

E-Learning: Online Teaching Experiences of Higher Education Teachers in India During the Covid19 Pandemic

Devaki¹

¹National Institute of Technology Tiruchirappalli, India

*Correspondence: devakiv93@gmail.com

ABSTRACT

The COVID19 pandemic has compelled teachers to convert their physical classes to online instruction within a brief time-frame. The study's purpose is to investigate higher education teachers' perceptions and experiences of their online teaching after months of online instruction during the outbreak of pandemic situations and to examine the challenges faced by the teachers in adapting to the online teaching-learning process during the COVID-19 pandemic. The study employs a mixed-method approach to collect data. This method includes both quantitative and qualitative approaches to broaden the scope and intensity of the research. A survey has been conducted and a questionnaire is framed and has been disseminated among higher education teachers across colleges, universities of Tamilnadu and Karnataka. Overall, 194 respondents participated in the survey to express their views and experiences. The survey provided quantitative data, while open-ended questions in the questionnaire offered qualitative insights. The findings illuminate two primary challenges: the teachers' experiences with online teaching during the Covid-19, as well as their lack of knowledge in the online teaching and learning mode—in the survey, the quantitative data analysis highlight two issues: internet connectivity and self-inspection or monitoring. On the other hand, open-ended questions in the questionnaire offered qualitative insights on their perceptions and experiences regarding the easiness and benefit of technology utilization, the usefulness of technology, and also the support they experienced during the transition. the research recommends incorporating specific features into the Learning Management System (LMS). The research proposes blended or hybrid learning should be implemented because e-learning requires a significant amount of self-study or conscience; teachers should develop and provide high-quality e-resources to students, with an in-depth focus on conundrum during online interactive classrooms.

ARTICLE HISTORY

Published December 1st 2023



KEYWORDS

COVID19 pandemic; Digital transition; E-learning; ICT.

ARTICLE LICENCE

© 2023 Universitas Hasanuddin
Under the license CC BY-SA
4.0



1. Introduction

As a result of the COVID19-virus outbreak, teachers all over the world have been forced to teach their classes online; this presents opportunities to transform teaching methods, and teaching has become a significant educational problem (Dick et al., 2020). Globally, a substantial majority of academic institutions, such as schools, colleges, and universities, have been closed around the world, interrupting academic activity and demanding an end to traditional classroom environments. As users, the active participation, knowledge, and administrative complexities that higher education teachers and students face as they switch from formal classroom set - up to internet instructional methods are critical and absolutely essential as users seek steadier versatile pedagogical techniques to address the concerns presented. The scourge of COVID-19 has led to significant advances in digital learning in all academic settings (Ferdig et al., 2020). Despite the abrupt transition from formal classrooms to virtual education, there was an immediate need for teacher technology professionalization. Moreover, the use of advanced ICT in teaching and learning in educational institutions overtime distorts the physical classroom context that signifies as a remedy to an unprecedented situation even though sustaining pupils' learning and needs.

Transformation to e-learning refers to the entire process of transformation, including the physical conversion of each subject in an institution, as well as faculty development, course final approval, and transfer to the new online

environment. On the other hand, Online teaching method poses various obstacles and challenges due to inexperience in conducting or attending live classes or tutorials by faculty and students, as well as teachers inability of early preparation or getting assistance from institutions technical teams (Wang et al., 2020; Rahman & Weda, 2018; Hanafiah et al., 2022). Furthermore, the inability to interact with students face-to-face to provide at ease talks, discussions, and mentoring, the lack of online teaching experience, technological difficulties with high-speed internet access, and the difficulty of getting accustomed to taking classes and being assessed online have all been identified as significant constraints (Arasaratnam-Smith & Northcote, 2017; Claywell et al., 2016; Sun & Chen, 2016). In India, several colleges have opted to provide online classes to students on a trial basis in metropolitan regions. This abrupt shift in teaching methods to online classrooms left students and faculty perplexed. The ongoing classes via the internet tend to concentrate on the issue of learning quality (Crawford et al., 2020). It is admitted that this is not a simple procedure, but the challenges may be conquered when considering the possibilities of this sort of problem. In view of the unpredictable conditions, the function of typical professionalization programs was not expanded. Lecturers were prepared to continue teaching without having any prior experience from a distance, despite the reality that the mainstream of academic institutions, continued to improve educational experiences, and interpersonal support systems were not exclusively ready (Sukmawaty et al., 2022; Aswad et al., 2019). Many colleges and universities do not integrate online education in their curricula. The structure of the educational system must be accessible to both students and faculty in order to be successful in the online teaching learning process. Educational institutions should include Learning management systems (LMS), enrollment and academic programs, faculty governance, student evaluation, and other digital technologies. They should provide adequate training and ability on how to use LMS, and other technologies should be provided to lecturers. The responsibilities of teacher, student, and parent are all equally crucial in embracing this; both should modify their minds about doing so. The outbreak of the pandemic has unequivocally shown that educational reform is on the way, and an appealing blend of traditional instruction along with an internet-based learning and teaching should be proposed to tackle any unprecedented situation in future. The objectives of the study is to study the perceptions of teachers on online teaching-learning during the COVID-19 pandemic and to examine the challenges faced by the teachers in adapting to the online teaching-learning process during the COVID-19 pandemic.

