E-Learning Practices During Covid-19 in MDU, Rohtak, Haryana: A Case Study

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The entire world has gone through tremendous transformation due to the COVID -19 Pandemic in the previous year particularly. The educational institutions were no more an exception; rather they accepted the challenge and started delivering through online mode completely in the previous years. Therefore, the researchers intend to read and analyze the effectiveness of various e-learning methods followed during this period by Department of Library & Information Science (DLIS), Maharshi Dayanand University Rohtak to provide uninterrupted LIS education from the student's point of view. This is further focused to know the platforms utilized, issues faced by the students (including the students from rural part of Haryana) and their expectations and satisfaction level about on-line education.

Keywords: *E-learning, Covid-19, LIS Education, Online Learning Expectations.*

1 INTRODUCTION

A virus originated from Wuhan, China in December 2020[1], soon became the deadliest virus worldwide spreading itself to many countries rather than continents of the world. It has changed the society in such a way that the mankind saw a complete lockdown of its own nature in various countries in the history of mankind making the "stay home stay safe" slogan most relevant. In India too, the government put a complete shutdown forall movement including schools, universities, and other educational institutions too for an undefined period[2]. In such a scenario the educational institutions were at the

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forefront to hear the unprecedented changes going throughout the world by making use of e-learning platforms so as to avoid huge loss of the students[3]. In addition to that everyone became familiar with e-banking, e-business, e-trading, etc. and e-learning is not a new concept after the last year of lockdown[4]. This became boon for higher education throughout the world. Therefore, the Government also initiated many e-learning programs for continuing undisrupted education in higher education institutions of the country by providing access to e-resources at home[5]. However, it is also true that planning and implementing successful e-learning pedagogy was a big challenge in our country due to huge digital divide. Therefore, many educational apps were tried by different institutions to offer free access to live classes. Some of them are as given below:

Table 1:E-learning Platforms

Video Conferencing Tools		
Online video conferencing tools	**Origin Date**	**Developer**
Skype	2003	Microsoft Corporation, eBay
Zoom	2013	Zoom video communication
Google Classroom	2014	Google
Google Meet	2017	Google
Umang	2017	Government of India
Diksha	2017	MHRD
Online learning Platforms		
Coursera	2012	Andrew Ng, Daphne Koller
edX	2012	Harvard University
Byju's	2011	Byju Raveendran,Divya Gokulnath
Unacademy	2015	Gaurav munjal,Roman Saini, Hemesh Saini
Vedantu	2011	Vamsi Krishna,Pulkit Jain,Saurabh Saxena,Anand Prakash

Content Based Platforms		
NROER(National Repository ofOpenEducational Resources)	2013	CIET,NCERT
Swayam	2017	Ministry of Education
Shodhganga	2009	Inflibnet
epg.inflibnet.ac.in	2015	Ministry of Human Resource Development
swayamprabha.gov.in	2017	Ministry of Human Resource Development
National Digital Library of India	2006	Ministry of Human Resource Development

2   E-LEARNING

Now the question arises what this e-learningis? It's a system that is based on formalized teaching with the help of electronic resources[6].Arkorful and Abaidoodefined"e-learning is using information and communication technologies for enabling access to online teaching and learning resources". Further E-learning is a such type of tool that has been used for teaching and learning[7]. And over a period of time this has become an essential part of higher education. Even in our country, the government is trying to make Massive Open Online Courses(MOOC) enabled countries. Where hundreds of universities, companies, and not-for-profit organizations have launched MOOC along with other e-learning platforms and MOOC also offered entirely free services.MOOC run by Swayam,Coursera, Future Learn, and EDx[8-9].

It includes web-based learning and computer-based learning . The content is provided via Internet, videotape, CDROM, satellite TV which can also be considered as e-learning. E-learning has different synonyms terms like Computer-based training (CBT),Web-based training (WBT), etc[10]. Therefore, we can say that e-learning is simply web-based training, which means we don't need to install any type of software on computers. We need an Internet connection and web browser to easily watch, listen and learn each lesson on desktop[11,4].

3   OBJECTIVES

- To know about e- learning status during lockdown of Department of Library & Information Science, MDU Rohtak;
- To know the various applications utilized for e- learning in the selected institutions during pandemic period i.e., 2021-22;

- To understand and highlight the various issues faced by students;
- To find out the Perceptions, Problems and expectations of the selected students.

