

**EFFECTIVENESS OF ONLINE LEARNING DURING THE COVID-19  
PANDEMIC: A COMPARATIVE ANALYSIS OF CLASSROOMS  
BEFORE AND DURING THE PANDEMIC**

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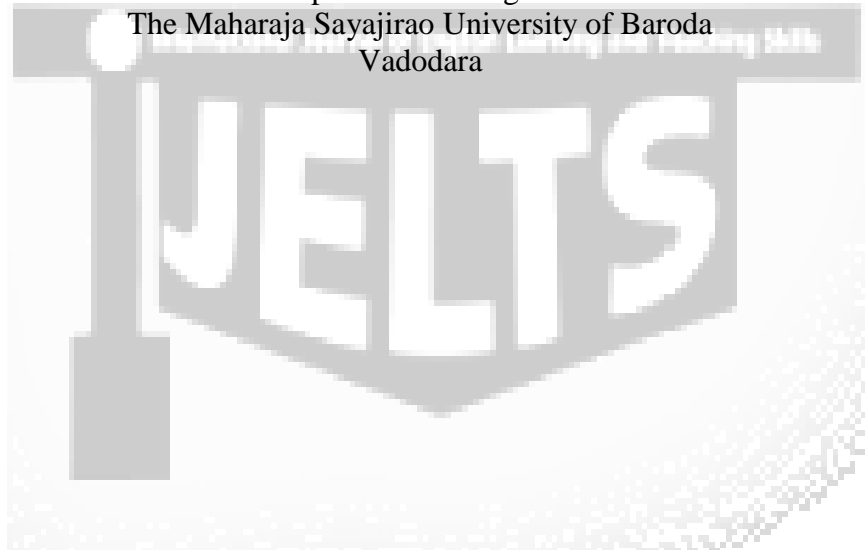
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## Abstract

Technologies are designed to bring about change. ICT that was formerly used only to socialize are now blessings for students, teachers, and all businesses in order to keep their operations running during the global shutdown. The COVID - 19 outbreak disrupts the entire life cycle, making ICT active once more. Researchers are currently doing a comparative investigation of online learning prior to and during COVID. Data was collected from 30 students to learn about their perspectives on how their academic lives changed throughout the pandemic. 25 students responded, and in their opinion, students acquire numerous new internet strategies that allow them continue their studies while in this situation. They confront many obstacles as well, but their valuable time is not wasted as a result of the use of technology in teaching and learning.

**Key Words:** Outbreak, Teaching and learning, Online learning, Traditional learning

## Introduction

A pandemic known as new corona virus, which may have originated in Wuhan (Haugn et al, 2020, Yang 2020), has spread throughout China and around the world (Guan et al, 2020). Over one million people died as a result of the pandemic, with more than 42 million people affected by the end of October 2020. Despite a drop in new cases in China, the virus spread to other regions of the world. It had harmed the world economy (Duan, 2020) and had an impact on human social activities, particularly schooling. In several nations, schools, colleges, and other educational institutions have been forced to close. During the devastating epidemic, many countries banned face-to-face classroom instruction during the early stages of pandemic. This closure affected 146 countries, with students accounting for 67.7% of the world's population. According to UNESCO, about 1500 million students are influenced by COVID-19. School closures affected about 190 nations in mid-April 2020.

Remote learning appears to be the only viable option for schools and universities in reaction to the pandemic situation. And face-to-face classes have been halted since the illness spreads through human contact. Aside from the closure of schools, student assessments, evaluations, and, eventually, examinations for various courses have been cancelled. As time passed, numerous institutes gradually and steadily began to implement online learning. The basic gear required for online learning is a computer, laptop, mobile device, laptop, internet, and Wi-Fi, which poor and underprivileged students cannot afford.

Distance learning must be used due to changes in the learning system. In other words, rather of taking place in schools, teaching and learning activities have relocated to households. As a result, a new idea school from home (SFH) is seen as the best answer because conducting conventional learning demonstrations in school is impractical. As the learning process

became more distant, the Ministry of Education and Culture demanded that online learning be used as an alternate learning medium. Schools, according to the Ministry of Education and Culture, should utilise online learning and give relevant learning experiences to students in order to reduce the strain of meeting all curriculum standards. As a result, School From Home considers the health and safety of students.

