

Conventional Learning to E-Learning A View from West Bengal

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Abstract

This paper examines the evaluation of the transition from traditional learning methods to hybrid and e-learning in West Bengal, with a focus on undergraduate students. A survey was conducted among twenty-five government college professors from West Bengal to obtain the desired results. According to the investigation, students above the poverty line have shown increased focus in their studies and have been able to receive their degrees through e-learning. Still, the ones below the poverty line are unable to access internet services in remote locations, which has led to a rise in dropouts.

Keywords: Hybrid Learning, E-learning, Conventional Learning, Pandemic

1. INTRODUCTION

The aspect of technological advancement has been one of the primary areas that accelerated during the pandemic outbreak. The state of panic and uncertainty that arose due to the pandemic gave rise to the use of technology around the world and increased the technological dependence of the people (Putra *et al.*, 2019). The restriction of social distancing and travel ban allowed people to use technology for most of their purposes in their day-to-day life, and the educational system has been the most significant area that was highly affected by it. West Bengal is one of the states in India that constitutes more than sixty percent of the population who were unaware of the use of technology in the education system, and during the pandemic. The system witnessed a sudden conversion from conventional learning to e-learning. Hybrid learning is a new concept in the state, and it has been observed that its effectiveness has been highest for college students (Aristika & Juandi, 2021). This investigation has been undertaken to assess the change from conventional learning to e-learning in West Bengal's education system with respect to the case of undergraduate students. The investigation is done to recognize the factors that led to the switch in the respective state. Moreover, it has also been undertaken to release the benefits for the students as well as the challenges faced by them with e-learning and hybrid learning systems.

2. Background

2.1 Concept of Hybrid Learning

The concept of hybrid learning is the same as that of synchronous learning, which amalgamates studying in person as well as the aspect of remote learning. As per the perception of Tyagi *et al.* (2021), more specifically, the term hybrid learning can be conceptualized as the way in which tests are taught in classrooms with the help of digital activities. It facilitates a collaborative learning experience for the students and allows them to be more connected to the study material as well as to the lectures they attended.

It has been introduced in Western countries as one of the most innovative ways of learning as well as teaching. It is also known as blended learning to provide the students with the best of both worlds of conventional as well as digital learning. Moreover, it has been understood that recording the lecture in class and sending it out to students is not an effective example of hybrid learning. About the suggestions of **Li, Li, & Han (2021)**, it is noticed that students can engage with the content using digital tools in the class, after the class, and before the commencement of the class. The flipped classroom model is utilized by various universities to allow students to adopt digital learning activities while they are attending the lectures in person in their classroom. Hybrid learning is a new concept in West Bengal, as it has not been considered a state that is highly advanced in terms of technology. However, **Hediansah & Surjono (2020)** mentioned in the study that the sudden advent of the pandemic had normalized digital learning, and currently, the education system has begun to accept the hybrid learning method for higher education due to the change in circumstances.

2.2 Change from Conventional to E-learning In West Bengal

There are several factors that are responsible for the change in the education system in the state of West Bengal. **Biswas & Debnath (2020)** stated in the study that one of the primary factors had been related to the aspect of a sudden outbreak of the pandemic, which brought the education system to a halt for months as conventional classroom learning could not be undertaken due to the novel and contagious nature of the pandemic as well as due to the worldwide panic. With respect to that, the aspect of e-learning emerged in the state in all the classes under the education system. The loss of students' time due to the lockdown and the halt in the education flow can bring the aspect of lethargy and a lack of focus in students, which can adversely affect the state's literacy development. According to the suggestions of **Thapa, Bhandari & Pathak (2021)**, this was also one of the other significant reasons that led to the undertaking of e-learning by the education system of India. Furthermore, the acceptance of e-learning by other states in India also pushed the West Bengal education ministry to take up the aspect of e-learning in its system. It has not only allowed the flow of education of students in the crucial time of the pandemic, but also allowed the state to develop technologically. The introduction of e-learning in the state has almost made the conventional method learning obsolete by bringing a surge of change in the education system. Concerning the claims of **Dash & Chakraborty (2021)**, the inclusion of ICT (Information and Communication Technology) into the educational system has led the state to explore several advantages that are attained from e-learning and hybrid learning.