During COVID-19, Alqahtani and Rajkhan, (2020) explored key success variables for e-learning. They ascertained that the five most significant factors are i) technology monitoring, ii) management commitment, iii) student achievement in understanding the use of e-learning systems, and iv) anticipating a high level of information technology from instructors, students, and institutions and v) instructors expertise in using technology. (Alqahtani and Rajkhan, 2020). Furthermore, they highlight that, in preference to technological progress, the utmost vital part in developing the educational process during the crisis is the availability of e-learning implementation. In addition to this, Pinedo (2021) underlines the value of technology in learning. He states that teachers should be provided with devices that enable users to make use of ICTs to supply route substances and exemplary training. It presupposes using novel and innovative, capable of engaging, together with supportive, and practicable methods. Besides, some rather technological devices enable us to improve and modify admonition in order to achieve effective learning by actively promoting students based on their needs and characteristics. As a result, the instructor has been perceived as a source of inspiration for students to use technology. Researchers such as Amin and Sundari, 2020; Alameri et al., 2020; Darius et al., 2021 have conducted research on the existing educational set of circumstances around the globe during the continuing outbreaks to assess the efficacy and consequences of teaching. In the context of higher educational sector, Reyes-Chua et al., (2020) aiming to integrate e-learning classrooms that are the most phenomenal substitute for the nation throughout this epidemic. They suggested professionals and students participate in science and technology workshops about incorporating experiments in insightful and interesting techniques. Moreover, the implementation of unfettered access to web-based digital platforms, a plethora of app engines to address activities in the classroom during COVID-19, ostensibly not in academic institutions, but rather as a collective methodology of many teachers (Reyes-Chua et al., 2020). Similarly, Mishra et al. described Mizoram University's internet pedagogical approaches used through COVID-19 shutdown in 2020. Demonstrating how institutions can use existing resources to effectively incorporate physical classroom education into effective online learning and teaching (Mishra et al., 2020).

The current scenario, for the most part, provides an exceptional intuitive grasp of educators' professional knowledge in digitally enhanced or internet lecturing. However, amidst the world's increasing computerization, teachers of higher education come across a slew of critical challenges in effectively implementing online tutoring. Some difficulties have been encountered in the education system's reform process as a result of the COVID-19 crisis; these issues are associated with new ideologies of the online education system and their technological difficulties. Prior to the Covid-19 global crisis, open higher education institutions in India have been presumed to provide online learning or e-learning. In

such cases, online or digital learning is unlikely to have happened and is out of the question. All of that has changed subsequently the global epidemic, particularly in India. Online tutoring seems to have become a major concern, and stakeholders are really not academically ready to adjust to the abrupt didactical change even though they are not technologically competent to accept the new predicament. This becomes a real challenge for educational stakeholders' transition from formal to distance/online teaching. This study focuses on filling this void or the brief period of the educational framework in India following the pandemic. The study's aim is to look into higher education teachers' preconceptions of their online teaching experiences after three months of e-tutoring during the COVID-19 disease outbreak, to examine the technical hitches teachers confronted in adapting to the online teaching-learning process.

2. Methodology

For this study, the researcher employs a mixed-method approach. This method entails combining quantitative and qualitative methodologies to broaden the scope and intensity of the research. This study is constrained to college and university teachers in southern India, predominantly Tamil Nadu and Karnataka.

2.1. Research instrument

The study uses an online survey, i.e., Google form. A survey was carried out using Google form to collect data from respondents, which was then analyzed. As a result of the unprecedented situation, no preexisting questionnaire was available to assess instructors' perceptions and experiences. Biggs (1996) developed customized theories for integrating important learning environment characteristics, Mulder (2014) structured aptitude, and Tallent-Runnels et al (2006) remote instruction assessments aided in the development of a set of questions. The questionnaire turned into evolved to each be closed and open-ended with an interpretation to choose respondents' perceptions and gather records through inferential and rational thinking. In this study, the researcher supplemented quantitative data (a questionnaire designed to elicit information about network connectivity, accessibility, and technical tools) with qualitative data (open-ended questions for their thoughts, expectations, and experiences) "designed to aid and understand the acquired quantitative information" (Pardede, 2015).

2.2. Participants

The respondents are tertiary-level higher education teachers from an array of disciplines across south India, primarily from Tamil Nadu and Karnataka. Out of a total of 200 samples, 194 faculty members participated in the survey. Based on demographic data, it was established that professors from 30 different organizations. The survey included participation from private and public universities and colleges and polytechnic institutes.