Researcher is currently conducting studies to determine the usefulness of online learning during a pandemic. It is also important to assess which tools and resources teachers utilize to offer online learning. From the standpoint of the students, a huge proportion of pupils do not have internet access or have a slow internet connection at home, demonstrating that online learning could exacerbate the situation.

### **Objectives:**

Following are the objectives of the study:

1. To comprehend the impact of online learning on the education system
2. To identify the online learning tools and resources used by academic staff and students.
3. Determine the effectiveness of online learning during and prior to a pandemic.
4. Determine students' attitudes towards the online learning platform used by teachers.

### **Research Methodology:**

The study's main goal is to acquire a better understanding of the online teaching method used during the first year of the COVID - 19 pandemic. As a result, the study was developed as a descriptive study using a qualitative technique. A systematic examination of various literature was also conducted to gain a better understanding of online learning. A self-administered format questionnaire was developed, and data was collected from English department students. It was created using Google Forms and sent by email. A total of 25 students were chosen and mail was sent to them, with 23 responses received. The study's goal is to conduct a comparative examination of online teaching and learning during and before the pandemic, as well as users' perspectives on the technologies and tactics utilized by teachers for teaching.

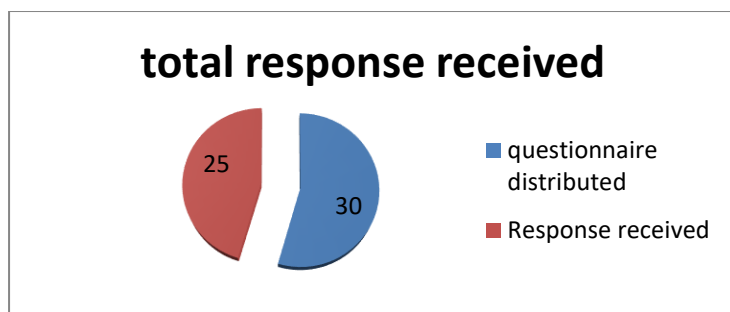
### **Data Analysis**

Questionnaire was distributed among 30 students among them 25 received back.

Table: 1 Total response received

<b>Total response received</b>		
<b>Particular</b>	<b>questionnaire distributed</b>	<b>Response received</b>
Respondents	30	25

Chart: 1 Total response received

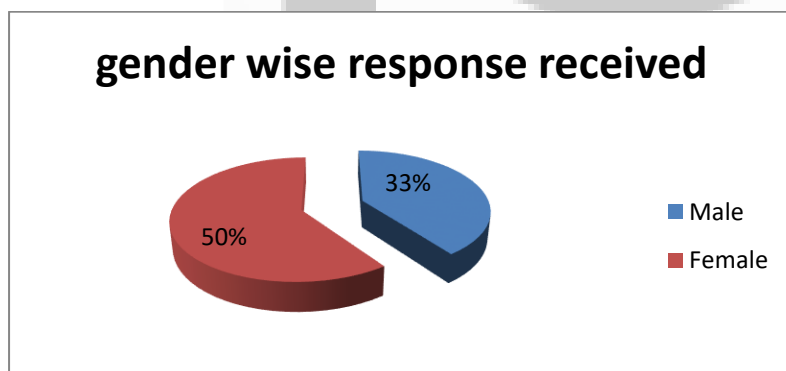


According to the table and figure above, the researcher issued 30 questionnaires, to which 25 students responded.

