

A STUDY ON THE IMPACT OF ONLINE TEACHING ON TEACHING LEARNING PROCESS DURING COVID-19

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ABSTRACT

The whole world is facing challenges posed by COVID-19. However, the humans have strongly and successfully dealt with them. Like all other sectors, the education sector has also suffered a lot. The timely use of information technology as an intervention has smoothened the process of education. The advanced online platforms that are available now have played a vital role in conducting online classes across the globe. This mode of education has provided all the facilities required by a learner. This paper tries to investigate the impact of this online teaching on the overall education of the students under the BPUT forum. The data have been collected through a questionnaire. The responses so obtained have been analyzed using SPSS-21. The research revealed that the learner community is quite happy. The most important outcome of the research has been the revelation that the students have faced difficulty in learning the problem-based subjects as compared to the theory-based subjects.

Keywords: Online education, Pandemic,

Introduction

When the line, “What an Idea Sir Ji”, from the advertisement of Idea Telecommunication Services, was first aired, emphasizing distance learning using mobile network, nobody would have thought that it would become the best mode of teaching and learning in the year 2020. The whole world was forced to remain indoors due to the outbreak of Pandemic: COVID-19. Severe damage was done to the economics of all the countries in the world. This pandemic has also put forward a great challenge on the execution of the academic program in all the countries. Being a vital component of society, the education could have never been compromised at any cost (Levin, 2014). Therefore, the information technology came forward to provide solution to this problem (Nadikattu, 2020). Both government and non-government efforts have been made to provide support to the students so that the teaching and learning process is not hampered.

Information technology was included as a part of education along with the introduction of computers. At the initial stage, it was only confined to making the class more interactive and smart. The learning community was happy with it along with physical mode of education. But the physical mode of education got hampered due to this COVID-19, so did the associated CBT/ICT mode (Lorente et al., 2020). As soon as the education was struck by the prolonged lockdown, the

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pioneers in the field of IT developed support system to impart education in the online mode (Sukla, 2020). Various IT based application proved as a boon for the education system to continue.

All is well in a society where nobody is deprived of any kind of development. In the same context, if we look into the conditions of the students of a country like India, an obvious question arises whether all the categories of students are getting the benefits of the online education (Sukla, 2020)? Therefore, the online education is an area of investigation on two aspects: (i) how much effective is the online education regarding covering all categories of students and (ii) what is the effectiveness of the online teaching for imparting quality education to those who have access. (Baig, 2011).

Literature Review

As discussed earlier, our country got into the lockdown from the middle of the March 2020. The teaching learning process transformed from physical mode to the online mode such as online class, webinars, online workshops, conferences etc. (Dhawan, 2020). Even the evaluation and assessment of the learning has to be done in an online platform. The institute as well as the faculties started to provide material and support that were required for the online education which included PDF, PPT, video classes on the subject matter, online library access etc. The learning could happen at the convenience of the learner with ample scope of interaction with the instructor (Singh & Thurman, 2019). The online mode of education helped the students in understanding the teaching in a clear and easy manner if step by step instructions were provided by the teacher. The online mode of education has been considered as the best mode of self-learning (Bajaj & Sharma, 2018).

In this process the government agencies as well as the non-government agencies have contributed immensely for the widespread accessibility and availability of the online education process. Various platforms such as NPTEL, SWAYAM, Udacity, Coursera, Edx and many more (Aithal & Aithal, 2016). With this existing online educational platforms some advanced meeting platforms boomed up during this COVID-19 to facilitate the classroom coaching. ZOOM, WebEx, Google Meet and Google Classroom and many more local virtual meeting platforms got the popularity during this period (Saha, 2020).

Despite all these facilities, there have been issues regarding the strategy of implementing the online education platform effectively (Nuraini et al., 2020). There has also been issue regarding the smooth running of the platforms on various devices due to power shortage, telecom network issues, lack of mobile or personal computers in various regions of country (Kunwar et al., 2020).