2.3. Procedure of data collection and analysis

The questionnaire was circulated between June 2020 and September 2020. A survey was done to collect data via a questionnaire. It was divided into two parts: a) The first section of the questionnaire collected respondent demographic information for example name, designation, highest qualification, number of years of teaching experience, and institution. b) The second section involves gathering teachers' perspectives on online teaching-learning during the COVID-19 epidemic and probing the difficulties teachers encountered in adjusting to online tutoring. SPSS tool was used to analyze the collected data. Descriptive analyses were derived by calculating the percentage and frequency of respondents' answers from the collected data for quantitative and qualitative data to maintain the validity and reliability of the data. Subsequent that, content analysis for qualitative data to accompaniment quantitative data was used to identify themes.

3. Result and Discussion

This section presents objective-wise findings. To study the findings of objective one, a descriptive and content assessment of the questionnaire on teachers' perceptions of online teaching-learning was performed.

3.1. The perceptions of teachers

Table 1. Respondents' years of teaching experiences in higher education

No. of years of teaching experience	
0 > 5	37% of respondents
5 > 10	30% of respondents
10 > 15	28% of respondents

15+	5% of respondents have 15+ years of teaching experiences
-----	--

Table 1. Represents data breakdown of teacher respondents' years of teaching experiences in higher education. Around 37 % of teachers' have 0 to 5 years of teaching experience, 30 % of teachers' have 5 to 10 years of teaching experience, and 28 % of teachers' have above 10 to 15 years of teaching experience, only 5 % of teachers have 15+ years of teaching experience. In terms of the frequency of words per individual, these data revealed that, while there were variances, these were not substantial for any one of the academic background categories. Instructors with varying experience levels possessed similar knowledge, which did not exactly indicate they learned how to control or handle or apply them in an educational context.

Table 2. Portrays teachers' comfortableness in using ICT for online teaching

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Uncomfortable	1	.5	1.9	1.9
	Neutral	15	7.7	28.3	30.2
	very much comfortable	37	19.1	69.8	100.0
	Total	53	27.3	100.0	
Missing	System	141	72.7		
	Total	194	100.0		

Table. 2 represent the instructors' comfort levels with ICT technology for online instruction throughout covid-19. Just about 19 % of instructors are very comfortable in using ICT tools for online teaching, interacting, and managing academic things, 7.7 % are indifferent neither comfortable nor uncomfortable in using ICT tools for online teaching, 5 % are apprehensive about using ICT tools for online teaching because they do not understand how to work and use the high-tech devices. None is apprehensive about using technology for online learning. This data demonstrates teachers' comfort level in using technology during online teaching. The outbreak of the COVID-19 pandemic has disturbed the ordinary physical classroom education and made to figure the substitute ways of proceeding with the instructing learning process. However, before the outbreak, web-based schooling practices were stressed by the different educational stakeholders.

Nevertheless, it was never a whole shift of web-based education or online teaching in the mainstream of higher education, which brought about the start of new difficulties just as favorable circumstances all the while. Following that, teachers were questioned about their experience teaching online classes prior to covid-19. Almost 72.7 % of professors have no prior experience teaching online programs, whereas 27.3 % had prior experience teaching online classes before covid-19. Teachers' infrequently deliver online lectures through video calls or webinars for remote education purposes. This data reveals a significant difference between individuals who have prior experience with online classes and those who do not.

Table 3. Represents teachers' prior experience in teaching online

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	53	27.3	27.3	27.3
	No	141	72.7	72.7	100.0
	Total	194	100.0	100.0	

Prior experience in teaching online: a) Teachers' who have previous experience have good basic skills to operate electronic devices and Learning Management Systems. b) Already feel comfortable and able to design classes, time management of the student learning process, completing the portion. c) Capable of communicating online, both verbally and in writing for example expressing their thoughts and ideas. Without prior experience in teaching online: a) Have basic skills to use electronic devices, for example, Managing files and using browsers. b) Teachers' had a hard time

while taking online classes to students; even it affects the transfer of knowledge to students during the online class. c) Less prepared to design online classes and manage time. d) Find it difficult to communicate through audio/video devices or via text.

Aspects to consider so that lecturers are better equipped for online teaching include utilizing the LMS appropriately and communicating feelings/affections through text or video, all of which are weak points owing to an absence of prior experience with online teaching. Outstanding technical expertise, proficient computer knowledge, communication skills, clarity of expression, emotionally attachment with the students, and other skills needed to deal with the demands of the online platforms, along with the ability to resolve minor issues. Online teaching skills and techniques required to teach through this pandemic have been identified both during and after the online classes.

Following that, teachers were questioned about their familiarity with internet teaching tools. Since 72 % of teachers lack prior teaching experience and are not acquainted with technology-based teaching and learning. Its evidently show lack of expertise in technology. Therefore, the researcher reconnoitered about ICT technological devices or online tools for teaching and learning. Their educational institution may require them to use and understand it when participating in online classes. Because of institutional guidance and support to learn and use the online instructional tool while taking online classes, approximately 49.5 % of teachers are aware of it. Another 29.9 % use Google to learn about the online instructional tool, and the remaining 15.5 % will ask peers for recommendations. A few teachers struggle with learning and implementing ICT advancements for online instruction, and those educators account for approximately 5.2 percent of the total.

