A study on students’ responses on digital teaching methodology under covid-19 perspectives

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Abstract: The whole world is facing unique Pandemic situation due to the outbreak of corona virus since last couple of months. There is a consistent situation of panic and fear everywhere. India too is facing same situation and amidst the prolonged phases of lockdown, everything seems to come to stand still. Economy is severely hit by this pandemic situation. Various Industrial sectors have either turned sick or closed down due to demand crunch and lacks of people are losing jobs, resulting unprecedented crisis in the society. In education sector too, there is paradigm shift in teaching and learning methodology. The students cannot attend traditional class room teaching due to close down of schools and colleges. In higher education too, online classes are going on and the college students have no options but to attend virtual mode of classes and face online examinations in many instances. The students’ community is altogether experiencing a new and non-familiar teaching and learning environment. This research paper was written based on the online survey of higher education students in few districts of West Bengal. The survey was undertaken to unearth the responses of the students’ community to this digital teaching methodology, which they are facing. The responses of students to this new and unfamiliar digital teaching and learning environment were shown in the “findings section” of this paper.

Key words: Teaching and learning, Pandemic situation, Teaching methodology, Covid-19.

1. Introduction

The outbreak of Corona virus has impacted the global economy. It has badly affected the education sector globally. In India too, Covid-19 has brought a lot of changes in academic environment. All on a sudden, the schools, colleges and other academic institutions got closed across the country. The traditional class room teachings could not be conducted anymore. The present situation calls for proper planning by the academic institutions. (Rieley, 2020). As an immediate response, almost all academic Institutions in our country resorted to digital teaching pedagogies and academic classes were taken in various online platforms. The academic fraternity, including teachers and students were forced to adopt a technology dependent teaching and learning environment, in which they were not used to earlier. For last one and half semester, education in our country is continued in digital platform. Network issues, cost, flexibility, pedagogy, environment are some of the challenges faced by the students under this new normal. The students’ community is facing very stressful situations in this challenging environment, which they have not faced before. They are confined to home environment...
and cannot go out and attend schools. They cannot spend time with their friends and attend their normal classes. This research was undertaken to collect the students’ responses related to various aspects of digital pedagogy and unearth them for smooth conduction of academic activities.

2. Literature review
It includes substantial, theoretical and methodological findings.

*Online teaching-the only option in this new normal*
Under the Covid19 pandemic, face to face offline teaching is not possible. Distance education is the only option. Modern technology with the availability of internet connectivity has made distance education possible. Advances in technology have made distance education easy (McBrien et al., 2009). Computers availability with internet connection has made learning possible any time from any place (Cojocariu et al., 2014). In this E-learning environment, students from anywhere can learn and interact with instructors and other students (Singh & Thurman, 2019). In traditional class room teaching, students can attend live classes and instant feedback is possible. But in E-learning environment, instant feedback and immediate responses may not be possible (Littlefield, 2018). Digital learning can present a lot of opportunities for social interaction (McBrien et al., 2009). During this covid situation, video lectures, online classes, instant access, stable internet connections, use of laptops and smart phones are common features of digital learning (Basilaia et al., 2020). It was observed in the recent past that educational institutions were giving more importance to adopt digitalized teaching techniques with the pace of more technology supported teaching and learning contents. The perspective was to improve the quality of teaching methodology. But today not only the quality focus, in this changed scenario the focus is how fast the institutions can adapt themselves for mass learning techniques (Carey, 2020). Many challenges of online education are there like distance, scale, network issues, personalized teaching and learning environment etc. It seems innovative solutions by institutions can only feasible solutions under this pandemic situation (Liguori & Winkler, 2020). The various digital platforms tools serve as a substitute to traditional class room classes. (Basilaia et al., 2020).

3. Objective of the study
- To study the responses of students of Higher Education towards the digital pedagogy practised during this Covid pandemic situation.
- The various types of problems students are facing with regard to online teaching and learning.
- The evaluation techniques, students will prefer under this pandemic situation.
- To assess the understandings with regard to teaching quality, as envisaged by the students’ community.

4. Limitations of the study
- The no. of respondents where limited.
- The study involved survey in few districts of West Bengal, India. Similar studies could be carried out in other states of India also.
- Unwillingness and lack of interest to answer few questionnaires.
- Targeted respondents where limited from a set of population.
- Communication barrier.

5. Research methodology
The study is a descriptive research involving online survey from the college students pursing mainly under graduate and post graduate courses like BA, B.Sc, B. Com, B.Tech, BBA, BCA, MBA etc. The
responses were collected from odd 500 students during the month of June-July, 2020. The online responses were collected from Institutions of few districts of West Bengal, India. Then the data, so collected were analysed and findings presented in the study.

