

A STUDY ON THE EFFECTIVENESS OF ONLINE TEACHING - TEACHER'S PERSPECTIVES

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Abstract: Covid 19 has transformed life across the world in a manner never imagined before, with massive implications on all realms of life, forever. Life, Living and Learning shall never be the same again. Apart from the various uncertainties that have unfolded upon us, the most important is the future of learning and education. Education as a process of Evolution has been adapting to various dynamics such as Technology, Skill development, Smart generation of students, National orientation and Social impact among others. However, the sudden impact of social distancing, has redefined the process of Teaching, Learning and the experience of institutional education. The Students have been quick to adapt to the new media and are experiencing the initial joy of discovery. However, the Teachers have been compelled to integrate a mechanism that generally was considered as distractive for younger generation and learning. This paper aims to understand the teacher's initial experience and perceptions regarding online teaching and their faith in the effectiveness of their efforts. The study involves the teachers of Graduate studies under the University of Bangalore, belonging to Government, Aided and Private Institutions, with over 16 parameters under consideration.

Key Word: Online Teaching, Graduate Studies, Technology integration.

Introduction

Education is a process of continuous, comprehensive, coordinated and a conscious evolution for the three primary elements of learning, namely the Student, the Teacher and the Subject. This is reflected in their interaction with the other stake holders, thus leading to the transformation of Society and civilization. The process of institutionalized learning has been developing with times, with the introduction of globalised content, curriculum, evaluation and expected outcomes. But the most important measure has been the integration of technology as a medium and measure of learning.

The students have naturally adapted to the 'smart' way of learning, the teachers have been cautious in their approach. The management have found this to be a new way of branding. However, it has been found that the existence or adoption of technology in education does not automatically translate into their acceptance. They are influenced by the ease of use, appropriateness of the medium, supporting facilities and infrastructure, apart from the willingness to unlearn the traditional methods of instruction.

The perception that technology has made the role of teacher subservient, with the teacher

becoming nothing more than a presenter and service provider being compensated for the efforts is gaining currency. The nobility associated with being a guide and a mentor has been threatened. The efforts to build discipline, character, integrity based on the teacher's moral standing is being challenged. The increasing use of Technology has depersonalized the process of learning and denied the teachers of their pivotal position. In a country like India, where the teachers perceive an exploited term of engagement, this loss of prestige to technology, may be quite disheartening.

The understanding of how the online teaching of tech-savvy students In a wired classroom with virtual books and visual supplements impacts student behavior and student perceptions of instructional quality, is primarily the result of Teachers' perception about their own effectiveness and efficiency. Even though the current scenario has denied us the opportunity to choose the media of teaching and interaction, the sudden transformation to virtual learning has thrown up issues of concern varying in magnitude.

A Gradual adoption of technology as a supplement would have provided time for natural evolution for the stake holders. However, the present scenario has affected the teaching fraternity and infrastructure facilities in ways unexpected and uncertain. There are elements of education such as the amount of time of study, the quantity/quality of notes, students' attendance and interaction, etc. may appear to be technology neutral. In fact, there are numerous positive impacts such as effect on student preparation, participation and learning due to technology integration.

There are innumerable advantages of technology in learning are the potential for immense resources, creativity, enhancement of teacher's credibility, convenience of learning, skill enhancement and above all else opportunities at self learning. However, this is countered by the distraction, physical strains, disengagement with the human and emotional element, issues related to privacy and security and loss of discretion in the selection of source and information.

Studies indicate that nearly 60% of children with technological addiction or dependence may be suffering from myopia due to computer vision syndrome. (Brandon Gaille, 2018). There have been also indications for the loss of judgments regarding time and resource management due to the flood of information and global influence.

The challenges take on a new dimension when we consider the profile of the young adults, termed as millennials. Extremely confident and goal oriented, their beliefs and values are focused on the present and materialistic aspirations. Low on tolerance and ability for hard work, liberal parenting has made them susceptible to stress and anxiety. Low on efforts and

high on expectations, their confidence borders on entitlement.