4   LITERATURE REVIEW

Many Studies have been published in the literature since pandemic started on e-learning even prior tocovid-19 too. But for the purpose of this paper selected literature primarily for last five years which highlights different models that provides the basic framework to understand the student's perception regarding on-line education have been taken into consideration.

Hendal[1] discussed the perception of Kuwait University faculty regarding e-learning during pandemicusing an online survey and the findings of study shows that most of the faculty members used electronic resources for their research work and many nonusers of e-resources are curious about knowing how to learn and use these resources. Balaron[11] discussed the knowledge, attitude and different strategies adopted by the students in this lockdown period and concluded that students are adopting these changes and enjoying them. The findings revealed students and faculty understand the situation and cooperate with the government guidelines. Mazadir, Rubina & Govind[4] discovered the issues of students related to e-learning and through their work we understand the concept of e-learning from both sides i.e. students and as well as faculty. The study also conducted in two stages i.e. interview and the second is an online interview. The findings are helpful for university students across the country where online classes have been initiated. Ozili[5]examined the socio-economic impact of COVID-19 in Africa and discusses the policy formed in African countries. These policies suggest the pathway for the future if any type of problem comes. The findings show that the effect of corona virus pandemic is more there compared to other countries. Shenoy, Mahendra & Vijay[2]described the technology adoption, teaching, and learning process during COVID 19. A qualitative research method was used for data collection from the faculty associated with higher education institutions in Bangalore. The findings show that during lockdown they adopted new technologies for teaching and students are learning different courses with the help of e-learning. The work shows the positives side of lockdown in the context of education. Mohammadi, N., et al showed the application of e-learning process and compared it with the traditional form of language learning and discussing these advantages and disadvantages of e-learning in language learning. The present paper is going to show the role of e-learning in COVID -19 crises. Raad & Amirullah Khan[3], showed the impact of e-learning in the lockdown and discuss the role of technology in this period. The findingsshow that staying home is one of the best options in this period and it also shows

the role of e-learning with the help of various apps like zoom etc. Anderson, J.[12] explained how information technology changed our life, focused on the importance of e-learning and how it combined pedagogy and technology. The researcher concluded by outlining why E-learning is important for teacher and student development. Singh[6] traced the journey of e-learning in LIS education, discusses the concept of open and distance learning, highlights the different and multi-channel delivery modes adopted by different universities and institutions. Khan[9] reveals the perception of students regarding the e-learning systems through aquantitative approach and presented 184 university students responses got through online questionnaire. The findings focused on the increasing of e-learning quality for better learning of students during covid-19.
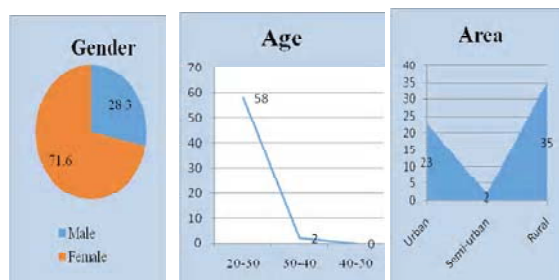
5 RESERACH METHODOLOGY

For conducting this study quantitative data was collected from the users'through questionnaire method. The questionnaire contains demographic information, awareness about different methods and platforms and perceptions of students regarding e-learning facilities provided by their institutions during Pandemic time. To get the perception of students a five-point scale ranging from *1-5(where 5= Strongly Agree, 4=Agree, 3=Neutral, 2=Disagree 1= Strongly Disagree)* was used to get the level of their agreement on certain statements. The total population consists of 79 students of DLIS, MDU (Rohtak) whoattended online classes during the last one year(March 2020-2021). Out of these total 79 studentsonly 60 students replied back and thus analysis given in the subsequent sections is based on these 60 responses.
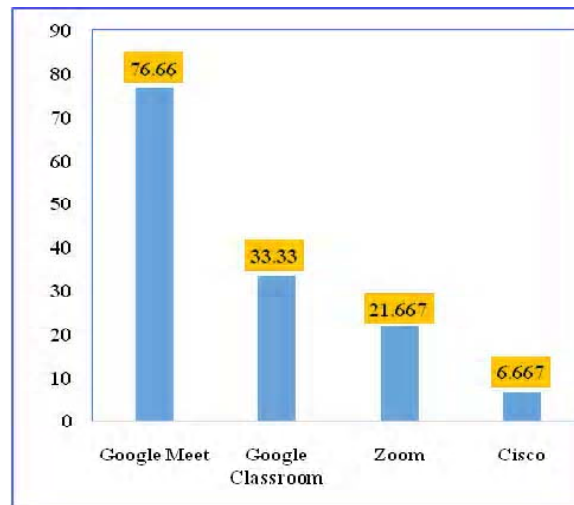
6 DATA ANALYSIS

Figure 1 depicts the personal information of the respondents classified on the basis of their gender, age group, area of the respondents. It is revealed from the analysis that there is a big difference between *Male* 28.3% and *Female* 71.6% respondents. Majority 96.6%of them fall under 20-30 age group, i.e. 50 out of total 60, followed by 10 (3.4%)who are falling into the age group of 30-40. Among the total (60) population majorityof students come from *Rural* (35) area.