Data source
It is based on primary data, interaction/interview of our respondents were taken for this survey using Google Form through structured questionnaires, in regard to know their perspective opinions.

Sample population
A sample of 500 respondents, to study their behaviour in few districts of West Bengal. Out of which 58% are male and 42% are female.

Sample frame
Research was conducted through online mode like WhatsApp, Messenger and Instagram etc.

Sampling method
This research was made to a specific sub group within a population set which represents a sample population. So, the sample method used is convenience sampling.

Structures questionnaire
Structured questionnaire specifies the set of response alternative and response format. A structured questionnaire may be multiple choice, dichotomous or a scale. Statistical tool utilised are pie chart.

Software used
MS- Excel was used to organize and analyse raw data collected from survey. It was also useful in making graphical representation of the organized data.

6. Data analysis
Data analysis is a process of systematically applying statistical and or logical techniques or transforming the relevant collected sample with a predefined goal to end up in useful information. Information which will contain conclusion and a decision-making outcome as well. For the purpose of finding out the effectiveness of “A study on student’s responses on digital teaching methodology under covid-19 perspective” 500 respondents were surveyed and following where the outcomes.

![Figure 1: Gender based responses.](image1)

![Figure 2: Feedback on virtual teaching technique.](image2)
Yes | Sometimes | No
---|---|---
36% | 10% | 54%

Virtual teaching mode, which is presently practiced under COVID-19 situation.

Traditional class room teaching.

Figure 3: Feedback on students’ preferences to virtual teaching pedagogy.

Figure 4: Whether students feel digital teaching is the correct option under Covid 19.
**Figure 5:** Feedback on teaching methodology.

**Figure 6:** Responses regarding whether students are facing technical problems

![Pie chart showing percentages of different issues facing students.]

**Figure 7:** Responses facing multiple problems.

![Pie charts showing feedback on teaching quality and examination willingness.]

**Figure 8:** Feedback on virtual teaching quality.

**Figure 9:** Feedback on whether students are willing to appear in online examinations at the end of academic semester.
7. Findings

We furnish below the significant findings of our research:

- Most of the students express that the virtual teaching methodologies of their respective institutions are adequate under this COVID academic environment.
- More than 70% students like the virtual teaching techniques adopted by their institutions.
- Majority of the students’ community feel that digital teaching techniques are the correct teaching option under this COVID situation.
- More than 75% students express their likeliness to virtual teaching pedagogy.
- Majority of the students report to facing technical problems, while joining virtual classes.
- Around 80% of the students admit that they face challenges of facing serious network issue while having fewer problems with regard to availability of electricity and digital gadgets.
- Regarding, teaching quality of the online mode, less than 10% of the students feel that online teaching quality is better than traditional class room teaching, while around 50% of the students feel that online teaching quality is inferior to traditional teaching quality. This is one of the major findings of the study and this is may be due to unfamiliarity to new teaching environment and inadequacy of the digital skills that still exist among the majority of the academic fraternity.
- Majority of the students express their willingness to appearing online examinations at the end of academic sessions.
- Around 44% of the students want combination of continuous evaluations and end semester online examination, while 33% of the students prefer continuous evaluation with no end term examination.
- Majority of the students like various webinars, online quizzes and other programs, conducted by their institutions during this Covid Pandemic situation.

8. Suggestions

Our suggestions enumerate the following based on the findings of the research:

- The institutions should continue to carry on digital education during this abnormal time of Corona virus pandemic.
- The teaching fraternity should try to enhance the online teaching skills and better delivery of lectures through online mode.
The objectives of online teaching should be designed in such a way that students’ participation get increased.

A blend of evaluation techniques with continuous assessment and end semester online examinations may be conducted.

The institutions should continue to carry various webinars and other online events to bring innovations and remove monotony of the present academic environment.

The network issues and other challenges may properly be given attention by the teaching community and administrative authorities of the institutions. The issues should be discussed with the suffered students and efforts should be made to reach feasible solutions.

9. Conclusion

The whole teaching environment is facing unprecedented challenges and abrupt changes. However, our struggle under the current situation should be continued with positivity and zeal to uphold the sustainable objectives and outcomes of the present academic activities. From our research, it is evident that the students are also paying respect and justification to the presently practised virtual teaching methodology under current COVID pandemic situation. The present situation demands proper address to the challenges of the digital pedagogy, being followed in almost all academic institutions in India. Surely, we can expect improved teaching quality and enhanced participation of the students’ community to this newly adopted diffusion in teaching pedagogy. The present situation demands more synchronization with respect to policy makings, diffusion of teaching methodologies, solving the present challenges and mutual address to these issues with active participation of students’ community, Academic fraternity and institutional authority.

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