Table 4. Teachers' familiarity with online tools for teaching

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	i don't know	10	5.2	5.2	5.2
	i know online teaching tools for teaching	96	49.5	49.5	54.6
	Use to search in Google	58	29.9	29.9	84.5
	i will ask my peers to suggest	30	15.5	15.5	100.0
Total		194	100.0	100.0	

Furthermore, Schmidt et al. (2016) stated that while college teachers frequently instruct as they were educated, they might come up short on an illustration of what viable online teaching involves, notably if they never attended an online course as a student. Therefore, teachers must attend or participate in training programs and courses offered by renowned universities across the globe related to their subject to get more comprehensive knowledge as teaching is a continuous process of learning to boost up and encourage their students to do so. Next, teachers were asked if they had participated in any training programs to teach online or use web/teaching technologies prior to Covid-19. According to the data, nearly 52.1 % of teachers have attended training programs to teach online and use online teaching tools, 30.4 % have not attended any such training program to learn about web teaching tools prior to covid-19, and the remaining 17.5 % have used the trial and error method while teaching online classes to students, which is learning from errors and through experience.

Table 5. Training programme attended to teach via online or to use web /teaching tools prior to covid-19

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	101	52.1	52.1	52.1
	No	59	30.4	30.4	82.5
	Trial & error method	34	17.5	17.5	100.0
Total		194	100.0	100.0	

Teachers were questioned about how much time they spent preparing for online lessons. According to the survey, almost 72.2 % of teachers spend more than an hour preparing for online classes; however, 14.9 % spend less than an hour preparing for online classes; and 6.2 % will not prepare for online classes and will instead use current content to

take classes. When it comes to online classes, however, 6.2 % simply deliver a casual conversation about the topic; there is no prior preparation or PowerPoint slides to help grasp the concepts well. Less than a percent of teachers said it depends upon the content they choose to take.

Table 6. Teachers' were asked the preparation time they take to deliver online classes

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than an hour	29	14.9	14.9	14.9
	More than an hour	140	72.2	72.2	87.1
	It depends on the subject matter	1	.5	.5	87.6
	Simply a casual discussion of the subject	12	6.2	6.2	93.8
	No preparation, using existing material	12	6.2	6.2	100.0
	Total	194	100.0	100.0	

3.2. The challenges

Table 7 displays data on students' participation in online classrooms even though students' involvement in physical classes' contribution in e-learning is incessant, adequate, and intent; it is not the alike as involvement in a physical classroom. Based on data, 62.9 % are attentive and interested in online classes, 20.1 % are not attentive and regular to online classes, nearly 9.8 % are chatting with their peers online, and only 7.2 % are not interested in online classes when compared to their attendance in regular physical classes.

Table 7. Students' involvement in online classes

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Uninterested	14	7.2	7.2	7.2
	Chatting with peers on online	19	9.8	9.8	17.0
	Not attentive	39	20.1	20.1	37.1
	Very attentive and interested	122	62.9	62.9	100.0
	Total	194	100.0	100.0	

In addition to that question, instructors were questioned about their students' attendance when online teaching to the entire class compared to physical classes. Teachers reported that about 51% of pupils attend class on a regular basis, with the remaining 49% attending irregularly or absenteeism in an online teaching session. Consequently, barely half of the class attends online lessons on a regular basis. Furthermore, teachers indicated that as a direct consequence of this, they are unable to accomplish their particular subject portions for assessments. The most important strategies for creating an online classroom were inspiring students, coordinating, mentoring and coaching. Therefore, teachers became more agitated, and the researcher inquired about the obstacles they confront when online teaching, aside from students' attendance and indifferent conduct.

Table 3 Represents codification data summary of teachers' challenges and perspectives while taking online classes. Using codification, this study recorded relevant remarks made by professors. Marking has been used to identify and group replies based on similarities. When a difficulty reoccurred more frequently, more participants voiced similar concerns, boosting this to the lack of proficiency consideration.. Approximately 50% of instructors stated internet access, 32% claimed technical challenges, and because of family members interfering, 7% of online students are not comfortable with the medium of instruction when attending online classes. The regular classroom setup seems to be quite separate from of the home environment, which also reasons students to be unengaged and inattentive, leading to reduced commitment in online classes. The accessibility of technology is a concern including both students and teachers because many students attend classes from diverse socioeconomic backgrounds that are not similar, and the cost of

every device, computer, buying of malware, in today's world, the cost of internet packages, maintenance, and so on has skyrocketed (also cited in Dube, 2020). Poor accessibility seems to have been a barrier for both students and teachers, especially in a country like India. Teachers encounter challenges in developing teaching materials, presenting courses, assessing student progress and involvement, assessing learning, and assisting students in maintaining a level of engagement, all of which necessitates additional time and effort.