Table: 2 Gender wise response received

Gender wise Response		
Particular	Male	Female
Respondents	33%	50%

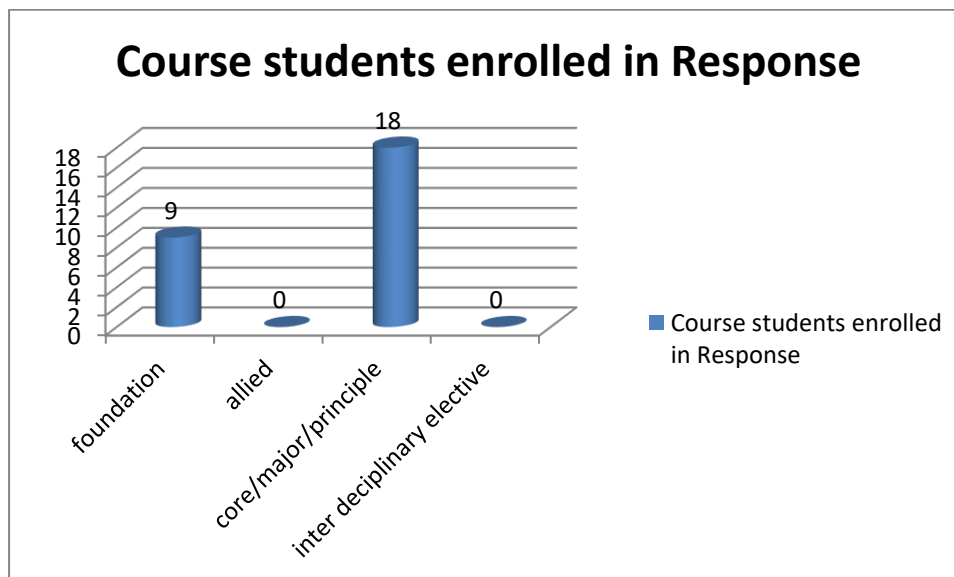
Chart: 2 Gender wise response received



The above table and chart reveal that 50% respondents were female and 33% are male.

**Table: 3** Course students enrolled

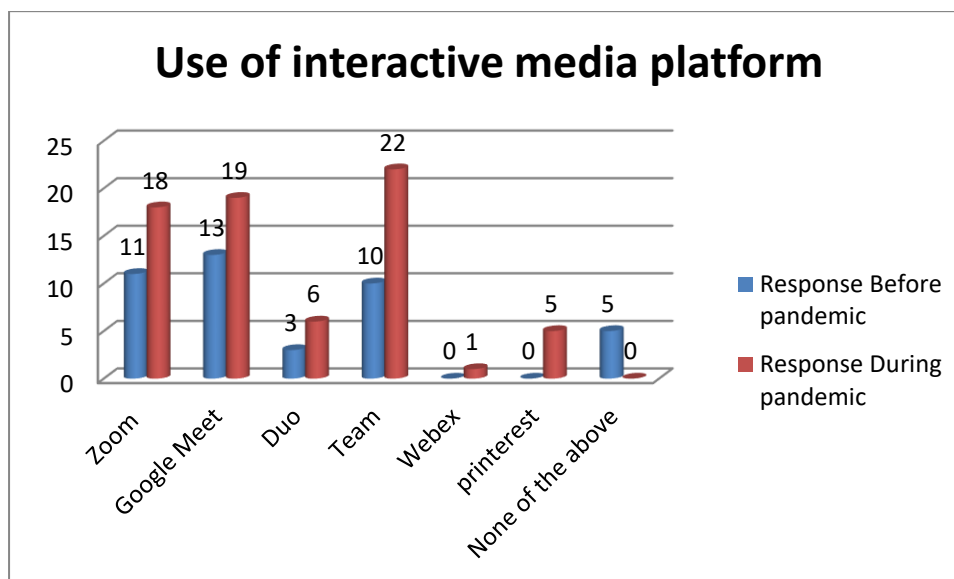
Course students enrolled in	
Particular	Response
foundation	9
allied	0
core/major/principle	18
inter disciplinary elective	0

**Chart: 3** Course students enrolled

The above table and chart reveal that 9 students enrolled with foundation course and 18 enrolled with core/major/principal course.

