an issue unless they have high-speed internet connection. Findings of the objective three

To obtain the results of objective three, namely, the teachers' and students' perspectives on the overall online teaching-learning experience and the problems faced by them. These results shed light on the experiences of teachers and students during the COVID-19 pandemic. Teachers although were quick adoptive to these changes, complained that they didn't find home environment comfortable in preparing and delivering lectures. Mostly female teachers were unhappy with the lock-down as all the schools and colleges were closed with the drop of the hat, which didn't give female teachers enough time to adjust their small children and at the same time they were required to fulfill their lectures online. All kind of setup needs time but this situation retreated everyone from their routine work. For teaching purposes, teachers needed secluded place and high connectivity. Once you get settled with these primary conditions, teachers were also worried for their students' presence in the classes which was minimal. Many teachers later come up with the ideas of switching from one online platform to another for better interaction with students. Some students from remote areas were still finding it difficult to join the classes. It is found that the University's initiative for online teaching-learning and providing their own software was a relief for the teachers. Many senior teachers who were not tech-savvy, they recorded their lectures and shared with the students but then the files were so heavy that students find it difficult to download. Many teachers were not fine with the idea of sitting in front of camera. They think face-to-face classroom is something they are accustomed to but delivering lecture with camera on was a different experience. In online classes syllabus was again difficult to complete with the less number of teaching hours. So teachers have to curtail the unnecessary or repetitive part from the syllabus. Sometimes because of internet issues, the voice lagged and the quality time was wasted on fixing the issues. As far as students opinion is considered, they were of the opinion that online classes were although boring but safe for them at the time of this pandemic where you can protect yourself and your family only by maintaining social distancing. The study also revealed that students were unhappy with the ongoing online classes for many reasons. The majority of the students felt that they found it difficult to communicate with their teachers and were asked to be quiet in the classroom. If they had any queries, then they have to wait for the next class. Students were asked to share their general feeling while attending online classes, then 56.5% of students found online classes to be difficult to understand and they took the help of other recourses. 22.7% of the students found online classes interesting while 15.6 % of the students felt sleepy during classes. Overall, 60% of the students complained that they faced trouble in online classes. Students were asked whether the online classes helped them in scoring good marks then 37.7% said no but 68% of the students accepted that yes objective tests were easy to perform and they found it scoring. When asked that do they think technology can help in reducing the opportunities for cheating, 47.6% of the students agreed and 19% of the students disagreed while 33.3% of the Students remained neutral.

Conclusion

Due to COVID-19, this immediate transition from traditional to online pedagogy education has provided enough time for the nation, in particular, the university to not only recognize the strengths and weaknesses but also, to accept the challenges and turn them into opportunities to be ready in the future. Many Institutes were initially resistant to the changes. They were not ready to accept the seriousness of the crisis and no one was expecting this crisis to be long-lasting. Neither teachers nor students were ready for the crisis. Everyone was facing difficulty in changing and breaking the monotonous of this life. Students with bad connectivity were not able to be present in all the classes which resulted in less percentage of attendance. According to the rule of the university, each student has to score 75% of the attendance. Later when the government had given some relaxation then students took the levity and stopped taking classes by giving false excuses. Many universities around the nation have now fully digitalized their classrooms, understanding the needs of the hour. In the midst of this ambiguity and chaos, alternative modes are introduced to comfort the teachers and learners. Teaching contents and hours are made easier. For the seamless working of the education institutes, curriculum, schedules, number of tests, and assignments are changed and given weightage over traditional exams. Face-to-face feedback forms are modified and improved to gather the information for recommendations. Many students, in the beginning, complained about the slow internet facility at home, few not having proper gadgets, many facing disturbances in the domestic environment, and even a few students find it really frustrating and challenging to focus. For many years, they are accustomed to the traditional mode of teaching. They prefer the natural environment of the classroom amongst their friends to study and chill out but this crisis has no doubt taken that freedom from them. Although, more emphasis is given on student's requirements, and lessons are tailored for easier online delivery. Therefore, it is recommended to have further studies and research in this area to provide the data and findings on how effective online teaching-learning is.

Declaration of Competing Interest

The author declared no conflicts of interest with respect to the research, authorship, and/or publication of this paper.

References

1. Barboni, L. (2019). From shifting earth to shifting paradigms: How webex helped our university overcome an earthquake. *CISCO*, Upshot By Inluitive.
2. Dhawan S, (2020). Online learning: A panacea in the time of COVID-19 crisis. *J Educ Technol Syst* 49(1):5-22. <https://journals.sagepub.com/doi/10.1177/0047239520934018>
3. Karen C. Williams, Kari Morgan & Bruce A. Cameron (2011) How do students define their roles and responsibilities in online learning group projects?, *Distance Education*, 32:1, 49-62, DOI: 10.1080/01587919.2011.565498

4. Martin, A. (2020). How to optimize online learning in the age of coronavirus (COVID-19): A 5-point guide for educators.
https://www.researchgate.net/publication/339944395_How_To_Optimize_Online_Learning_In_The_Age_Of_Coronavirus_COVID_19_A_5_Point_Guide_For_Educators
5. Singh, V., & Thurman, A. (2019). How many ways can we define online learning? A systematic literature review of definitions of online learning (1988-2018). *American Journal of Distance Education*, 33(4), 289-306
6. All India Survey on Higher Education (AISHE). (2019). *Ministry of Human Resource Development, New Delhi: Government of India.*
7. WHO Coronavirus Disease (COVID-19) advice for the public <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public>
8. Schneider SL, Council ML (2020) Distance learning in the era of COVID-19. *Arch Dermatol Res* 8:1 <https://doi.org/10.1007/s00403-020-02088-9>
9. Mishra L, Gupta T, Shree A, (2020) Online teaching-learning in higher education during lockdown period of COVID-19 pandemic <https://doi.org/10.1016/j.ijedro.2020.100012>
10. UGC (2020),. April). Report of the UGC committee on examinations and academic calendar for the universities in view of COVID-19 pandemic and its subsequent lockdown. Retrieved from https://www.ugc.ac.in/pdfnews/4276446_UCG-Guidelines-on-Examinations-and-Academic-Calendar.pdf

