

Online Education as a Catalyst for Reforming Higher Education

HEMASWETHA S^{1*}, KAVITHA C K², DURGA S³

^{1,2,3}UG Student 2nd Year BCA Department, Chevalier T.Thomas Elizabeth College for Women, Tamil Nadu, India

stu_HEMASWETHA_S5@cttewc.edu.in

Abstract: Despite the COVID-19 breakthrough, all educational institutions across the globe have drastically collapsed. Close to 168 million students are out of school in the year 2020. To keep their academic syllabus functional, most educational founding has transitioned to online-based education. Typically, in developing nations such as India, they would rely on conventional learning techniques. I.e., students take part in a face-to-face physical education program in a classroom. Whereas virtual education began with blended learning, there are still certain traditional procedures that are not merged with the teaching processes. Through an online survey of 100 students using a detailed scientific framework, we emphasize analyzing each student's perspective and decisions for e-learning. According to the questionnaire's findings, 45% of students preferred offline teaching with face-to-face classroom instruction. In comparison, 55% of students were found to be influential in promoting virtual learning. This research paper highlights the impact of web-based learning and a SWOC analysis of the e-learning category after the COVID-19 disaster. We concluded that good virtual course teaching depends on the following criteria: 1) technical and interface characteristics, 2) subject area characteristics, 3) student roles and course teaching assignments, and 4) information sharing. The unplanned shift to digital education has been a challenge for students and teachers alike, but clearly it is quick to adjust to the new situation. It is hoped that the publication of this paper will stimulate continued discussion of productive strategies that can improve the success of universities and colleges in their transition to online teaching.

Keywords: COVID-19, educational institutions, learning techniques, web-based learning, SWOC analysis.

Introduction

In the 21st century, education can change lives as professors and students bring together data, materials, different perspectives, and different explorations during their studies and experiences. Faculty at various colleges and universities can articulate these opportunities by embracing critical thinking spaces where students are encouraged to expand the scope of learning strategies, imagination, critical thinking synthesis, creative expression, self-awareness, and determination. The World Health Organization (WHO) has declared the 2020 corona virus pandemic, also known as COVID-19. This immediate disaster led to medical emergency and subsequent attempts to spread the virus, leading to the imposition of national (total) lockdowns in various countries.

Low. The main focus is to reduce infection and death rates in densely populated countries such as India, the US and China. The announcement of the lockdown obscured the functioning of the entire world. In developing countries like India, traditional learning strategies (i.e. face-to-face courses) are often used in middle and high schools. The COVID-19 pandemic is the worst shock to the education system in a century, as more than 1.6 billion children and youth have been out of school for months and many are still not back in school (UNESCO, 2021). Despite the tremendous growth in COVID-19 in India, this had the unexpected result of forcing institutions and universities to close indefinitely. In terms of technology, electronic learning has become the most common type of distant instruction. Many schools and universities now

provide wholly online or hybrid/blended courses that include online and face-to-face training. In recent years, there has been a surge in interest in distance online learning, not only for students who work but also for those who live too far away or for other reasons are unable to attend traditional campus universities. Students with demanding schedules and limited flexibility can now obtain a great education, thanks to the advancement of online education. Web-based instruction, as opposed to traditional classroom instruction, has enabled teachers to provide classes all over the world with a single Internet connection. In recent years, there has been an increasing interest in distance online learning not only to educate students who work but also who live too remotely or cannot access traditional campus universities for other countries (Menses. J, 2020, 6). While online education has some advantages over traditional learning, it also has significant drawbacks. Nonetheless, it appears that more students are opting for online education to obtain a degree. Fostering such forward-thinking ideas has resulted in the fast growth of online education and courses all around the world. Many schools and universities now offer wholly online courses, as well as hybrid or blended courses that combine online learning with in-person instruction. Here in distance-based education, the educational institutions use most of the apps for E-based learning such as zoom, Google meet, blackboard, Edmodo, Secretive, Kahoot, etc. Courses (where students are presented with static PC content), Web-based Learning and Mobile Learning (through devices like cells, PDAs, and modernized but sound players like iPods or MP3 players) (Sharma, 2021, 8). The aim of this article about distance education includes the following criteria: 1) Consider the learning style or requirements of the understudy. 2) Enhance the quality of teaching and learning. 3) Improve your productivity and learning abilities 4) when it comes to engaging with pupils in the classroom, improve network adaptability and availability. This article discusses how remote education can help students increase their knowledge while they are isolated during a pandemic.