**Table: 4 Use of interactive media platform for teaching and learning**

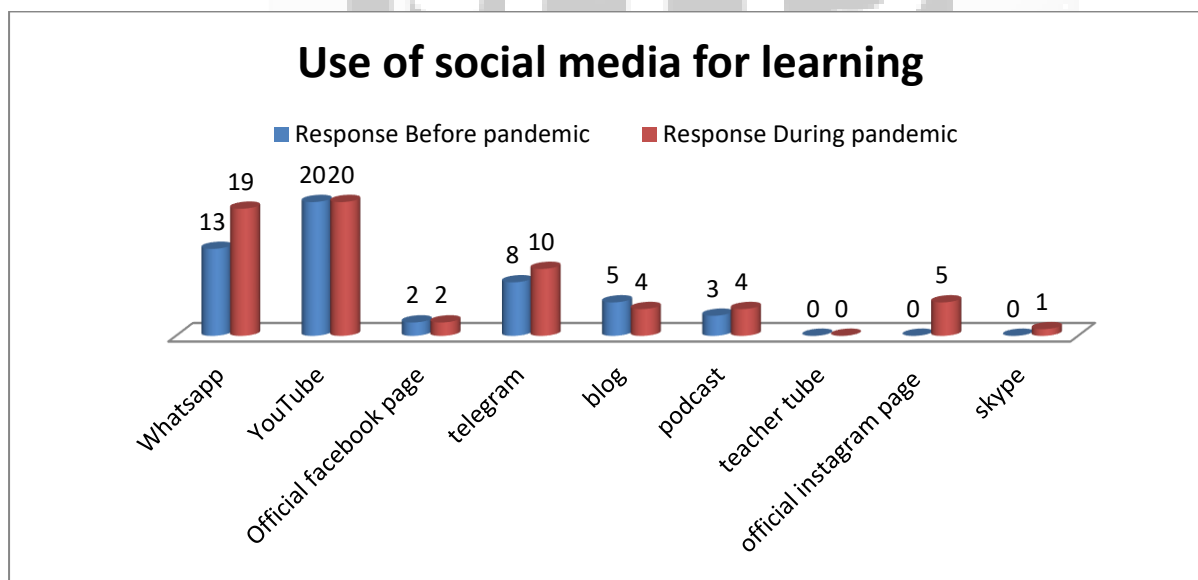
Use of interactive media platform		
Particular	Response	
	Before pandemic	During pandemic
Zoom	11	18
Google Meet	13	19
Duo	3	6
Team	10	22
Webex	0	1
printerest	0	5
None of the above	5	0

**Chart: 4 Use of interactive media platform for teaching and learning**

The above table and chart show that the interactive media platform was used less before the pandemic than it is now. Zoom received 11 responses prior to the epidemic and 18 responses during the outbreak.

**Table: 5 Use of social media platform for learning**

Use of social media for learning		
Particular	Response	
	Before pandemic	During pandemic
WhatsApp	13	19
YouTube	20	20
Official Facebook page	2	2
telegram	8	10
blog	5	4
podcast	3	4
teacher tube	0	0
official Instagram page	0	5
Skype	0	1

**Chart: 5 Use of social media platform for learning**

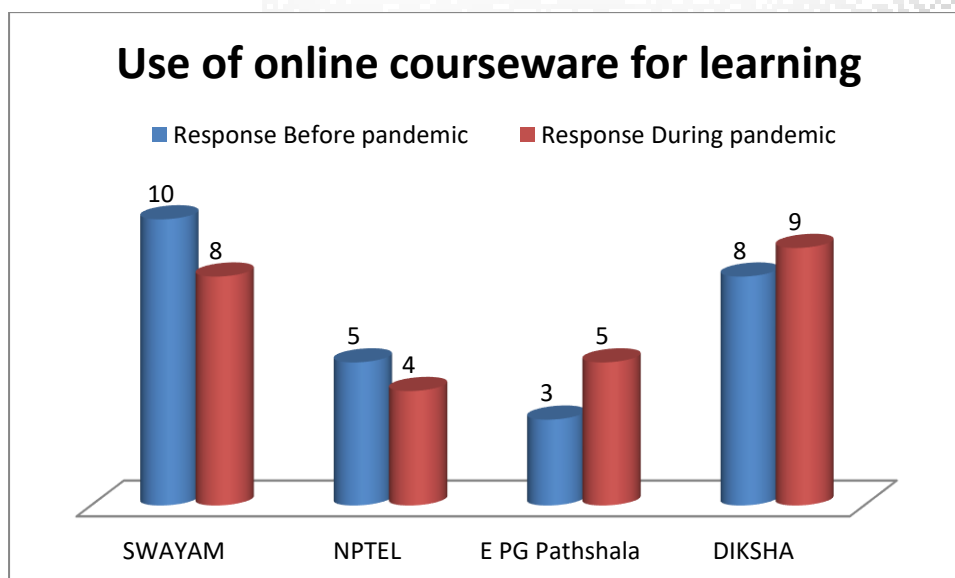
The table and chart above provide a comparison of social media platform usage before and during the pandemic. WhatsApp received 13 responses prior to the epidemic and 19

responses during the outbreak. YouTube received 20 responses for both times, Facebook received 2 responses for both times, telegram received 8 responses before and 10 during the pandemic, blogs received 5 responses before and 4 during the pandemic, podcast received 3 responses before and 4 after the pandemic, teacher tube was not used by students, and the official telegram page received 0 responses before and 5 after the pandemic. Skype was not utilized for studying prior to the epidemic, although one student indicated that it was used during the pandemic.