Objectives of the Study

To carry out the study the following objectives were taken:

- I. To evaluate the status of the online education adopted in management education under the BPUT.
- II. To access the effectiveness of online education in management education.

Research Method

This paper follows exploratory research methods to achieve its objective. For this purpose, a structured questionnaire was administered among the various stakeholders of the management education under BPUT. The questionnaire was responded by 308 numbers of respondents. The responses so collected were processed and analyzed using the SPSS-21 software. The statistical tools used were descriptive statistics, chi-square analysis and regression analysis.

Data Analysis

The data collected from the 308 respondents has been processed by using statistical software SPSS - 21. The results of the test have been presented below.

Table-1: Frequency distribution of the demographic profile.

Designation		Frequency	Percent	Valid Percent	Cumulative Percent
	Faculty	40	13.0	13.0	13.0
	Student	268	87.0	87.0	100.0
Age group	20-25 years	231	75.0	75.0	75.0
	17-20 years	26	8.4	8.4	83.4
	25-30 years	19	6.2	6.2	89.6
	30-40 years	13	4.2	4.2	93.8
	40 above	19	6.2	6.2	100.0
Qualification	Intermediate	9	2.9	2.9	2.9
	Graduation	119	38.6	38.6	41.6
	Post-graduation	117	38.0	38.0	79.5
	Professional	63	20.5	20.5	100.0
Stream	Arts	33	10.7	10.7	10.7
	Science	32	10.4	10.4	21.1
	Commerce	238	77.3	77.3	98.4
	Engineering	5	1.6	1.6	100.0
How much data	1GB	173	56.2	56.2	56.2

you consume daily?	2GB	120	39.0	39.0	95.1
	3GB	15	4.9	4.9	100.0
Your trainer/institution uses platform suitable for you.	Yes	282	91.6	91.6	91.6
	No	26	8.4	8.4	100.0

Source: Primary data.

Table-1 reveals various demographic characteristics of the respondents. The frequency distribution of faculty and students is 13% and 87% respectively. The age group reveals that the majority of respondents (about 83%) belong to the age group of 20-25 years. In the qualification it is observed that most of them belong to the post graduate category (79.5%). The educational background of the respondents revealed that maximum of them belong to the commerce stream. The qualification and the academic background of the respondents reveal the fact that most of them who are pursuing management degree have B. Com at their graduation. Regarding the data usage, it is found that most of them 56% of respondents are using 1GB data daily followed by 39% using 2GB data per day. Further, 91.6% of the respondents believe that their institute provides an online platform which is very much suitable for their teaching learning process.

Table- 2: Ranking of Various Online Platforms for Education

Rank	Webex	ZOOM	SKYPE	MEET	G SUIT	WHATSAPP
1	72	106	61	105	59	99
2	113	77	79	62	109	71
3	48	62	62	80	60	79
4	39	35	34	40	32	36
5	30	12	50	9	36	16
6	4	8	22	2	8	1
7	2	8		10	4	6
Total	308	308	308	308	308	308

Source: Authors own calculation

Table-2 represents the ranks given by the respondents to various online teaching learning platform. The questions were asked separately so the ranks are given separately. As depicted from the above table it is clear that the ZOOM app is very popular among the respondents by getting highest No-1 Rank followed by Google MEET. MEET is giving a high completion to the ZOOM app.

