



Fostering Creativity in an Online Teaching Environment During Covid-19 in Ahmedabad City

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Abstract:

As a part of the consequence of the Covid-19 pandemic situation, a lot of schools in Ahmedabad, Gujarat; India closed in March 2020. Teachers were asked to adapt to online teaching with training and workshops related to technology provided to them by their respective schools. The pandemic has compelled the academic fraternity to provide education from K-12 to higher education in online mode. This system has allowed the academic institutions to continue to disseminate knowledge to students while maintaining covid protocols, but it has also been found vulnerable to certain limitations of its own. The limitations raised questions, like, how virtual classrooms can foster creativity among the students; what the proficiency of the instructors in terms of development of online teaching materials is; how efficiently, the instructors are conducting online classes/lectures, and do all students have access to internet and smartphones. The current study aims to explore and answer such questions in a scientific manner. The study was conducted using the method of an online survey, by applying the technique of research scale. The study findings highlighted, that, the instructors/teachers/faculties from the entire academic fraternity ranging from K-12 (school), college, and universities are actively involved in teaching in online/virtual mode. The study also found, that, the teaching fraternity is efficiently using their available resources to develop a conducive teaching-learning environment, leading to the promotion of self-motivation among the students participating in the virtual platform.

The worldwide pandemic situation caused by the Coronavirus disease (Covid-19) has led to a state of despair for a lot of sectors. The education system changed dramatically with the distinctive rise of e-learning platforms. There was a sudden shift from the classrooms in many parts of the globe, wondering whether the adoption of e-learning will continue post-pandemic. The descriptive study demonstrates how the education system was re-designed to provide students and teachers with opportunities to learn and teach online. The paper presents the results of a survey conducted in August and September 2020 based on teaching creativity and collaboratively during the times of Covid. Analysis of potential factors such as school-computer technology, teacher-education learning techniques, Information, and communication technology tools (ICT) access, etc. Findings from regression analysis show changes in the teacher competence and teacher education opportunities to learn digital competence.

Keywords: Creativity, Online Classroom, Teaching-learning, Teacher education, Pandemic Education Situation, Schools In Ahmedabad

Introduction

The 2019 Covid, the pandemic situation has led to several challenges both for the teachers as well as the students. The schools faced a lot of challenges in terms of online teaching transition. The first half of 2020 witnessed a lot of schools closing due to the lockdown. All schools were required to shift to the online teaching mode. (Arbuckle, 2017) There is still much unknown about the nationwide practice of online teaching across all levels of schools in the state. (Besser, 2020) The preemptive measures like 'lockdown',

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‘social distancing’, and ‘work from home’ have changed the long operating so-called traditional method of teaching-learning at schools, colleges, and universities.

The amount of lack of experience in online teaching, academic management, separation of teachers from students, school administrative process, creativity -ideation, and satisfactory student academic performance was identified as the most important linked factors. The study thus concludes around the idea that teachers’ online teaching creativity collaboration increased amongst school-teachers in Ahmedabad during the COVID-19 school lockdown.

Literature Review

Prior to Covid-19, various forms of online teaching were in existence in terms of distance education and other open courses. The transition of online teaching as a consequence of the pandemic brings about a number of challenges both from the teacher’s and student’s standpoint.

Teachers face restrictions with online teaching as compared to face-to-face teaching. There was a necessary requirement to replace physical classroom sessions with online teaching that cannot be changed over time during natural disasters, crises, or the pandemic (Amabile, 1982).

The researcher has tried to assess three factors of creativity conducting environment, promotion of intrinsic motivation and generating ideation in the online teaching-learning design of the teachers which are considered to work in confluence of each other and results in creative output (Amabile, 1983). Comparing it with the physical classroom teaching, teachers have reported spending a little extra time to familiarize themselves to the online teaching environment, designing methods to engage with students, and knowing individual students’ understanding of the teaching content and matter (Braun et al. 2016). These challenges were associated with the separation between teachers and their students as opposed to the conventional classroom teaching (Brouwers and Tomic, 2000) and/or lack of online teaching experience (John, 2018).

Websites provide a public interface for organizations around the world and a global entrance into the knowledge fountains of academic institutions. (Patel et al., 2021) For instance, teachers can enhance the teacher-student connection and impact using facial expressions and body language, whose influences could be affected in an online classroom, which leads to greater reliance on voice and visual communication (Bao, 2020). It creates a joyful and interactive learning environment where the learner feels comfortable discovering. The fundamental motivation of the learners is the inner impulse to carry out the learning with satisfaction. (Collie et.al., 2020) Ideation is another word for contradictory thinking, which is the ability to generate multiple ideas and multiple thought processes. (Mal et.al., 2021)

Research Methodology

Research Design

Research Design is a framework for research and the research approaches could be classified into three categories of research which are Exploratory, Descriptive and Causal. This study is conducted with explanatory research as the study needs to investigate the impact of servant leadership on employee performance. The explanatory research design involves formulating of the hypothesis and collecting the data to achieve the objectives.

