

A STUDY OF ROLE OF TEACHERS IN E-LEARNING DURING PANDEMIC SITUATION IN RURAL AREA, WITH REFERENCE TO BHIWANDI TALUKA



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Introduction:

Like all other sectors, education also affect more due to this pandemic situation. But nothing is permanent, in this dynamic world, so how can such situation freeze the life or activities of the human being who is defame for his concurring nature.

In country like India yet internet access at remote or backward region is very slow though it is 4G. For them it is like a day dream. India's maximum population are from lower middle income group. Paying for buy technology and instrument was far reach to them.

Current prime minister's proactive drive for digital India played crucial role in rural, remote and backward region, in spreading awareness of using technology for various receipt from benefits of government, payments online during demonetisation period, and allied activities.

In spite of these use of android mobile was restricted to youth and adults while school children were abandoned from its use.

Objectives:

- 1) To study the role of teachers in using E-learning platform.
- 2) To know preference for continuance of mode of teaching whether online or offline in future.

- 3) To know which app/ platform is user friendly to conduct online lecturers.
- 4) To see in between male and female professors level of willingness to shift to online platform also familiarity of software
- 5) To understand level of knowledge about online teaching, before and after pandemic.
- 6) To get suggestions regarding other options which could use either.

Research Problem:

This research study has consider the role and view of senior colleges teachers in Bhiwandi Taluka, regarding unexpected shift from traditional offline teaching method to unfamiliar or non-habitual online method with various app. As in senior colleges various streams are running under one roof, which facilitate to collect versatile data from faculties of different fraternity.

Hypothesis:

- i. There is no significant difference in the level of willingness to shift to online platform across gender and age group.
- ii. There is no significant difference in the level of familiarity of software across gender.
- iii. There is no significant difference in the

level of willingness to shift to online platform across age groups.

- iv. There is no significant difference in the preference for mode of teaching across gender.
- v. Online teaching method suitable to all subjects across streams.

Sample frame and sampling:

Data collected from senior college professors in Bhiwandi. All the colleges are taking online lecturers through various app but with limited teachers. So population of this research is senior college professors which are actually involved in online teaching in Bhiwandi Taluka, rural

region. Among them we take 104 sample respondents through reference method of non-probability method of sampling.

Data collection technique:

Data collected from primary sources such as schedule questionnaire which include different forms of questions such as two way, open ended, likert scale. To extract personal details of respondents demographic questions also include. To get creative suggestion and also to know their enthusiasm towards changes, open ended questions were inserted. Questionnaire prepare in Google form and to collect data specifically from those teachers who are actually involved in online teaching, send it personally through their Whatsapp contact. And also request them to share to those who are in their contact. Thus snow ball or referral method of non-probability method of sample collecting were used.

Data analysis techniques:

SPSS Statistical Software used for data

Analysis. Statistical Techniques used through SPSS are Frequency Tabulation, Descriptive Statistics, Independent Sample t-Test, One way ANOVA, Chi-square test and Paired T-Test.

Literature Review:

(Urdan & Weggen, 2000), mentioned in this research study that Online Learning and Teaching Online learning method used for web-based training, e-learning, distributed learning, Internet-based learning, web-based instruction, cyber learning, virtual learning, or net-based learning. Further extended that Online learning is a subset of distance education and embraces a wide set of technology applications and learning processes including, computer-based learning, web-based learning, virtual classrooms, and digital collaborations.

(Keengwe & Kidd ,2010), stated that Online learning is focused not only on the online contexts, but also includes a full range of computer based learning platforms and delivery methods, genres, formats and media such as multimedia, educational programming, simulations, games and the use of new media on fixed and mobile platforms across all discipline areas.

Campbell (2004) argues that the emphasis of online learning in higher education settings is on the development of metacognitive as well as reflective and collaborative learning.

Goodwin, D., Hua, L. V., & Hayes, J. R. (2014), concluded in their research such as Blended learning may be an effective way to achieve goal. Blended learning involves blending the classroom activities with online activities. In a comparative study by Dabbagh and Nanna

Ritland (2005) examined the differences between traditional and online learning environments and argued that traditional learning environments are (a) bound by location and presence of instructor and student, (b) presented in real time, (c) controlled by an instructor and (d) are linear in teaching methods. Also mentioned that since the 1960s, online learning has dramatically changed affecting small and corporate business, private and public education, the training sector, and the military in different ways.