Table-3: Descriptive Statistics of Technical Aspects

Sl. No.	Variables	N	Mean	Std. Deviation
1	What type of learning management system is used by your institute?	308	1.79	.406
2	The online platform provides enough time for the class	308	1.22	.413
3	The audio and video quality of classes are very clear.	308	3.30	1.022
4	Online classes are more convenient than the physical classes	308	2.37	1.062
5	Clarity of teaching has increased in the online classes	308	2.91	1.119
6	Both audio and video deliberation of online class has helped you to understand the lesson in better way	308	3.11	.974

Source: Authors own calculation

Table-3 represents the descriptive statistics of the technical aspects of the online classes. The variable 1 has a mean value of 1.79 indicates that the platform used for the online class have all the features that are required for a systematic academic management system. The variable number 2 as represented in above table were administered to the respondents with two option “yes” or “no”, therefore the mean value of 1.22 reflects that the respondents are more inclined towards “NO”. which means that the time allowed in online class are not sufficient for proper understanding. Variable 3,4,5 and 6 has been measured with a 5 point Likert scale. With the man value of above three we may conclude that the audio and video qualities of the online class has been very effective. But the regarding the convenient of the online class and teaching quality in online classes, the respondents are not satisfied.

Table-4: Descriptive Statistics of impact on Education

Sl. No.		N	Mean	Std. Deviation
1	You get enough opportunity to get your doubt cleared	308	3.16	1.181
2	The theoretical papers are better understood in online platform	308	3.07	1.082
3	The numerical/problem bases papers are better understood in online platform.	308	2.36	1.099
4	The assignments are better administered to you in an improved way.	308	3.27	1.012

5	The evaluation process in the online process is better than offline mode.	308	3.01	1.215
6	The classes on the online platform has improved your skill level	308	2.93	1.085
7	The overall teaching learning process has improved due to online mode of teaching.	308	3.18	1.095

Source: Authors own calculation

The responses regarding the impact of the online education were collected by using a 5 point Likert Scale. In this scale the mean value was 3. Any variable having a mean value more than 3 would indicate a high impact and below 3 would represent low impact.

It is observed from Table-4 that the online classes have high impact on matters like: understanding is better in online classes, specifically the theoretical papers are bettered understood, the evaluation process and the assignment administration is better done in online mode. The respondents have face difficulty while understanding the numerical / practical problems. The overall level of satisfaction is very good.

Table-5 : Model Summary of Regression Equation

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.648 ^a	.420	.418	.55520	2.145
a. Predictors: (Constant), Technical Score					
b. Dependent Variable: Impact on education					

Source: Authors own calculation

The regression technique was used to study the impact of the online mode of teaching and learning on the education of the respondents. The results of the test have been presented in Table-5.

It is observed from the above table that the R square value is 0.42 which indicates that the online mode of learning affects the education of the respondents to the extent of 42%. This means that the online mode of teaching and learning is having a moderate impact on the education of the MBA graduates.

The validity of the above model has been sustained in Table-6. The p-value of the ABOVA test is 0.000 which indicates that the model is highly significant. In other words, the independent variables are capable of explaining the variations in the dependent variable.

Table-6: ANOVA results of Regression equation

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	68.326	1	68.326	221.658	.000 ^b
	Residual	94.325	306	.308		
	Total	162.651	307			
a. Dependent Variable: Impact on education						
b. Predictors: (Constant), Technical Score						

Source: Authors own calculation

Table-7: Coefficients of Regression equation

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.871	.146		5.954	.000
	Technical Score	.868	.058	.648	14.888	.000
a. Dependent Variable: Impact on education						

Source: Authors own calculation

Again it is clear from the results published in the table-7 that the independent variable technical factors of the online education are significant enough to influence the dependent variable impact on the education.

Conclusions

The essence of everything lies in its effective implementation. Although the online platform came forward to provide a solution to the standstill education process, still it is required to assess the effectiveness of the online teaching mode in imparting the education to the target mass. This paper investigated into the effectiveness of the online education based on the responses obtained from the students of the MBA under BPUT. A thorough analysis has revealed that there is an overall satisfaction level among the students. The only problem faced by the students was regarding understanding the problem-based papers. It has also been revealed from the analysis that the online mode of teaching influences the education to the extent of 42%. It is very clear from this result that there are so many other factors which also affect the online education. This may be taken for further research.

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