**Table: 6 Use of online courseware**

use of online courseware for learning		
Particular	Response	
	Before pandemic	During pandemic
SWAYAM	10	8
NPTEL	5	4
E PG Pathshala	3	5
DIKSHA	8	9

**Chart: 6 Use of online courseware**



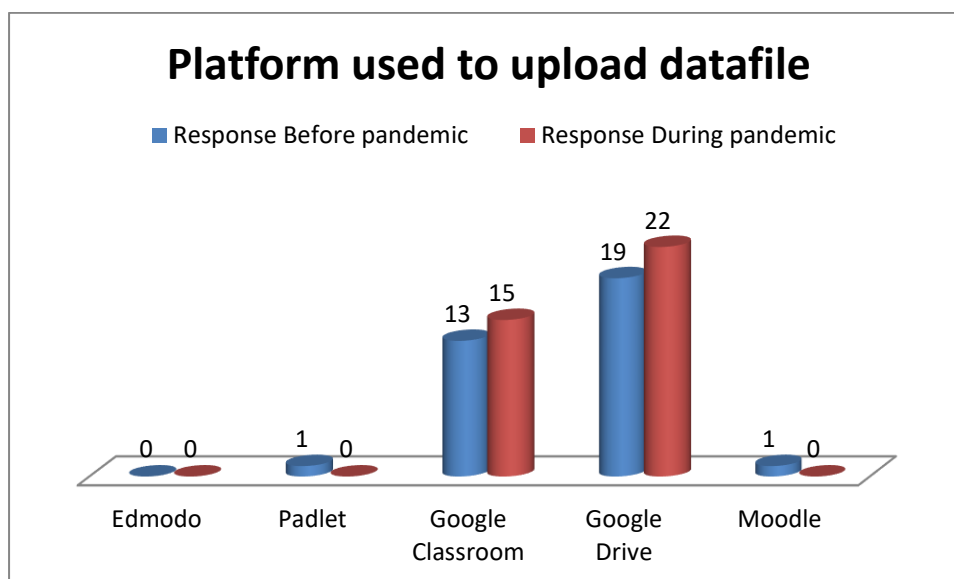


The above table and chart provide a comparative examination of online courseware use, and it was discovered that SWAYAM and NPTEL were utilised more before the pandemic, with SWAYAM receiving 10 responses before and 8 after the pandemic, and NPTEL receiving 5 responses before and 4 after the pandemic. E PG Pathshala received three responses before the epidemic and five during the pandemic, whereas Diksha received eight before and nine after the outbreak.

**Table: 7 Platform used to upload data file**

Platform used to upload datafile		
Particular	Response	
	Before pandemic	During pandemic
Edmodo	0	0
Padlet	1	0
Google Classroom	13	15
Google Drive	19	22
Moodle	1	0

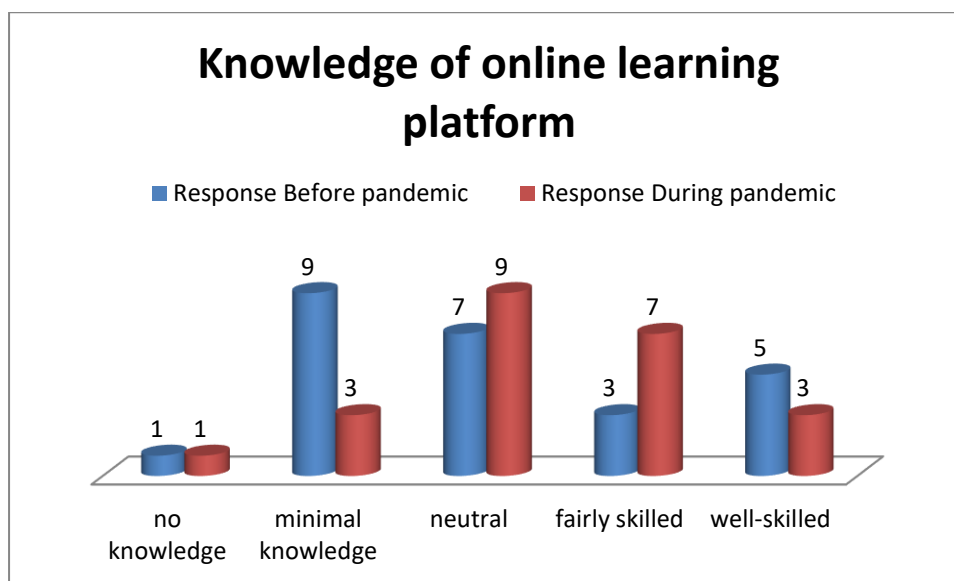
**Chart :7 Platform used to upload data file**