Nelson and Thompson (2005) cited barriers to online teaching practices like faculty time, rewards, workload, lack of administrative support, cost, course quality, student contact, and equipment concerns. Faculty regarded teaching online as more difficult than teaching traditional courses (Gerlich, 2005) as well as complain that online delivery were more labor intensive because of the amount of time required to grade papers and respond to questions (Lao, & Gonzales, 2005; Wegmann, & McCauley, 2008; Sellani & Harrington, 2002).

Data Analysis and Result:

Frequency tabulation done to know how many male and female teachers from various age group and from different stream are responded.

It found that 58 male and 46 female teachers are responded across age group. More responses from Arts and Science Stream across gender.

Gender: * Age: Crosstabulation

Count		Age:				Total
		25 to 35	36 to 45	46 to 55	56 and above	
Gender	Male	12	26	16	4	58
	Female	22	6	12	6	46
	Total	34	32	28	10	104

Gender: * Stream: Crosstabulation

Count		Stream:					Total
		Commerce	Arts	Science	IT	Self-learned	
Gender	Male	8	35	18	2	0	63
	Female	8	6	12	6	8	40
	Total	16	41	30	8	8	103

Descriptive Statistics result shows that the level of willingness is high but confidence level for using technology is comparatively more high.

	Mean	Std Deviation
Willingness	2.79	.983
Confidence	3.13	1.115
Familiarity of software	3.00	1.166

H0: There is no significant difference in the level of willingness to shift to online platform across gender.

H1: There is significant difference in the level of willingness to shift to online platform across gender.

To test 1st hypothesis regarding willingness across gender, Independent sample t test apply and by comparing mean of male and female, it was found that there is not much difference in mean value but female are little more willing to shift online than male faculties.

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
willing to shift to online learning	Male	58	2.59	1.044	.137
	Female	46	2.96	.868	.128

P value Sig(2 tailed) shows .056 which is higher than .05. So null hypothesis is accepted. Therefore we conclude that there is no significant difference in the level of willingness to shift to online platform across gender. Male Professor as well as female professor are willing to shift online teaching method.

H0: There is no significant difference in the level of familiarity of software across gender.

H2: There is significant difference in the

level of familiarity of software across gender.

To test 1st hypothesis regarding willingness across gender, Independent sample t test apply and by comparing mean of male and female, it was found that there is not much difference in mean value which is .07, shows that both male and female faculties are equal familiarity of software. P value Sig(2 tailed) shows .737 which is higher than .05. So null hypothesis is accepted. Therefore we concluded that there is no significant difference in the level of familiarity of software across gender. Male and female both are familiar with software.

	Gender	N	Mean	Std. Deviation	Std. Error Mean
[a] Familiarity with software	Male	50	3.03	1.228	.361
	Female	46	2.95	1.095	.361

H0: There is no significant difference in the level of willingness to shift to online platform across age groups.

H3: There is significant difference in the level of willingness to shift to online platform across age groups.

To study 3rd hypothesis one way ANOVA test apply and it found that Sig value is .020 which is lower than P value, so Null hypothesis is rejected. It conclude that there is significant difference in the level of willingness to shift to online platform across age groups.

ANOVA Q.1 How willing were you to shift to online learning environment?

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	9.284	3	3.095	3.430	.020
Within Groups	90.216	100	.902		
Total	99.500	103			

Age: * Q.1 How willing were you to shift to online learning environment?

Crosstabulation

	Q.1 How willing were you to shift to online learning environment?					Total
	Not at all willing	Least Willing	Somewhat willing	Highly willing	Extremely willing	
25 to 35	2	4	16	10	2	34
36 to 45	6	4	20	2	0	32
46 to 55	8	6	12	4	0	28
56 and above	2	2	4	2	0	10
Total	18	16	52	18	2	104

To know willingness in detail age group wise cross tabulation done. From that it seen that 2 responses from age group 25 to35 are extremely willing and zero from other age group. From other age category most of respondents showed somewhat willing to shift online.

H0: There is no significant difference in the preference for mode of teaching across gender.

H4: There is significant difference in the preference for mode of teaching across gender.