2.3 Benefits and Challenges of the Switch from Conventional Learning to E-learning and Hybrid Learning in West Bengal

There are several benefits of e-learning, which have been attained by the West Bengal educational system as well as the students. As per the suggestions of **Sasmal & Roy (2021)**, one of the primary benefits attained by the students under the West Bengal educational system has been concerned with the continuation of their degree, even with the struggle during the pandemic. The examinations are taken through online platforms, which has led them to attain their degrees to progress to another standard. Moreover, it has been easier for teachers to teach from a comfortable and secure home environment, which has raised their efficiency. In accordance with the study of **Das (2021)**, it has also been possible for the state to develop their technological aspect, which has helped it to gain proper recognition. Other than that, it has been observed that the switch from conventional learning to e-learning has enabled the students to concentrate on their studies more passionately without worrying about the rise of pandemic cases in the state currently.

However, it has also been noticed that the switch from conventional learning to e-learning has also added to several challenges faced by the education system in the respective state currently along with its advantages. **Kapasia *et al.* (2020)** mentioned in the study that it had been understood that the primary aspect of the issue is the loss of value of the degrees attained by the students through digital methods. Studies have shown that many students have accepted that the element of effectiveness is extremely low with the e-learning method. The reason behind that can be the lack of training for the teachers to use the platforms effectively and the lack of focus on students due to the loss of discipline in the home environment. Furthermore, from the study brought forth by **Mseleku (2020)**, it has also been found that less than forty per cent of the government school students in West Bengal have internet access. Additionally, most of them belong to the below poverty line category, due to which they are unable to afford e-learning opportunities every day, leading to a rise in dropouts during the pandemic.

2.4 Research Questions

The research questions to be determined for this investigation are as follows:

- Q1:** What are the reasons that led to the change from conventional to e-learning in the West Bengal College Education system?
- Q2:** What are the benefits of hybrid learning in the college education system of West Bengal?
- Q3:** What are the issues confronted with undertaking hybrid learning in the college education system of West Bengal?

3. Methodology

3.1 Data Collection

With respect to the critical evaluation of the switch from conventional learning to hybrid learning in the college education system in West Bengal, the primary data has been collected. Through the assembly of primary data, it is possible for the researcher to raise the element of the accuracy of the results (**Saunders, Lewis, & Thornhill, 2007**). An online survey has been conducted by the researchers in order to attain the most desirable outcomes in relation to the research questions of this investigation. The participants were chosen through the use of the purposive sampling method. A total of twenty-five out of one hundred government college professors from West Bengal were chosen. The choice of these people was settled as they are closest to the education system of West Bengal and have witnessed the switch from conventional to hybrid learning in the state. Furthermore, a total of five questions have been framed by the researchers for the collection of information. These five questions have been based on the research questions that have been created to accomplish the purposes of this exploration drive. The questionnaire was sent to the participants five days before the date of the survey. The additional time was allotted to the participants in order to allow them the opportunity to contemplate the questionnaire so that the most desired outcome is achieved from them to raise the bar of the results (**Žukauskas, Vveinhardt, & Andriukaitienė, 2018**). Apart from that, consent was taken from them, and they were informed about the purposes of the exploration before the survey session. Lastly, they were all allowed to skip any questions if they deemed it too uncomfortable to answer. Besides, the researcher also took up the value of anonymity in order to secure the personal information about the participants and to ensure their privacy (**Van den Berg & Struwig, 2017**).

3.2 Data Analysis

The aspect of data analysis has been considered as one of the most significant parts of an investigation. About the critical evaluation of the switch from conventional learning to hybrid learning in the college

education system in West Bengal, the data has been analyzed through the utilization of SPSS. The use of correlation, mean, and standard deviation has been done to reach the results through proper analysis and presentation. It has been observed that usage of this respective tool allows the fastest results with extensive accuracy, which contributes to its choice (Tong & Zuo, 2018).