The table and chart above depict a comparative analysis of the platform used by students to upload data files before and during the pandemic. Padlet received 1 response before pandemic and 0 response after pandemic, Google class room was used by 13 students before pandemic and 15 students after pandemic, Google Drive received 19 responses before pandemic and 22 responses after pandemic, and Moodle received 1 response before pandemic and 0 response after pandemic.

**Table: 8 Knowledge of online learning platform**

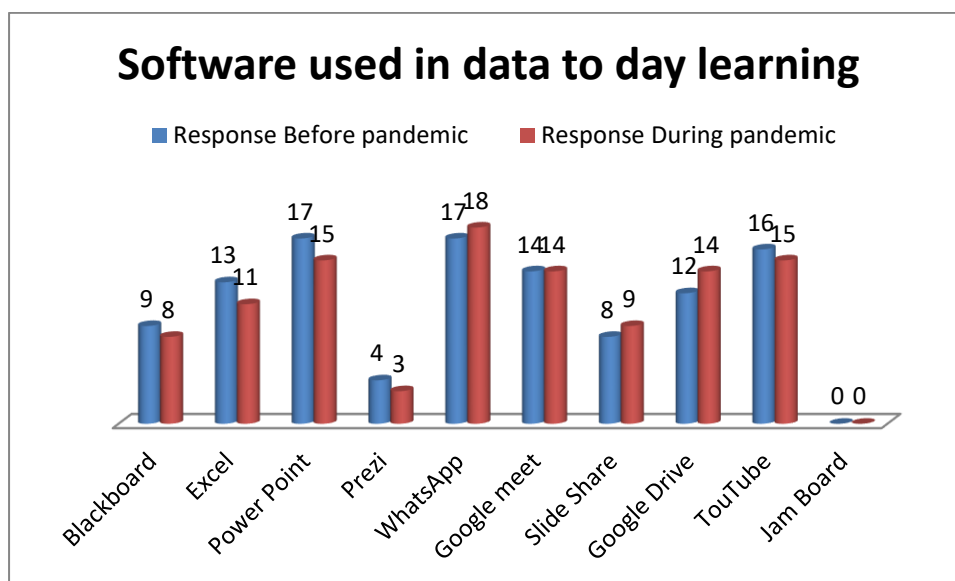
knowledge of online learning platform		
Particular	Response	
	Before pandemic	During pandemic
no knowledge	1	1
minimal knowledge	9	3
neutral	7	9
fairly skilled	3	7
well-skilled	5	3

**Chart: 8 Knowledge of online platform**

The above table and chart reveal that only 1 student did not have any knowledge of online learning platform, minimal knowledge received 9 response for before pandemic and 3 for after pandemic, neutral received 7 response before and 9 after pandemic, fairly skilled received 3 and 7 for before and during pandemic consequently, and well-skilled received 5 for before pandemic and 3 for after pandemic.

**Table: 8 Software used in day-to-day learning**

software used in day-to-day learning experience		
Particular	Response	
	Before pandemic	During pandemic
Blackboard	9	8
Excel	13	11
Power Point	17	15
Prezi	4	3
WhatsApp	17	18
Google meet	14	14
Slide Share	8	9
Google Drive	12	14
YouTube	16	15
Jam Board	0	0

**Chart: 8 Software used in day-to-day learning**

The table and graphic above compare software used for day-to-day learning by students prior to and following the pandemic. It is shown that blackboard received 9 responses before and 8 during the pandemic, excel received 13 responses before and 11 during the pandemic,