Literature Review

The consequences of the pandemic and its preventive measures have transformed the lives of children, parents and

teachers. Technology has proven to be a vital savior in the face of a debilitating pandemic. The apparent disruption of 'normal' education has been replaced by 'e-learning' via various online platforms and mobile phones (Desk, 2020). A look into the future suggests that virtual schools supported by cutting-edge technology and cutting-edge instruction delivered by subject matter specialists will be among the dominant trends. This paradigm will include learning via laptops, computers, tablets, or cell phones. It will save time and money, while also becoming a more affordable instructional medium. Distance learning, rather than being a passive experience, may enable learners choose what they need to study quickly and easily regardless of where they are (Rajat Signal @RajatSinghal Apr 17, 2021, 15:14 IST, 2021). aSc Edupage, a platform utilized in 173 countries and at 150 000 schools, is one option for a digital school administration system. The system is a cloud-based web portal and mobile application that provides the majority of the capabilities required for managing school-based general education processes, as well as some basic free functionality. The system includes functions such as timetable automation, curriculum, and attendance control, homework assignment, grading, and messaging. Parents can participate in the process by accessing grade and result information, verifying attendance, and connecting with teachers through the system (www.edupage.org, 2020). This journal study examines covid-19's post-traumatic growth in education, where this study paper sought to investigate the positive psychological effects of the COVID-19 pandemic, lockdown, and post-traumatic growth in Portugal and the UK (Stallard et al., 2021). The National Education Policy 2020 encourages well-designed, appropriately scaled pilot studies to investigate the benefits of online/digital education for students. Collaborative efforts are needed to bridge the digital divide. It is critical that the technology used in online and digital education be adapted in order to address equity concerns. Teachers must be properly trained and developed in order to be effective online educators. Adjustments in assessment forms, as well as pedagogical changes, necessitate a fresh approach (Ram Ramaswamy, n.d.). Students who recommended face-to-face classes and anticipated a solid experience valued Online

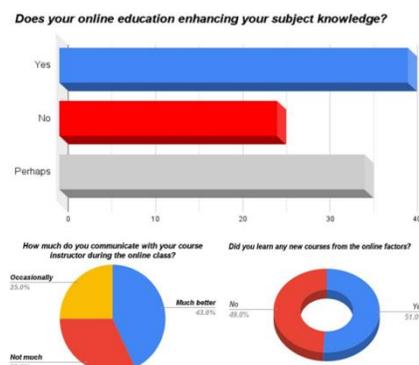
Collaborative Mode of communication and Instructional Support the most (van Wart et al., 2020). Online interactive teaching using Google products for education such as Gmail, Classroom, Planner, Forms, Jam board, Drawings, Drive, Meetups Google meet, and some free open source software was proposed as an alternative. All of the products were subjected to extensive testing. It includes such resolutions and guidelines for higher education institutions to make the transition from face-to-face to online learning as quickly and cheaply as possible (Basilaia, 2020). We need an appropriate mix of online lectures and face-to-face interactions in combined education, as well as building student-student as well as students' engagement, as well as incorporating asynchronous and synchronous activities (Sanjaya Mishra, n.d.). As this mentioned by this journal (2021) In fact, e-learning should operate also, as this will also give preceptors with numerous crucial benefits, like fastening on advanced value relations with scholars and saving preceptors' time. These suggestions are applicable to perfecting online literacy as well. The most grueling aspect of online tutoring was the unstable internet connection. The connection becomes more stable when the scholars' videos and audios are impaired, still a blank wall visible when this mode of tutoring is used. Also, it was apparent that some scholars did not have the coffers to share online, further adding the digital peak. Because of this, online education was both technically and ideologically grueling. As a result of the demands of online tutoring, the maturity of issues was related to scholars' responses, similar as intermittent power and signal problems (Mishra et al., 2020). Still, tutoring presence includes everything that the educator does, similar as planning the course, delivering lectures, explaining assignments, easing practices, administering tests, grading, and answering inquiries. These challenges are amplified in the internet environment. While the lecture as a single medium is pivotal in face-to-face classrooms, it is fading as the primary motivator in council education as detailed syllabi, electronic adverts, recorded and accompanied lectures, 24/7 relations relating to pupil inquiries, among other exemplifications, come more wide. Bringing together the pedagogical and technological aspects of tutoring under a single idea yields limited appreciation.