Figure 1: Demographic Profile ofUsers

7   ONLINE PLATFORMS

This section indicates that mixed responses were received from the students'about the online platform utilized for on-line education. It was found that majority of the students, i.e, 76.7%stated that their university asked them to get connected using *Google Meet* followed by33.3% students'responded that their preferred mode remained *Google Classroom*. Out of 60, only 13 (21.7%) respondents' have responded the utilization of *Zoom*for e-learning during Pandemic. Very least number of users' i.e, 6.7% marked *Cisco Webex* was also used for some time.So it can be inferred upon from the analysis that despite many other on-line platforms for e-learning were available and listed during the time by the faculty. However, *Google Meet* remained the most utilized platform for the e-learning during pandemic.
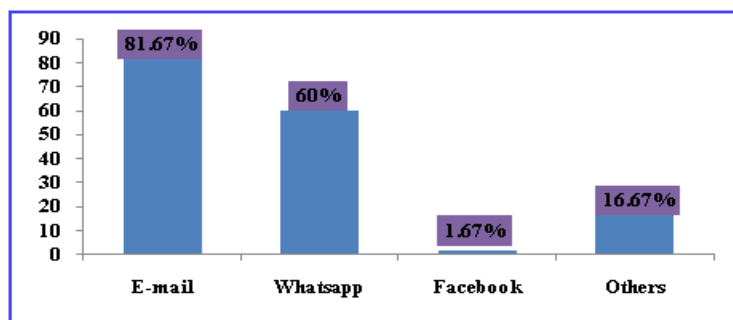

Table: 1 Platformfor Online Classes

Platforms	Total Responses	%
Google Meet	46	76.7
Google Classroom	20	33.3
Zoom	13	21.7
Cisco Webex	4	6.7
* **Multiple platforms are used by the respondents**		

8   METHODS USED FOR SHARING DOCUMENTS

The responses regarding the methods utilized for delivering the content to the students, e-mail remained the most utilized method as endorsed by 81.67% students'followed by 60% students'who stated that their university provides content using WhatsApp Platforms. It was further asked from the students to specify the other methods of information sharing for which student marked others but they did not specify the particular one under other.
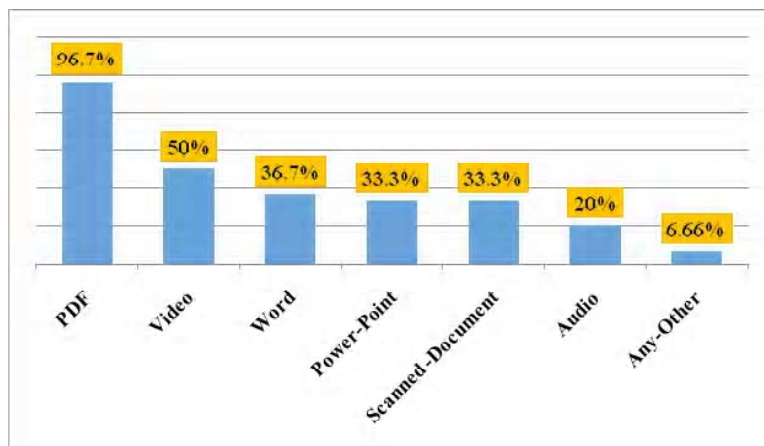
Table 2: Methods for Sharing Document

Methods	Users	Percentage
E-mail	49	81.67
WhatsApp	36	60
Facebook	1	1.67
Others	10	16.67
* **Multiple Methods are used by the University**		

9   DOCUMENTS FORMAT USED BY THE RESPONDENTS

Table 3 as given below indicates that the96.7%out of total 60 respondents said that the *PDF* format was preferably used by their university in comparison to other file formats. The second most preferred format remained *Video* format as endorsed by 50%users is highly used to share the content after *PDF* format. In this string the next preferable level is *Power-Point*33.3% which was also utilized by the university.