4. Correlation

Table 4 – Correlation

		Factor_that_led_to_change_to_e_learning_in_WB	Hybrid_learning_have_supported_extensive_understanding	Issues_with_hybrid_learning_in_WB	benifits_from_hybrid_learning_in_WB
Factor_that_led_to_change_to_e_learning_in_WB	Pearson Correlation	1	-.083	.530**	.096
	Sig. (2-tailed)		.692	.006	.647
	N	25	25	25	25
Hybrid_learning_have_supported_extensive_understanding	Pearson Correlation	-.083	1	.236	.144
	Sig. (2-tailed)	.692		.257	.491
	N	25	25	25	25
Issues_with_hybrid_learning_in_WB	Pearson Correlation	.530**	.236	1	.204
	Sig. (2-tailed)	.006	.257		.328
	N	25	25	25	25
benifits_from_hybrid_learning_in_WB	Pearson Correlation	.096	.144	.204	1
	Sig. (2-tailed)	.647	.491	.328	
	N	25	25	25	25

** . Correlation is significant at the 0.01 level (2-tailed).

As per the correlations conducted in **Table 4**, it has been understood that the value of the first dependent variable of factors leading to change to e-learning with respect to independent variables is -.083, .530, .096, respectively. The second value of dependent variables concerning independent ones is .692, .257, and .491, respectively. The third value of a dependent variable concerning the independent ones is .530, .236, and .204. The last values concerning the independent variables are .096, .144, and .204.

5. Results and Discussions

5.1 Reasons for Change from Conventional Learning to E-Learning and Hybrid Learning in the College Education System of West Bengal

Table 5.1 – Factors that led to a change to e-learning in WB

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	6	24.0	24.0	24.0
	2	16	64.0	64.0	88.0
	3	3	12.0	12.0	100.0
	Total	25	100.0	100.0	

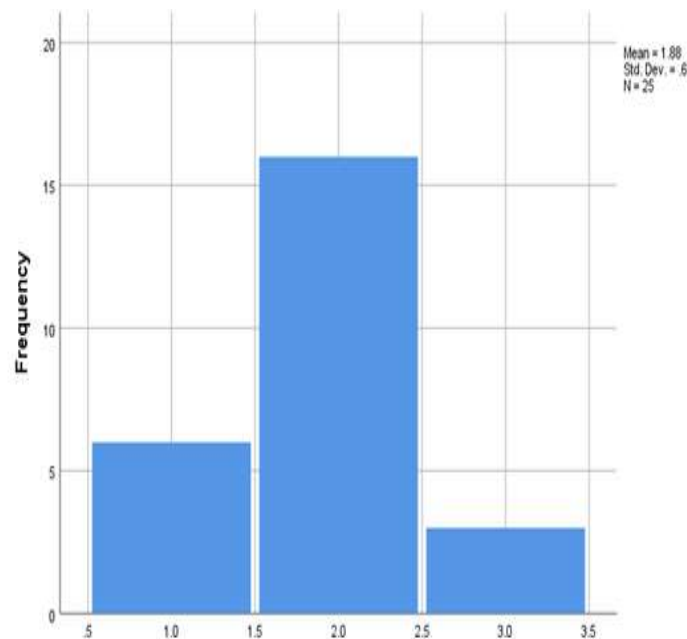


Figure 5.1 – Factors that led to a change to e-learning in WB

From **Table 5.1** and **Figure 5.1**, it is observed that the graph accounts for the response from the professors against the question of the most important factor that led to the change from conventional learning to e-learning in West Bengal. Moreover, it has been noticed from the graph that the demand for technological advancement led the respondents mostly to answer the questions. Due to the changes occurring rapidly in the country toward technological dependency, the respective state's education system was planning on change, which was brought forth by the pandemic. Moreover, the aspect of the pandemic has also been considered as an important factor to support the conversion of the education system. Some of the respondents, as per the graph, have also agreed that both factors are equally responsible for the introduction of e-learning in the state, which justifies its popularity and necessity. Furthermore, the value is 0.6 times of standard deviation; it has been understood that there has been an irregular variation of choices by the respondents concerning the question of factors of change.

5.2. Outcomes of E-Learning and Hybrid Learning Attained

Table 5.2.1 – Hybrid learning has supported extensive understanding

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	6	24.0	24.0	24.0
	2	18	72.0	72.0	96.0
	3	1	4.0	4.0	100.0
	Total	25	100.0	100.0	