Methodology Research

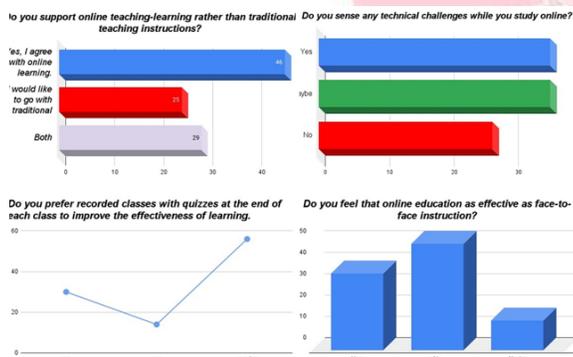
This is a descriptive analysis in which we're trying to comprehend the significance of advanced education via distance education during the COVID-19 period. In our quantitative exploration analysis, samples were recorded from advanced education scholars who are studying in their colleges of online classes at home on an enhanced pedagogy shift base. The number of actors was set at 100. The repliers were divided into 50 first-year scholars and 50 second-year scholars. There have been no special considerations given to scholars grounded on their gender or rank. Each pupil was regarded as a single, distinct reality, or static. In expansion to this member, we conducted a web check for this exploration study by exercising a web study benefit. The questionnaire included a variety of question types, similar as multiple choice questions, open-concluded questions, rating out of five among other exemplifications. The first section consists of four questions about the scholars' probability information. The alternate section includes three questions about the graces of online education versus traditional classroom instruction. This check procedure includes a structured questionnaire and was created with the backing of informal exchanges with scholars who are enrolled in online classes. In this check, we discovered some important information about remote education for an online check. Data on characteristics were collected first, followed by learner preferences, comprehensions pros and disadvantages and recommendations. The study responses were also used to draw conclusions and validate the proposition.

Results

These are the set of questions where the students can answer about their opinion for online education merits, drawbacks and their suggestions for their effective study times in exams.



In this figure 1, 40 students encourage their support for online education where their subjects enhance their subject knowledge through various study materials. Twenty-five students opposed this concept of online education and the remaining 35 students were said to be neither supportive nor neglected to their point of view for online education. According to question no: 2, 43.0 percent of students indicated that they much better connect and communicate with their course teacher while attending online classes, whereas 32.0 percent of students could communicate and 25.0 percent of students could rarely cooperate with their professors while attending remote classes. In response to question 3, 51.0 percent of the scholars advocated for web - based program to enhance their access to study content online, while 49.0 percent said they would not take new courses at home. om Q.No:4, Out of 100 students, 46 students agree that online classes are effective for learning, 29 students give their support for both for remote and f2f education for better understanding for their knowledge and the rest of 25 pupils were said as no preferences for



Online education. As we are familiar with the specific problems for Q.no: 5, the poll value for yes has remained unchanged at 36, and the students who have not encountered any network connectivity thus far have been recorded as 27. In this 5th graph can be seen as a recommendation for boosting online learning among high school seniors in countries like India, because students said that studying subjects through pop quizzes is simple. In this situation, 56 students said they were undecided, 30 said yes, and 14 said no. As shown in the sixth graph, students who can classify the mode of instruction through f2f with web-based education have a disadvantage. As seen in the sixth graph, pupils who can differentiate between

face-to-face instruction and web-based education are in a disfavor. In this classification, 50 students select the no option, 36 students take the yes option, and 14 students are uncertain.