Table3: Format of Document

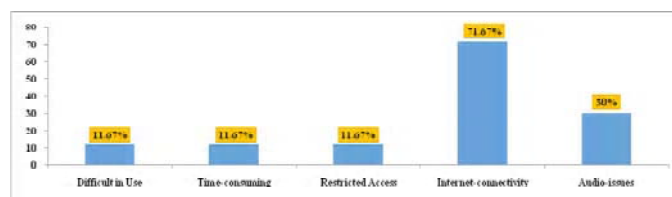| Format	Users	%
DF	58	96.7
Word	22	36.7
PowerPoint	20	33.3
Video	30	50
Scanned-document	20	33.3
Audio	12	20
Any Other	4	6.66
*Multiple Formats are used by the University		

10 PROBLEMS FACED BY STUDENTS

To know the problems faced by the students, questions were asked from the students and the results as received are given in Table 4, the analysis indicates Internet-connectivity remained one of the major problems faced by 48.3% (i.e, 43 out of 60) students. Mostly this problem is faced by those students who belong to rural areas due to bad network connectivity in the villages. This was followed by 11.67% (7) of students who said connecting with class in online environment was Time-Consuming and they were feeling little Difficulty in use issues during on-line classes. Very least number of users 3.3% students faces hurdles like Audio issues etc.

Table 4: Problems Facedby Students

Problems	Response	%
Internet- connectivity	43	48.3
Restricted Access	7	11.67
Difficultyin use	7	11.67
Audio issues	18	3.3
Time Consuming	7	11.67
*Multiple problemsfaced by the respondents		

11   BENEFITS OF E-LEARNING

The respondents believe the most valuable aspect about the benefits of e-learning majority users feels '*Recorded Lectures can be easily shared and repeated*' is easier with a mean value of 4.1 (on a five point scale) has a deviation of 1.22 from the mean score followed by '*Traditional teaching method is more students centric*' and '*E-learning is compatible with your lifestyle*' with mean scores 3.95 (SD=1.3) and 3.87 (SD=1.11) respectively. It is observed that the most valuable (have the higher mean score) benefits of e-learning has the least deviations from the mean score. The least preferred statement regarding the use of e-learning was '*Scared from online classes due to privacy issues*' with mean value 2.78 (SD=1.42).

Table 6: Benefits of E-Learning

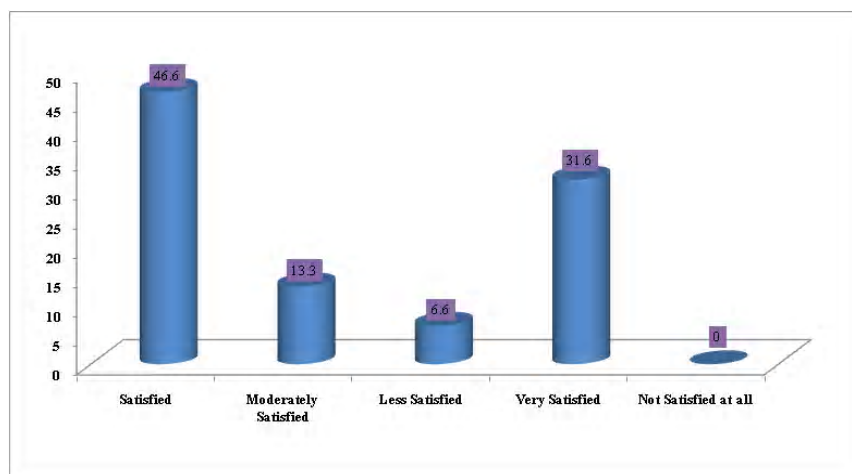| E-Learning	SD (%)	D(%)	N(%)	A(%)	SA(%)	Mean	Std.D
E-learning is compatible with your lifestyle	2 (3.3)	6(10)	11(18.3)	20(33.3)	21(35)	3.87	1.11
Lack of comfort with technology	9(15)	12(20)	14(23.3)	11(18.3)	14(23.3)	3.15	1.39
E-learning enables you to learn more efficiently than trad learning	9(15)	9(15)	15(25)	12(20)	15(25)	3.25	1.39
Online classes covered all aspects of the syllabus	5(8.3)	11(18.3)	14(23.3)	15(25)	15(25)	3.4	1.28
Traditional teaching method is more students centric	2(3.3)	9(15)	7(11.6)	11(18.3)	31(51.6)	3.95	1.3
Level of comfort with this method of teaching learning	3(5)	11(18.3)	15(25)	15(25)	16(26.6)	3.5	1.21
You are fully aware about the free resources provided by your university/Institution	1(1.6)	9(15)	12(20)	19(31.6)	19(31.6)	3.77	1.11