Having been used to a life of comforts, their global outlook and ambition is disconnected from the realities of their own ecology. Spoilt by the abundance of choice, they are subject to an intense experience of time famine. Intensely independent and averse to authority, the most significant skill lag among the millennials has been found to be team work and disagreeability, due to the perception of being adequately informed and intolerance for the theoretical knowledge.

Thus, the study wishes to explore the transition to online learning from the teacher's perspective in the context of technology, subject, infrastructure facilities, branding of the institution, management support and the disciplinary and learning issues of students.

Objectives of the Study

- Effect of the nature of Institution such as, Government, Aided and Private colleges on the perception of effectiveness.
- Effect of Experience, Academic Qualification and subjects taught on the effectiveness of online teaching
- Effect of Online teaching on Attention, Interaction and discipline among students.
- The Availability of Technology infrastructure and Management support for the adoption of the new normal.
- The Enhancement of the Brand of the institution and the Learning ability of the teachers,
- The Future of Online Teaching and the fulfillment of the purpose of education.
- The Most preferred media of Online teaching being adopted by the teachers.

Research Methodology

- **Study Area** – The research was carried out for the teachers of undergraduate courses in Bangalore city.
- **Population of the Study** – the study was carried out to understand the teacher's perspective on online teaching- learning process. The scope of the study is confined to the teachers of under graduate commerce and management program. Hence, the respondent were all the teachers engaging online classes for undergraduate courses
- **Sampling unit** – The individuals teaching theory as well as practical courses and working in various institutions were considered as sampling unit for the study.
- **Sample size**–The researcher has used “**Cochran formula**” for calculation of sample size calculation. This formula was most appropriate as continuous scale (5 point rating scale) was used for data collection.
- Formula used for calculation of Sample Size is as below

$$n = \frac{(z)^2 \times (s)^2}{(d)^2}$$
$$n = \frac{(1.96)^2 \times (1.25)^2}{(0.25)^2}$$
$$n = 96.04 = 96$$

Where,

n = Sample Size

z = critical value of z for given confidence level (alpha)

s = estimate of standard deviation

d = acceptable margin of error

The minimum sample size for the study was 96. But the researchers collected data from 151 respondents which further helped in reducing the sampling errors in the study.

• **Sampling Technique**

Probability sampling method was used to select the sample units from the population. The sampling technique applied as stratified simple random sampling. The population was segmented (stratified) based on the type of institutions they work with namely private unaided, private aided and government colleges. This stratification helped the researchers to assess the perceptual differential among teachers working with different work environment. After stratification, the sample units were chosen randomly for the data collection.

• **Data Collection**

Primary data for the study was collected using the structured questionnaire method. The questionnaire was administered using google form to the respondents. Various platforms were used to connect with the respondents such email, WhatsApp and LinkedIn.

• **Data Analysis & hypotheses testing**

The data analysed with statistical tools such as mean, standard deviation. Ranking of mean was taken to find out the relative effectiveness of various online teaching platforms.

Hypotheses were tested with chi-square test and ANOVA. Chi-square test of independence was carried out to test whether perceptions about challenges faced during online teaching depend on type of institution and experience of the teacher. ANOVA tests were conducted to assess if there was significant opinion difference between various sample groups about the effectiveness of various platforms of online teaching.

Data Analysis

- 54% of the respondents were male and 46% were female respondents.