Quantitative method has been used as teaching efficacy is measured with the adaption to the pandemic for the study. It will help in analyzing the information statistically to achieve its objectives.

Research Objective

This study aims to use a mixed-method design to understand what percentage of teachers from different levels of education are engaged in online classes. The research objective is to understand what percentage of teachers are based on the subjects they have taught and are involved in online teaching patterns. Where the objective also looks to understand what factors of creativity the teachers are promoting and pursuing. More towards understanding how well the teachers are creating and conducting a learning environment in an online classroom and setup. The idea of research is to understand how well the teachers are promoting motivation in learners in an online classroom environment.

To understand how well the teachers are generating ideation among learners in an online classroom. Measurements were carried out to collect information on fostering creativity to investigate their moderation effects on changes in online teaching.

Data Collection

The study is designed to understand the 'know'- 'how' of teachers through an online class which is promoting creativity among the learners. Thus, a descriptive survey seems to be the best design for understanding information and data.

The most suitable data collection method for this study is through questionnaires. So, primary data will be collected by teachers at different schools in Ahmedabad city in terms of questionnaires based on a five-point Likert Scale. The Likert scale format is:

1) Agree 2) Neutral 3) Disagree 4) Strongly agree and 5) Strongly disagree

The development of the questionnaires is based on the following variables: creative online teaching and covid collaborative online-based teaching. Questionnaires were distributed to a total of 200 teachers using the convenience sampling method from different schools in Gujarat with affiliations such as ICSE, CBSE, Gujarat Board, and others.

However, only 120 respondents were received. 9 respondents did not complete the questionnaire, which gives a total of 111 valid responses. Hence, a total of 60 percent valid response rate.

Accessibility and Ethical Issues

Consent of the involving parties was taken before carrying out the investigation. The researcher ensures no revelation of the identity or other personal information. The researcher made sure no violation of responses arose.

Table 1: Descriptive characteristics of participants (n = 111)

Variable	n	%
Gender		
Female	88	80.80%
Male	23	19.24%
Age Limits		
Under 25 years	20	15.60%
26-35 years' old	30	27.52%
36-45 years' old	33	30.28%
45 years or older	28	26.61%
Level of teaching		
Pre-primary	14	12.84%
Primary	45	41.28%
High School	18	13.76%

Location of schools		
Urban	89	81.65%
Rural	22	8.75%
Total	111	

Results

The participants for the present research study are the urban-rural class teachers in schools and professors in colleges and universities who are engaged in online teaching because of the pandemic crisis. Goal-directed sampling is being done on online social media platforms. This research study involved a quantitative approach using statistical tools to evaluate the collected data, facts, and figures. SPSS (Statistical Package for the Social Sciences) has been deployed to conduct meaningful conclusions.

Demographic Analysis, Descriptive Analysis, and Data Analysis was conducted by using SPSS to determine the impact of fostering an online teaching environment in the city of Ahmedabad. Demographic analysis is a statistical technique used to develop and measure the dynamics and dimensions of the population.

The questionnaire was designed to evaluate three different factors of fostering creativity-conducting environment, promotion of motivation, and generating ideation process. The three important factors to assess for creativity were incorporated by teachers in their online class design and setup, then it is supposed to promote creativity amongst students.

Demographics of Respondents

Functional department: Most of the respondents are from all functional areas. Tenure: The year of experience varies and starts with the lowest 0 – highest 20 years of experience of teaching in schools. The educational level bifurcation of teachers was quantified in terms of their graduation, post-graduation, and diploma degrees, making the data more reliable in terms of knowledge and experience of their hierarchical positions.

The demographic analysis of this research was measured by gender, age, and work experience.

Gender was categorized into males and females: 23 males and 88 females.

Age was grouped into under 25, 25-35, 36-45, and 45 & above. The frequency of the respondents is 20, 30, 33, and 28 respectively.

Table 2: Demographic analysis

Variables		Frequency	%
Gender	Female	88	80.73%
	Male	23	19.27%
Age	under 25	20	15.60%
	25-35	30	27.52%
	36-45	33	30.28%
	45 and above	28	26.61%