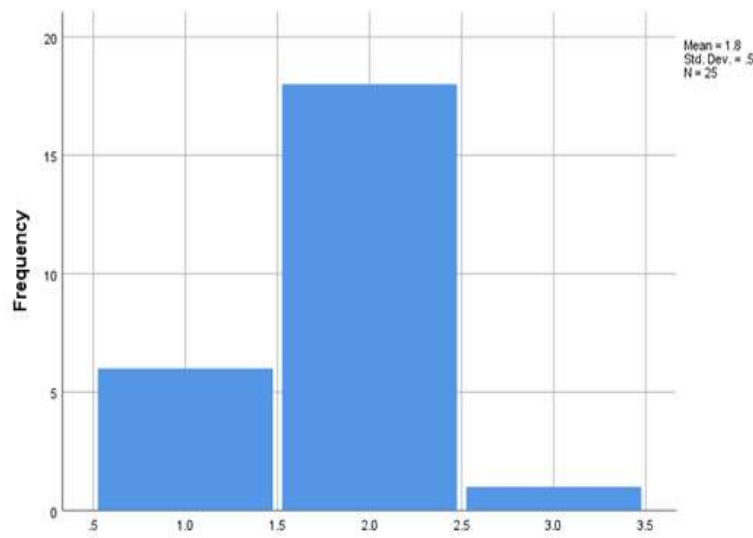


Figure 5.2.1 – Hybrid learning has supported extensive understanding

Table 5.2.2 – Benefits from hybrid learning in WB

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	11	44.0	44.0	44.0
	2	13	52.0	52.0	96.0
	3	1	4.0	4.0	100.0
	Total	25	100.0	100.0	

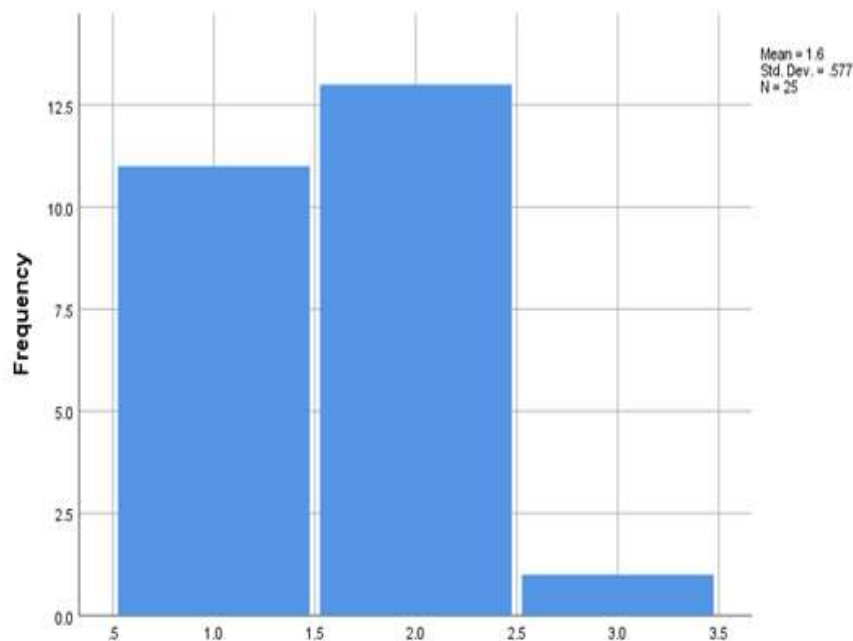


Figure 5.2.2 – Benefits from hybrid learning in WB

From **Table 5.2.1** and **Figure 5.2.1**, it has been duly noticed that most of the government college professors included in the survey have agreed with the fact that e-learning and hybrid learning opportunities have helped the undergraduate students in understanding their course materials better. Only

six of them strongly agreed with the fact, and one of them responded neutrally in light of the presence of the statistics, which shows that many students faced extensive issues with e-learning and hybrid learning tools and systems. The reason for their strong agreement has been witnessed from **Table 5.2.2** and **Figure 5.2.2**. With respect to that graph, the responses from the participants relating to the benefits of e-learning have been stated by West Bengal undergraduate students. It has been understood that thirteen professors agreed to the fact that the students are able to focus on their studies and the course material through online lectures, as they are secure regarding their health due to the prevention of the pandemic with the help of the e-learning system. Furthermore, the factor of continuation of studies has also gained extensive support from the professors as they have seen a rise in demand for e-learning and hybrid learning in the higher education institutes in West Bengal, as it is helping them to keep on studying and achieving their degrees. In addition to that, it has been observed from the graph as well that the professors agreed to the aspect of comforts of the home being a factor that has led to the success of the e-learning activities and led to its extreme demand in the state currently. The face of the education system has been changed as students and professors have realized the efficient ways of learning without moving to another place. It has been proved to be more convenient for them. Lastly, the value of 0.5 in the standard deviation shows a considerable variation in the opinions of the professors, and it can be traced back to their differences in age.