Discussion

There are various focal points to having virtual board classrooms as well as face-to-face (f2f) courses. Students can upgrade their information levels exterior of the classroom by collaboration with their course educates, planning for lessons, and abridging the concepts secured as they move from face-to-face to entirely mixed to entirely online. In this segment, we may see the benefits and disadvantages of mixed learning in online instruction, as well as the SWOC investigation.

Advantages of Online Education in COVID-19 Virus

- During their studies, pupils get fresh undergo.
- Teachers can simply deliver data to learners over the internet.
- During pandemics, online learning can save a year of study time.
- Anytime we can learn it.

Disadvantages of Distance Education in COVID-19 Virus

- incapableness to Attention on Shades
- Machinery Problems
- Wisdom of Isolation
- Manage Screen Time

SWOC Analysis:

This study work contributes to a better reason of the efficacy, success, correctness, and this research helps to a greater knowledge of advanced ideas for an assignment. This will aid in the efficient upgrading of the remote learning system to help users. There are two sides to online schooling.

- Teachers and students.

SWOC analysis of online learning will help these two parties strengthening their communication. This research can discover places for the expansion of internet facilities in the country as well as areas where they need to be developed. This will provide the knowledge needed to launch a technical revival in the country's education system as well as pinpoint the current discussion. For these reasons, SWOC analysis of distance learning is a key tool these days.

SWOC - Strengths, Weakness, Opportunities and Challenges analysis of E-Learning

Strengths of online learning:	Weakness of remote learning:
Students can gain access regardless of time or location.	delay in responses for assessments, tests, quizzes, etc.
Support for live online classes is aided by technology.	Technical problems
location adaptability.	Students may have difficulty understanding the outcomes of their subject knowledge.
Students can work from any location by submitting their work online.	Lack of personal/physical attention.
Additional online courses enable them to increase the students' knowledge.	Learner's capability & confidence level is reduced by spending their time on social media during online learning classes.

opportunities made by online learning:	Challenges faced by E-learning:
Open and accessible training.	Students were affected mentally.
Training for line of work development.	Course quality & network infrastructural problems.
Impact on knowledge management.	Lack of in-person interactions while taking classes online.
Continuous updating of skills.	Lack of education technology and online for special needs of students.
Improving quality & competitive advantages.	Abundant distraction & lack of discipline.
Changeable education environments.	Course structure and quality.

Summary

A strategy approach that recognizes online education as "core business" across the institution is needed. This strategy must unify an institutional-wide consciousness of the nature and diversity of the online student cohort, as well as the formulation and carrying out of ever improving quality standards for online education. Early intervention with students to connect, prepare, and engage them is essential, especially when it comes to setting realistic expectations and encouraging and supporting academic preparation. The time-consuming issue of building and maintaining a strong sense of 'teaching assistant' is not always fulfilled in present workload models. Using websites such as Courser, udemy, NPTEL, SWYAM, and so on, and downloading study materials through online portals, it allows students to gain knowledge and improve their skills. For online learning, content, curriculum, and delivery must all be properly defined. These

three are the most important that requires the basis of online learning in every institution.

Conclusion

Despite having little prior undergo with online education, these students appeared to adapt to the sudden shift to online education due to the COVID-19 pandemic. The most pressing concerns among students were a lack of social interaction, a sense of isolation in their studies, improper housing situations for home office purposes, including insufficient data bandwidth, and a sense of diminished motivation and effort. We focused our attention in online teaching on the relationships between cognitive and teaching presences to determine the best and most appropriate practices and tactics for online training guidance. We concentrated on the formation of an online learning profession by boosting social presence, interactions, and collaboration between the course instructor and students, as well as among students, in distance learning. This study identifies an opportunity for the field to demystify the language surrounding distant learning relearning, research in the domains of learner outcomes, where there is a tendency to relegate research more broadly (e.g., studies). The most pressing concerns among students were a lack of social interaction, a sense of isolation in their studies, unstable housing situations for home office purposes, including insufficient data bandwidth, and a sense of diminished motive and effort ("PLOS ONE," 2021, 16). To conclude that online education acts as a catalyst that can improve college, university studying graduate-level students to upgrade their knowledge for the upcoming future generation.

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