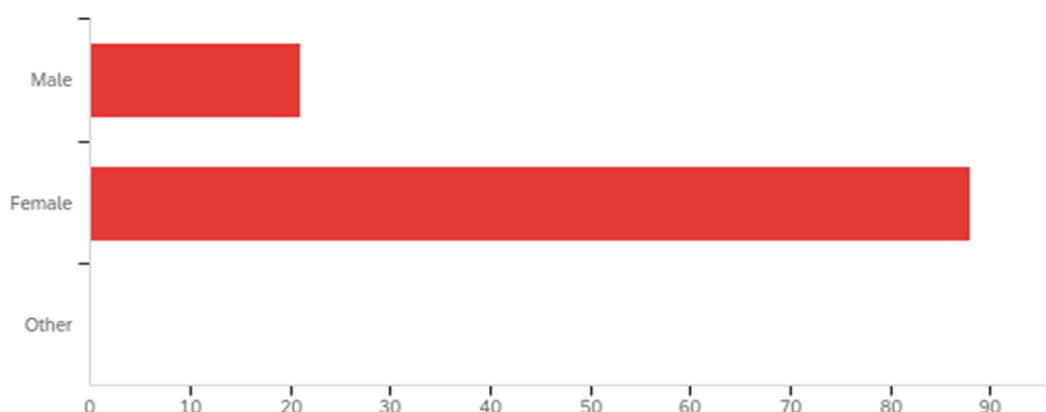


Table 3: Moderation effects of ideation in the online teaching mode due to Covid-19, Pandemic

Variable	β	SE	t	p
Online instruction	0.495	0.175	2.825	0.005
Ideation	0.33	0.138	2.386	0.018
Effectiveness	0.198	0.177	-1.121	0.263
Technology	0.419	0.188	2.231	0.026

Table 4: Evolving themes about challenges experienced in online teaching during the Covid 19, pandemic

Themes	Admirable quotes
Engaging with students	"It's simple for a student to lose their interest"
Technology	"Not familiar with applying technology in online teaching"
Workload	"Too much time spent on restructuring the lesson online"
Student organization	"It's difficult to supervise students in time"
Student administration	"How to control students' behaviors online?"

Results: Qualitative Data (Open-ended question)

Of the 111 teachers who filled in the open-ended questions about the major challenge(s) they experienced during online teaching, various themes emerged through research

(Table 4)

Theme 1: Connecting and engaging with students and increasing motivation

The research data reported that online teaching has separated them from their students. Teachers sometimes couldn't see the students on such an interface and even had to mute them sometimes due to the noise issues in online sessions. Teachers were unable to



detect students' understanding immediately. The online class could help in creating ideation among learners but possibly due to the limitation of technology and spaces to recreate the experience of a real-life environment exactly as the students are not as responsive as they are in real life.

Theme 2: Technology

One of the main challenges with technology is the lack of familiarization with the technological devices or digital devices. The lack of usage of digital devices in terms of even understanding the technical operations related to them was a challenge so far.

Reported problems related to technology was online video editing, uploading documents, software usages and internet connectivity issues.

Theme 3: Workload

It was reported from the data that the number of working hours increased from pre-covid phase to covid phase. The daily productive working hours increased from 3-4 to 5-6 hours. And it affected into an increase in the weekly working hours as well. A lot of administrative work increased along with teaching.

Theme 4: Student Supervision

The inability to provide supervision was also reported. Chatting windows were a disadvantage to understand the issues and problems students face during online sessions. Students were even reported of cheating during tests and identical answers were reported during assignments and projects.

Theme 5: Student Management

Student management was the bigger challenge for a few as the data reported that, managing students on online platforms became difficult. As teachers had to mute them time & again which would hinder the class or they weren't keeping their videos on, on time. Few became inattentive even during online sessions as they could just start the class and not be interactive in the same.

The students sometimes would not understand the content hence the teachers had to give instructions again & again or conduct additional tutorial sessions as well.

Limitations

A little research to confirm these conclusions as the data is related to Ahmedabad city and not the country at large. In spite of, the research study being a small-scale survey, the study findings revealed the importance and effectiveness of online teaching-learning in the current pandemic crisis of the Covid-19

As the sample selected is from 220 teachers limited to actual 111 respondents, it cannot justify the impact of teaching efficacy due to the covid-19 situation because a large population cannot be studied with this sample.

Thus, this limitation explains the hurdles a researcher might face in concluding the investigation and fulfilling the objectives being more accurate. The upcoming research can be conducted with the inclusion of more and varied variables.

The future research can ensure a larger number of sample size in different states and country at large. Furthermore, expansion of the model can be done if the researcher includes the turnover rates, experience with the superiors, and work commitments.

Conclusion

Based on the results, Covid-19 has a significant impact on the teaching styles in terms of creativity and collaborative study in schools of Gujarat. Hence, more schools must be trained properly to adapt to the current scenario. Innovation, teamwork, and creativity must be encouraged so that it keeps the teachers and students motivated.

The study would increase the awareness amongst different schools. The study would provide them with a clear holistic picture of their standing and the scope for further



improvement. The study would also help to get a clear idea about the impact of a pandemic on the teacher performance and personal growth if any.

Hence, attention must be provided to this education sector to make teachers more motivated and oriented towards the ultimate school goals. The study has found teachers can have profound personalities and pitch in with self-interest in such a crisis.

The study finds teachers who have been supported less experienced less growth in innovative tools and techniques. It has shown how small practices and techniques from the teacher's end in an online classroom can create a suitable environment to promote - conducting environment, intrinsic motivation, and ideation amongst the students which are key factors to promote creative abilities among them and this helps in fostering creativity.

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