Table 8. Difficulties teachers' face while online teaching

Challenges/difficulties	Frequency	Perspective
Internet connectivity (inconsistent internet connection and data charges, problems with internet connectivity disrupt the process of teaching and learning)	50%	Over than a quarter of the respondents thought that online learning disadvantaged less affluent students. Because of the high cost of internet access and data.
Technical issues (teachers had difficulties due to a lack of equipment assistance)	32%	Poor network/signal hinders video classes/conferencing. Inadequate facilities for underprivileged students
Not comfortable with medium of instruction (course delivery and teaching methods, difficulties in delivering lessons, completing portions, relevant content and aligning subject traits)	7%	Teachers acknowledged that online learning necessitated the establishment of innovative teaching skills. Complex to design and describe mathematical formulae and their use, not suitable for lessons demanding laboratory work.
Uninterested students (online teaching is more difficult and time consuming than face-to-face teaching, Switching on the computer and listening to music)	9%	Not that every student is ready for online classes, not listening to the class ¹
Monitoring, interference of family members	2%	It is impossible to cope students in active learning through discussion and debate, and it is difficult to know students are actively involved in the learning process.

After their online teaching experience, teachers were asked which type of classroom setting they preferred. Almost 60.8 % of teachers said face to face/physical classroom teaching, only 12.4 % said online teaching because it saves them time and money, and the remaining 26.8 % said the hybrid teaching and learning method which is a combination of physical classroom teaching and online classes, For instance, physical classroom instruction will be provided three times per week in the classroom, and classes will be delivered online on the remaining days. Traditional teaching method is mostly preferred by the teachers of higher education in India than digital teaching/education as they are not fully equipped or have expertise in modern technologies. Nonetheless, global epidemic contexts and the need for pace decided to make them gain a better understanding of technology-assisted teaching and learning, or virtual education, and that is ubiquitous in Westernized countries.

Table 9. Teachers' preference of classroom environment

		Frequency	Percent	Valid Percent	Cumulative Percent
V Valid	Online teaching	2 4	1 2.4	1 2.4	12.4
	Blended teaching	5 2	2 6.8	2 6.8	39.2

Face to face/ Classroom teaching	8	60.8	6 0.8	00.0
Total	1 94	1 00.0	1 00.0	

Teachers were asked if they administered online tests while providing online instruction during the outbreak. Almost 74% of teachers administer online tests, whereas 26% do not provide online tests during online instruction. Next, teachers were asked what type of online exam they offer to their pupils; over 60 % said they give online quizzes, 31.5 % of teachers' said they give audio/video recorded assignments/tests, and just 8.50 % of teachers' said they give online written test and assignments. Following that, teachers were asked if online teaching and learning are as successful as physical ones. Also, the utility of online learning has had a substantial influence on teaching effectiveness. Some teachers appreciate the positive side of distant learning because of its ease, accessibility, engagement and flexibility, and knowledge growth. Nearly 36.6 % of teachers said it is efficient, pretty much identical to teaching and learning in a physical or formal classroom environment, whereas along almost 36.1 % said it is not efficient like teaching and learning in the physical classroom, and just about 27.3 % of teachers' are neutral about the effectiveness of online teaching and learning when compared to physical classroom teaching and learning.

Table 10. Teaching and learning online is effectively similar to the physical classroom

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	71	36.6	36.6	36.6
	No	70	36.1	36.1	72.7
	Maybe	53	27.3	27.3	100.0
Total		194	100.0	100.0	

The most difficult aspect of online education in general was the inconsistency of network connections. The connection is steadier if the students' videos and audios are turned off, but that manner of teaching appears to teach to a blank wall. Furthermore, it was considered that some of the pupils lacked the necessary resources to participate online, which looked to be further widening the digital gap. Thus, the problems with online education were both technical and discursive. It was discovered that teachers could not read the emotions and feelings of their pupils, making it impossible to adjust the teaching style.

3.3. Discussion

The findings highlight two issues: the teachers' experiences with online teaching during the Covid-19, as well as their lack of knowledge in the online teaching and learning mode—the study's findings highlight two issues: internet connectivity and self-inspection or monitoring. Caliskan et al., (2020) proposed that colleges end up creating a distance learning center to enable teachers with technical aspects. The most often reported concern by teachers has been Internet access. It implies a lack of ICT infrastructure availability. This is congruent with the findings of Nwagwu's (2020) study, which indicated ICT devices accessibility and teachers' perceptions of organizations' inclination to integrate online-learning. Regarding challenges in online teaching, more than half of the class strength students' are very attentive and regular in online classes. Almost more than 50 percent of teachers' struggled with internet connectivity (inconsistent internet connection and data charges, problems with internet connectivity disrupt the teaching and learning process), and they preferred face-to-face interaction or the traditional method teaching than technology incorporated teaching and learning method—some preferred blended learning which could be the best option for teaching during the unprecedented time. Teachers brought a problematic issue: conducting online practical classes during the lockdown period indicated difficult times because it required systematic demonstration of the entire process in the presence of the students. Through a qualitative study, it is found that even though the transition was ongoing, most teaching faculty members continued to use WhatsApp as a means of online educational interaction as it is simple to convey information compared to other technical devices. WhatsApp was used by both students and teachers in their daily lives, and it was also accessible at all times. Furthermore, because of inadequate internet access, teachers relied heavily on WhatsApp instead of uploading and transferring study materials via e-learning management systems.