- The respondents were selected for data collection to make sure that there was significant representation of all types of institutions. 36% of the respondents are working in private unaided institutions, 36% belong to private aided institutions and rest 28% are government teachers.
- 28 % of the respondents are completed their doctorate, 22% are MPhil, 47% have completed their PG and only 3% are UGs.
- Majority of the respondents i.ee. 71% have more than 10 years of teaching experience followed by 16% with less than 5% and remaining 13% have 5 to 10 years teaching experience. This data helped researchers analyse the difference in preference of online tools.
- The respondents were divided in their opinion about adequacy of interaction during online classes, though 56% agreed that there is no adequate interaction among during the online classes, 28% did not agree to the statement whereas 15% were natural in their opinion.
- On the question of attentiveness of the students during the online classes, 56% of the teachers believe that students are not attentive and only 30% of the teachers think otherwise.
- Majority of the teachers i.e. 59% accept that assessment of students' attentiveness is not possible during online classes.
- It is interesting to note that 64% of the teachers accept that the technology infrastructure is not always supportive for online teaching.
- It is important to note that 62% of the respondents believe that students use deceptive methods during online classes. 23% were neutral and only 12% don't agree with the statement.
- The study shows that 61% of the respondents think that teaching discipline is not possible during online classes.
- The majority of the teachers consider teaching practical subjects online as difficult proposition. 66% of the respondents find it ineffective.
- There was almost no disagreement about institution support to the online teaching. Of course 21% respondents were neutral in their opinion but only 9% disagreed.
- The respondents were divided in their opinion about effectiveness of online teaching in meeting the purpose of the higher education. 42% believe that it meets the purpose of higher education where as 34% chose to be neutral and 24% of the respondents did not agree to the statement.

- 75% of the respondents think that the online teaching is a temporary phenomenon, 16% remained neutral and only 9% did not agree to the statement.
- 52% of the teachers responded positively and accept that online teaching helps institutes enhance their brand equity. 29% chose to be neutral and 18% responded negatively.
- The opinion about time to revise syllabus in the online mode of teaching is divided. 48% agree with the statement whereas 33% disagree and do not think they get adequate time to revise the syllabus. 18% remained neutral in their responses.
- On the question of change in learning attitude among the teachers, 79% of the respondents accepted that online teaching has promoted a learning attitude. Only 12% did not accept the statement.

Overall Analysis of Opinion related to effectiveness of various online teaching platforms

Uploading videos online using platforms such as Youtube is considered as the most effective method of teaching followed by providing online notes and online meeting or class. Uploading videos provides flexibility to both teachers' as well as students. Teachers can record the session and edit the videos to make it more effective whereas students have flexibility to watch session and learn at the time of their convenience rather than attending the session online at a given fixed time as in case of online meetings or mobile call/conferencing.

Comparative Analysis of Opinion related to effectiveness of various online teaching platforms with respect to type of institutions

The study shows that there is no significant difference in opinion regarding the effectiveness of various online teaching platforms across different types of institutions. Uploading the class videos in YouTube is considered as the most effective method by all. One important difference is noted in case of providing online notes, private unaided college teachers consider this method as the 2nd most effective method whereas for government college teachers it is not an effective method as it is ranked 4th.

Comparative Analysis of Opinion related to effectiveness of various online teaching platforms with respect to years of experience of teachers.

The study reveals that the younger teachers with less than 5 years of experience are more comfortable with engaging students using online classes as compared to that of teachers with more experience. It is ranked 1 by the young teachers whereas ranked 2 by teachers with 5 to 10 years of experience and ranked 3 by the teachers with more than 10 years of experience.

The preference is opposite when it comes to online notes, teachers with more than 10 years of experience prefer providing online notes and rank it as most effective. Teachers with 5 to 10

years of experience consider providing online notes as 4th preferred method and for teachers with less than 5 years' experience it is 3rd most preferred method of teaching online.

Hypothesis I

HO - Perception related to adequacy of class interaction during online classes is independent of type of institution

HA - Perception related to adequacy of class interaction during online classes is dependent of type of institution

Conclusion - As the calculated value of Chi Square is less than that of critical value, HO is accepted and HA is rejected. Hence, Perception related to adequacy of class interaction during online classes is independent of type of institution is accepted

Hypothesis II

HO - Perception related to attentiveness of students' during online classes is independent of type of institution

HA - Perception related to attentiveness of students' during online classes is dependent of type of institution

Conclusion - As the calculated value of Chi Square is more than that of critical value, HO is rejected and HA is accepted. Hence, Perception related to attentiveness of students' during online classes is dependent of type of institution is independent of type of institution is accepted