Proper training is required to use the online platforms	1(1.6	9(15)	16(23.6)	10(16.6)	24(40)	3.78	1.18
Individual student attention is possible in online learning	3(5)	17(28.3)	11(18.3)	11(18.3)	18(30)	3.4	1.32
Recorded lectures can be easily shared and repeated	3(5)	5(8.3)	8(13.3)	11(18.3)	33(55)	4.1	1.22
Feeling confident in online learning	3(5)	5(8.3)	17(28.3)	17(28.3)	18(30)	3.7	1.14
Scared from online classes due to privacy issues	16(26.6)	10(16.6)	14(23.3)	11(18.3)	9(15)	2.78	1.42
E-learning is decreasing your personality development level	6(10)	7(11.6)	16(26.6)	15(25)	16(26.6)	3.47	1.28

12 SATISFACTION LEVEL OF STUDENTS

Student assessment is the prominent method of the evaluation process in the education system. Various techniques are being adopted to understand the student's learning capacity. The online way of learning is a prompt method that was highly acceptable during pandemic time. Table 7 shows the level of *satisfaction* of students about online lectures during COVID Pandemic. This is also endorsed by the majority of the students, i.e., 78.2 % (46.6+31.6) marking online education as satisfactory or very satisfactory. They asserted that it is more convenient and aptitude-based. Whereas only 6.6% of them are *less satisfied* with the online classes due to various reasons like

Table 7: Satisfaction Level of Students

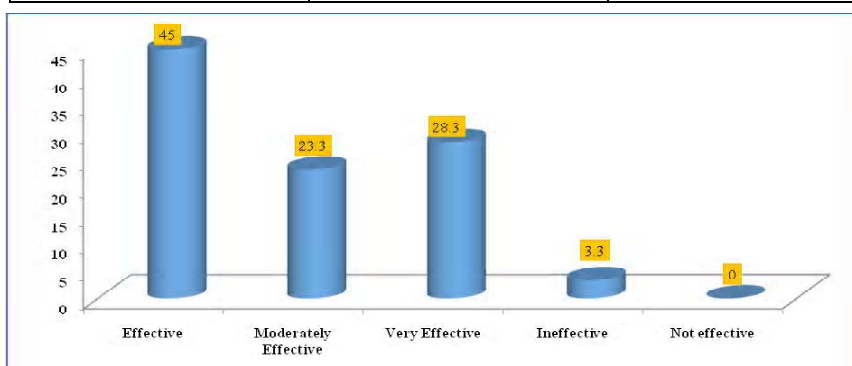| Satisfaction level with the online Classes	Total Response	Percentage
Satisfied	28	46.6
Moderately Satisfied	8	13.3
Very Satisfied	19	31.6
Less Satisfied	4	6.66
Not Satisfied at all	1	1.66
Total	**60**	**100**

EFFECTIVENESS LEVEL

Table 8 shows the effectiveness level of online classes. Analysis on this clearly shows one side swiped responses as 46.66 % are saying this as effective, moderately or very effective. Whereas this has been marked as less effective with only by 3.3% and none has marked as Not effective.

Table 8: Effectiveness Level

University level	Total Response	Percentage
Effective	27	45
Moderately effective	14	23.3
Very effective	17	28.3
Not Effective	0	0
Ineffective	2	3.3
Total	60	100

13 CONCLUSION

E-learning has made its special identity in the pandemic period and it remained a boon for students of schools and higher education institutions worldwide during this period. Therefore, this study was focused on the perception of students regarding e-learning at the Department of Library and Information Science, Maharshi Dayanand University, Rohtak to understand their problems. This was an effort to explore the different aspects of e-learning. Google Meet remained the most used platform for students during online Classes. However, Internet-connectivity, privacy issues, audio issues, time-consumption were reported as the hindrance in the way of effective e-learning but still including the 35% population as rural population it is yet marked as effective method of teaching by more than 96% of the students. Therefore, universities may focus to enhance the quality of on-line education to bring out the better results. As this study shows a useful picture of students' perception regarding online classes. However, successful implementation of online learning resources into the curriculum requires a well-thought-out strategy and a more active approach by the government at various levels.

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