5.3 Challenges Faced with E-Learning and Hybrid Learning

Table 5.3 – Issues with hybrid learning in WB

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	8	32.0	32.0	32.0
	2	15	60.0	60.0	92.0
	3	1	4.0	4.0	96.0
	4	1	4.0	4.0	100.0
	Total	25	100.0	100.0	

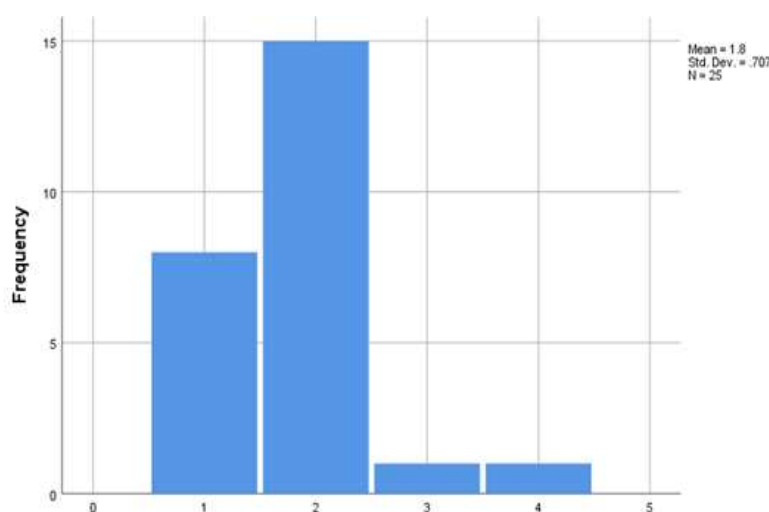


Figure 5.3 – Issues with hybrid learning in WB

From **Table 5.3** and **Figure 5.3**, it is observed that the issues have been confronted by the professors of undergraduate pupils in West Bengal government colleges with the e-learning and hybrid learning system.

It has been observed from the survey that most of them agreed to the fact that a lack of technological literacy and technological awareness has been the reason that many students have lost their focus in their courses during the pandemic and have dropped out. Moreover, a sudden outbreak of the pandemic introduced the aspect of e-learning suddenly, without ensuring technological awareness of the professors, making it difficult for them to fulfill the expectations of the students through the virtual platforms. Moreover, it is also difficult for the professors to teach the students at all in remote locations due to the lack of internet access for all the students. As West Bengal government colleges include a considerable number of students who do not have access to the internet connection at the remote locations of their houses, they have lost focus and dropped out eventually during the pandemic. Furthermore, the aspect of poverty is another reason that has led several students to drop out with the introduction of e-learning and hybrid learning as a mode of the education system. They are unable to afford the cost of internet packs offered by providers and also do not have smart devices, which limits their options for receiving education. It has been considered to be one of the primary issues that have been observed to be faced by the professors of the government colleges of West Bengal with the use of e-learning methods. The value of the standard deviation for this question is obtained to be 0.707, which shows a steep difference in opinions of the respondents and can be justified due to the age difference.

6. Limitations

The primary gap or limitation of this study has been in relation to the aspect that only twenty-five professors from West Bengal who work in government colleges of West Bengal are taken as samples, which limits the universality or reliability of the results, and these are based on individual opinions.

7. Conclusion

The main goal of this paper has been to facilitate a comprehension concerning the assessment of the change from conventional learning to e-learning in the West Bengal education system with respect to the case of undergraduate students. From the exploration, it has been understood that the aspect of hybrid learning and e-learning has brought forth several benefits along with several challenges for undergraduate students. The primary reason for this switch in the educational system of the state has been related to the aspect of the pandemic. Moreover, it has been understood that the primary benefits the undergraduate students have received have been related to the aspect of continuation of their degrees, which prevented them from losing focus on their studies. However, many dropouts have been observed in this stage of the academy, as in West Bengal, the internet access is not widespread, and the aspect of poverty and lack of infrastructure also disrupted their possibility of pursuing their degrees through e-learning and hybrid learning.

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