To test 4th hypothesis, Chi-Square test apply, it was found from the result of Pearson chi-Square that Sig. Value of P is .224 which is higher than .05. So H0 accepted. Thus it is concluded that there is no significant difference in expected and observed frequencies for online and offline

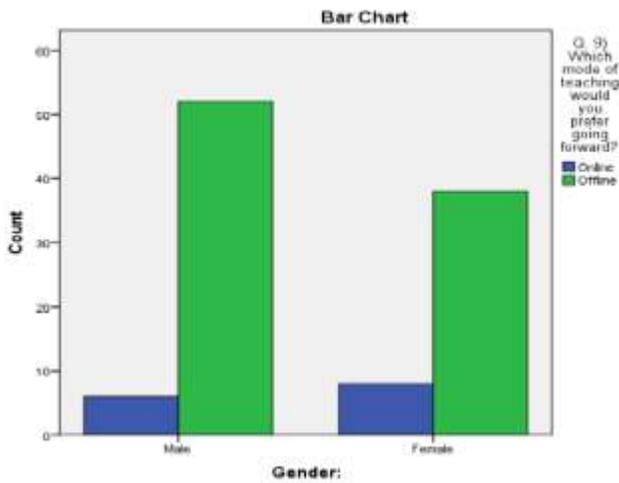
mode of teaching across gender. Both male and female professor are giving preference to offline mode of teaching.

Gender: * Q. 9) Which mode of teaching would you prefer going forward?

		Q. 9) Which mode of teaching would you prefer going forward?		
		Online	Offline	Total
Gender: Male	Count	6	52	58
	Expected Count	7.8	50.2	58.0
Female	Count	8	38	46
	Expected Count	6.2	39.8	46.0
Total	Count	14	90	104
	Expected Count	14.0	90.0	104.0

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	1.053 ^a	1	.256		
Continuity Correction ^b	.572	1	.449		
Likelihood Ratio	1.068	1	.257		
Fisher's Exact Test				.388	.234
Linear-by-Linear Association	1.063	1	.258		
N of Valid Cases	104				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.19. b. Computed only for a 2x2 table



H0: Online teaching method suitable to all subjects across streams.

H5: Online teaching method suitable to certain subjects across streams.

To test 5th hypothesis, ANOVA test apply, it was found that P value is .040 which is lower than .05. So H0 rejected. Thus it is concluded that online teaching method suitable to certain subjects across stream. To know exact stream, Post Hoc test carried and found that IT, Self-funded Course and Law stream, it is best formfitting compare to other stream.

ANOVA

Q. 11) Please indicate whether online teaching method is best fitted to your subject.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.149	5	.430	2.428	.040
Within Groups	17.351	98	.177		
Total	19.500	103			

In responding the question of options to online teaching various suggestion have received, such as 30% online and 70% offline, teaching subjects like maths and accounts found difficult, teachers must provide training, Take weekly online activities which creates the Activeness in students, Online teaching will

never work properly, because students don't attend and moreover it's difficult to connect with the student, We should continue same but college should make some investment and need to be buying paid version of this applications so it becomes more easy and comfortable, There has to be proper team and surveillance system to monitor the students and teachers. Some accepted that during such emergency online teaching is the only option as it saves the students from academic loss.

Q. 2 Which platform do you prefer to conduct online lecturers?



Most of the respondents say 71.2% are using Google meet for online teaching, 25% Zoom app and 3.8% are using Cisco Webex.

Conclusions:

Online teaching is not the new concept. It's practising since 1960's for industrial training as well as distance education and since then onwards revolution taking place due to advancement of technology. Now it extended to our tradition education pattern due to sudden attack of Pandemic Covid-19.

From the analysis it was found that there was no sex discrimination in technology or online teaching method adaption both Male and female professors having willingness to shift online with confidence and well familiar with

software due to habitual of social media also got demo through YouTube videos.

Since years to years, Indian people who developed habit of personal touch or face to face interaction, prefer offline mode of teaching. After the covid-19 situation, for future mode of teaching respondent shows preference to offline, across different age group and stream. This mindset may be due to, they have adopted online teaching mode just for pandemic situation.

Limitations of the study:

1. The study was outcome of pandemic situation, so it is situation bound.
2. This study covers after covid-19 pandemic period.
3. Due to short period not possible to cover all colleges in Thane
4. This study is restricted to Bhiwandi rural area college teacher only in Thane District.
5. Due to restriction of social distance, data collected through Google form questionnaire.
6. The result of this study are as per responses get from the respondents which are on assumption that responses are fair and factual.

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