In the end, teachers said that online training sessions and webinars were helpful for them, in adapting to the newest guidelines for effective online teaching and learning. They were able to exercise their autonomy in various aspects of their teaching, such as conveying information, giving directions during classes, asking questions, and determining how grades should be distributed. Overall, it was evident that the teachers were able to adapt and thrive in the new virtual environment, thanks to the support and resources provided to them. The study's qualitative results shed light on the need to provide students with free access to digital learning materials during the shutdown period. With traditional classroom teachers delving into the world of distance education and online learning, they are on the lookout for free online resources. However, the transition to this new form of education may take some time for them to adjust to. To make the most out of their time during the shutdown, students require access to digital learning materials. It's a challenging time for traditional classroom teachers as they navigate through the complexities of distance education and learning. Despite the search for free online resources, the adjustment to this new form of education may take a while.

Teachers have highlighted various challenges that students have faced while attending online classes. One major issue that needs to be addressed is the inequality gap that exists among students belonging to different socioeconomic backgrounds. This gap is particularly evident among those who reside in remote or underprivileged areas, as they lack access to the necessary resources for online learning. Hence, it is essential to adopt an inclusive pedagogical approach that caters to all students' needs, regardless of their background. By doing so, we can ensure that every student has an equal opportunity to learn and succeed. It's important to have a deep understanding of each student's unique qualities in order to avoid inaccurate findings or results, especially when it comes to online teaching and learning, which is still in its early stages in this country. To ensure that this approach achieves its intended goals, there are a few strategies that can be implemented with ease. One key approach is to incorporate online tutoring with a modest boundary, taking into account the distinct needs and learning styles of each student. By doing so, we can create a more effective learning environment that allows students to flourish and succeed. It's crucial to recognize that online teaching and learning is not a one-size-fits-all solution, and that each student requires a tailored approach to achieve their full potential. By embracing this mindset, we can help students overcome any obstacles they may face and reach their academic goals.

As we move forward, it's important to delve deeper into the terminologies that are relevant to the post-pandemic landscape of higher education. The COVID-19 crisis has brought about a new way of learning, and as such, there are certain concepts that are key to understanding the evolving role of teachers. Specifically, we're seeing a shift from the traditional instructor model to a more mentor-based approach. Exploring these ideas in greater detail will help us gain a better understanding of how education is changing and what this means for students and educators alike. In light of the challenges faced by third-world countries such as technological setbacks, academic inadequacy, and resource scarcity, this study proposes a solution in the form of LMS features (Thomas, 2020). As the pandemic continues to cause unexpected disruptions, higher education systems are facing significant challenges, particularly in poorer countries. It is crucial for teachers to possess both fundamental and technical skills to help students unlock the full potential of technology (Kelley, 2002).

A study has found that a hybrid approach to teaching can effectively enhance student engagement and interaction. This approach involves combining e-learning systems with the flexibility of remote or in-class learning, both inside and outside the classroom (Hentea, Shea, & Pennington, 2003). This idea has been validated by the results of a study conducted by Al-Husban and Shorman in 2020. The notion of cooperative learning has proven to be a successful method for delivering lectures and promoting student engagement. The results of this study offer valuable insights that can guide future endeavors in improving and expanding the use of technology in education. Additionally, it would be worthwhile to explore the students' readiness for independent and blended learning. Educational establishments should prioritize the development and evaluation of instructional design ideas to effectively empower teachers in utilizing technology in the classroom.

To successfully integrate digital tools into the classroom, teachers must be convinced that they cannot do without them. This can be achieved through practice sessions that equip teachers with the necessary skills to incorporate technology into their teaching. Rather than simply showcasing technology during remote training sessions, teachers should be given the opportunity to experiment with it in their own classrooms, with the necessary support provided as needed. Professional development activities in e-learning can be broadly categorized into two areas: creating and sharing content with learners, and effective communication between instructors and learners. By participating in this training, teachers' enthusiasm for learning is strengthened, leading to greater motivation and engagement in the learning process.