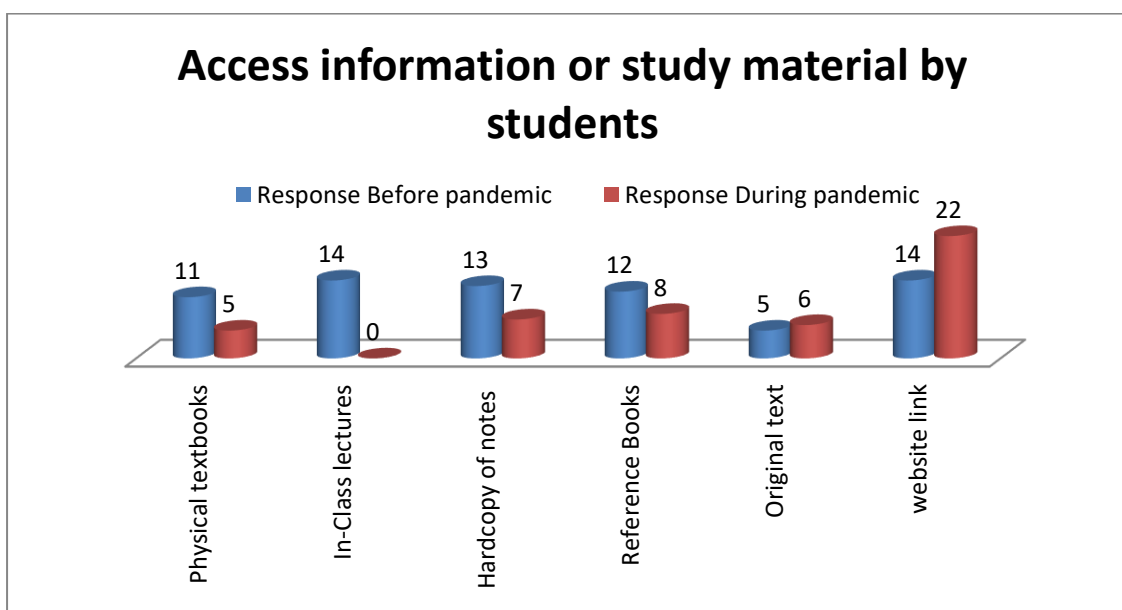
power point received 17 and 15 simultaneously, Prezi received 4 responses before and 3 responses during the pandemic, WhatsApp received 17 responses before and 18 during the pandemic, Google meet received 14 responses for both, SlideShare received 8 responses before and 9 during the pandemic, and google drive received 12 and 14 for both before and during the pandemic.

**Table: 9** Access information and study material given by teachers

Access information or study material given by teacher		
Particular	Response	
	Before pandemic	During pandemic
Physical textbooks	11	5
In-Class lectures	14	0
Hardcopy of notes	13	7
Reference Books	12	8
Original text	5	6
website link	14	22

**Chart: 9** Access to information and study material given by teachers

### Finding and conclusion:



According to the above table and chart, 11 students used physical books before the epidemic, and 5 students used them during the pandemic; 14 students access information or study material in class lectures, and 0 during the pandemic. Hardcopy notes are used by 13 students before the epidemic, and 7 students respond to it during the pandemic; 12 students

use reference books before the pandemic, and 8 use them during the pandemic; 5 use original text before the pandemic, and 6 use it during the pandemic; and 14 use website links before the pandemic, and 22 use it during the pandemic.

Outbreak COVID - 19 digitalizes the globe. Every traditional work has been transferred into the digital realm. No matter if someone is unfamiliar with the digital worlds or does not own a digital gadget, everyone must adapt to technology in order to exist. The current researcher compares the situation of academics before and during the pandemic. It was discovered that interactive media platforms were used more frequently during the pandemic, as it was necessary to use the internet platform for teaching and learning owing to the lockdown scenario. Teachers most commonly utilize Microsoft team, Zoom, and Google Meet.

During a pandemic, social media platforms such as WhatsApp, Telegram, and YouTube are also more widely used. Online courseware such as SWAYAM, DIKSHA, E - PG Pathshala, and NPTEL were also used by students. The majority of students uploaded their homework and assignment materials to Google Drive and Google Classroom. Students' understanding of online learning platforms grew as it became mandatory for them to study using the internet and a computer. During a pandemic, the use of software such as Excel, PowerPoint, WhatsApp, Google Meet, Google Drive, and YouTube increases. During the COVID - 19 epidemic, students who used physical books, hard copies of books, and reference materials are now using website links.

As a result, the researcher concludes that the information communication and technology, social media, and numerous online software and online courseware that are not utilized properly by living beings have begun to use these platforms fairly. Previously, these platforms were largely used for socializing with peers, friends, and families, but now they are used to receive information and are blessings for living beings because they can survive with the help of these platforms. Whether for business or education, online technology is being used and becoming a tool to go forward in our lives during a pandemic crisis.

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