Hypothesis III

HO - Perception related to students' using deceptive methods during online classes is independent of type of institution

HA - Perception related to students' using deceptive methods during online classes is dependent of type of institution

Conclusion - As the calculated value of Chi Square is less than that of critical value, HO is accepted and HA is rejected. Hence, Perception related to students' using deceptive methods during online classes is independent of type of institution is accepted

Hypothesis IV

HO - Perception related to institution supporting promotion of online teaching is independent of type of institution

HA - Perception related to institution supporting promotion of online teaching is dependent of type of institution

Conclusion - As the calculated value of Chi Square is less than that of critical value, HO

is accepted and H_A is rejected. Hence, Perception related to institution supporting promotion of online teaching is independent of type of institution is accepted

Hypothesis V

H_0 - Perception that online teaching is a temporary phenomenon is independent of type of institution

H_A - Perception that online teaching is a temporary phenomenon is dependent of type of institution

Conclusion - As the calculated value of Chi Square is less than that of critical value, H_0 is accepted and H_A is rejected. Hence, Perception that online teaching is a temporary phenomenon is independent of type of institution is accepted

Hypothesis VI

H_0 - Opinion related to effectiveness of online meeting platform for teaching does not differ significantly based on type of institution

H_A - Opinion related to effectiveness of online meeting platform for teaching does differ significantly based on type of institution

ANOVA TABLE						
SUMMARY						
<i>Groups</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>		
Column 1	54	201	3.722222222	1.072327044		
Column 2	54	186	3.444444444	1.383647799		
Column 3	42	150	3.571428571	2.25087108		
ANOVA						
<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	2.087619048	2	1.043809524	0.6897656	0.503309932	3.057620652
Within Groups	222.452381	147	1.513281503			
Total	224.54	149				

- **Conclusion** - As the "P" value is more than 0.05, hence H_0 is accepted. Hence, Opinion related to effectiveness of online meeting platform for teaching does not differ significantly based on type of institution is accepted

Findings

The Study reveals that the transformation to online teaching has been a sudden, yet a choice less decision. The large majority of the teachers have responded with grave concern towards the effectiveness of their own teaching methods in the new normal. In a classroom situation, teaching and learning is an interactive human process where the attention and assessment of students' interests is gauged instantly and continuously. Moreover, the evolution of the process of learning is guided by the interaction, involvement and even interference by the students and the physical ambience. Teaching was about discovering the syllabus and not covering the text.

It is evident from the study that the teachers across the various demographic profile, believe that Technology integration and online teaching is essential from the institutional brand building point of view and is desirable from the perspective of their own self development and curriculum enhancement. However, when it comes to the most essential element of the learning experience and shaping of students' character, the apprehension regarding lack of adequate supervision or corrective measures relating to character formation and culture development, the teachers' role becomes negligible.

Based on the combined analysis of the data, it is found that, since P value is less than 0.05, the null hypothesis is rejected at 5% level of significance with regard to all the Statements on perception of teachers on online teaching. Hence the opinion regard to all the Statements on perception of teachers on online teaching is not equal to average level. Based on mean score, opinion regard to all the Statements on perception of teachers on online teaching is above average level.

Since average level is more than 3 all the respondents have positively agreed for all the statements irrespective of Gender, Type of the institutions they are working and their experience levels. Hence it is suggested to go for a teaching methodology which promotes both online and offline teaching, it may be Blended Learning or some other teaching methodology.

Conclusion

Covid 19 has disrupted the general equilibrium of life and has compelled us to adapt all aspects of our life and living. Education, with the entire generation and future as the stake holder, needs to lead the change and guide the design of transformation. Just as teachers were learning to compete with technology for the students' attention and learning, here they are faced with absolute uncertainty regarding their role in the new normal. As the NEP has just been unveiled, the need of the hour is strategic planning of resumption of learning as an

organized process, with the teachers as the main driver of institutional education.

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