4. Conclusion

The study's data sheds light on a crucial realization that has come to the forefront due to the pandemic-induced closure of educational institutions. There has been a greater understanding of the criticality of online teaching-learning modes and the results they yield. The experiences of this mode of teaching have highlighted its necessity, but also the need for proper preparation and utilization of digital tools to ensure a successful outcome. Without proper planning, the entire process can be a harrowing experience for both students and teachers. However, despite its limitations, online education has emerged as a feasible alternative to meet the needs of students and educational institutions during this unprecedented time. This is a testament to the adaptability and resilience of the education sector in the face of a crisis, even though it lacked prior experience with online teaching. There's no denying that online teaching and learning have made significant strides in recent times. However, it remains to be seen how efficiently and effectively these efforts will serve us in the future. It may take some time to fully grasp the true value and potential impact of this new approach to education. That being said, recent research suggests that a blended learning model, which combines both traditional classroom teaching with digital learning, may be the way forward. This approach, also known as hybrid learning, has garnered interest and support from about half of all teachers surveyed. It could be especially beneficial for countries like India, where access to education can be a challenge. Overall, while there is still much to be discovered and explored in the realm of online education, it's clear that hybrid learning has the potential to revolutionize the way we teach and learn.

Blended or hybrid learning is a highly recommended approach that should be implemented in education. This is because e-learning requires a considerable amount of self-study and discipline from students. To ensure that students are provided with the best possible learning experience, teachers should develop and provide high-quality e-resources that can be explored in-depth during online interactive classrooms. With blended or hybrid learning, students can have the best of both worlds. They can learn at their own pace and convenience, while also having the opportunity to participate in live classes with their teachers and peers. This approach allows students to have a more personalized learning experience, where they can focus on areas that they find challenging and work on them with the guidance of their teachers. Furthermore, blended or hybrid learning can help students develop essential skills that are necessary for success in today's world. These skills include self-discipline, time management, and digital literacy. By learning how to navigate online learning platforms and engage in virtual discussions, students can prepare themselves for future careers that require these skills. In conclusion, blended or hybrid learning is an effective approach that can enhance students' learning experiences and prepare them for future success. By providing high-quality e-resources and interactive online classrooms, teachers can create a dynamic and engaging learning environment that fosters student growth and development.

The online lessons are going to be an absolute blast for the students in this context. Additionally, we should strive to integrate teaching methods that blend both physical and online classrooms wherever possible. When it comes to delivering content and instruction, there are a few key things to keep in mind. Firstly, we need to develop non-linear and non-traditional methods for achieving our course content objectives. This will ensure that our students have the best chance of achieving improved learning outcomes. Secondly, we need to create a curriculum that allows our students to develop their core knowledge and learning experiences while also providing them with the opportunity to evaluate analytically. Finally, the best way to effectively incorporate digital learning is to empower our teachers and show them that they can do it all over again with less. By doing this, we can ensure that our students receive the highest quality education possible, regardless of whether they're in a physical or online classroom.

Teachers need proper guidance to effectively integrate technology into their teaching practices, and practice sessions can provide them with the necessary support. These sessions should not just showcase technology, but also provide instructors with the opportunity to experiment with it in their classrooms. This way, they can receive the required assistance and ensure that technology is being used in the right way. Furthermore, government agencies in India should take an active role in providing reliable communication tools, which can positively impact online academic experiences. It is also essential to enhance technology-enabled classroom instruction and learning for students, to address the shortcomings that existed in the education system prior to and after the COVID-19 pandemic. By doing so, we can ensure that students have access to continuous learning opportunities, which are crucial for their growth and development.

References

Alameri, J., Masadeh, R., Hamadallah, E., Ismail, H. B., & Fakhouri, H. N. (2020). Students' Perceptions of E-learning platforms (Moodle, Microsoft Teams and Zoom platforms) in The University of Jordan Education and its Relation

- to self-study and Academic Achievement during COVID-19 pandemic. *Advanced Research and Studies Journal*, 11(5), 21-33.
- Al-Husban, N. A., & Shorman, S. (2020). Perceptions of Syrian Student Refugees towards Blended Learning: Implications for Higher Education Institutions. *International Journal of Emerging Technologies in Learning (IJET)*, 15(1), 45-60.
- Alqahtani, A.Y.; Rajkhan, A.A. (2020). E-learning critical success factors during the covid-19 pandemic: A comprehensive analysis of e-learning managerial perspectives. *Educational Science*, 10, 216.
- Amin, F. M., & Sundari, H. (2020). EFL students' preferences on digital platforms during emergency remote teaching: Video Conference, LMS, or Messenger Application? . *Studies in English Language and Education*, 7(2), 362-378.
- Arasaratnam-Smith, L. A., & Northcote, M. (2017). Community in Online Higher Education: Challenges and Opportunities. *Electronic Journal of e-Learning*, 15(2), 188-198.
- Muhammad, A., Rahman, F., Said, I. M., Hamuddin, B., & Nurchalis, N. F. (2019). A software to increase English learning outcomes: An acceleration model of English as the second language. *The Asian EFL Journal*, 26(6.2), 157.
- Biggs J. (1996). Enhancing teaching through constructive alignment. *Higher Education*. 32, 347–364.
- Caliskan, S, Kurbanov, R, Platonova, R, et al. (2020) Lecturers Views of Online Instructors about Distance Education and Adobe Connect. *International Journal of Emerging Technological Learning* 15, 145–157.
- Claywell, L., Wallace, C., Price, J., Reneau, M., & Carlson, K. (2016). Influence of nursing faculty discussion presence on student learning and satisfaction in online courses. *Nurse educator*, 41(4), 175-179.
- Crawford, J., Butler-Henderson, K., Rudolph, J., Malkawi, B., Glowatz, M., Burton, R., ... & Lam, S. (2020). COVID-19: 20 countries' higher education intra-period digital pedagogy responses. *Journal of Applied Learning & Teaching*, 3(1), 1-20.
- Darius, P. S. H., Gundabattini, E., & Solomon, D. G. (2021). A Survey on the Effectiveness of Online Teaching-Learning Methods for University and College Students. *Journal of The Institution of Engineers (India): Series B*, 1-10. Available at <https://doi.org/10.1007/s40031-021-00581-x>
- Dick, G., Akbulut, A. Y., & Matta, V. (2020). Teaching and learning transformation in the time of the Coronavirus crisis. *Journal of Information Technology Case and Application Research*, 22(4), 243-255.
- Ferdig, R. E., Baumgartner, E., Hartshorne, R., Kaplan-Rakowski, R., & Mouza, C. (Eds.). (2020). Teaching, technology, and teacher education during the COVID-19 pandemic: Stories from the field. *Association for the Advancement of Computing in Education (AACE)*.
- Hanafiah, W., Aswad, M., Sahib, H., Yassi, A. H., & Mousavi, M. S. (2022). The impact of CALL on vocabulary learning, speaking skill, and foreign language speaking anxiety: the case study of Indonesian EFL learners. *Education Research International*, 2022, 1-13.
- Hentea, M., Shea, M. J., & Pennington, L. (2003). A perspective on fulfilling the expectations of distance education. *In Proceedings of the 4th conference on Information technology curriculum* (pp. 160-167).
- Kelley, M., G. (2002) National educational technology standards for teachers, preparing teachers to use technology. *Eugene, OR: International Society for Technology in Education (ISTE)*.
- Mishra, L., Gupta, T., & Shree, A. (2020). Online teaching-learning in higher education during lockdown period of COVID-19 pandemic. *International Journal of Educational Research Open*, 1, 100012.
- Mulder, M. (2014). *Conceptions of professional competence*. In S. Billett, C. Harteis, H. Gruber (Eds). *International Handbook on Research into professional and practice-based learning*. Springer.
- Nwagwu, W.E. (2020). E-learning readiness of universities in Nigeria-what are the opinions of the academic staff of Nigeria's premier university?. *Educational Information Technology*, 25, 1343–1370.
- Pardede, E. (2015). The use of modern pedagogical techniques when introducing information technology students to entrepreneurship. *Teaching in Higher Education*, 20(6), 636-651.

- Pinedo. (2021). *Programa de Capacitación Docente: Tecnologías del Aprendizaje y del Conocimiento—TACs*. Trabajo de Grado. Panamá: Universidad Especializada de las Américas. 2017.
- Rahman, F., & Weda, S. (2018). Students' perceptions in appreciating English literary works through critical comment: A case study at Hasanuddin University and Universitas Negeri Makassar. *Asian EFL Journal*, 20(3), 149-172.
- Reyes-Chua, E., Sibbaluca, B. G., Miranda, R. D., Palmario, G. B., Moreno, R. P., & Solon, J. P. (2020). The status of the implementation of the e-learning classroom in selected higher education institutions in region IV-A amidst the covid-19 crisis. *Journal of Critical Reviews*, 7(11), 253-258. Available at <https://doi.org/10.31838/jcr.07.11.41>
- Schmidt, J. J., Gagnon, G. A., & Jamieson, R. C. (2016). Microalgae growth and phosphorus uptake in wastewater under simulated cold region conditions. *Ecological Engineering*, 95, 588-593.
- Sukmawaty, Rahman, F. F., & Andini, C. (2022). Covid-19 Pandemic and Axiology of Communication: A Study of Linguistic Phenomena. *IJISRT*, 7(4), 1079-1087.
- Sun, A., & Chen, X. (2016). Online education and its effective practice: A research review. *Journal of Information Technology Education*, 15.
- Tallent-Runnels, M. K., Thomas, J.A., Lan, W. Y., Cooper, S. (2006). Teaching Courses Online: A Review of the Research. *Review of Educational Journal*. 76(1), 93-135.
- Thomas, C., J. (2020) Coronavirus and challenging times for education in developing countries April 13. Brookings.
- Wang, C., Cheng, Z., Yue, X. G., & McAleer, M. (2020). Risk management of COVID-19 by universities in China. *Journal of Risk and Financial Management*, 13(2), 36.