

ATTITUDE TOWARDS BLENDED TEACHING-LEARNING APPROACH: A STUDY ON POST GRADUATE LEVEL STUDENTS

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ABSTRACT

Blended learning is one of the essential learning methods for enhancing and developing an individual's creative skills in education. It is a method of learning that uses current technology and incorporates a variety of strategies in a manner that is appropriate for students. The descriptive survey method was used to determine attitudes towards the blended teaching-learning approach. The researcher also used a random sampling technique based on a Likert Three-point scale to collect data from 313 PG-level students from West Bengal. The investigators used a self-created questionnaire (ATBTLA) to examine attitudes toward the blended teaching-learning approach. For data analysis, the investigator developed a research model and graphical representation to represent the attitude towards the blended teaching-learning approach and used SPSS-23 to compute the Mean, S.D., t-test, and ANOVA. The present study revealed that most students (68.89%) scored between 56.038 and 66.019, indicating a moderate attitude towards the blended learning approach among Post Graduate level students. It also found that most students were satisfied with the blended teaching-learning process. The results reveal that the PG level students' attitude towards the blended teaching-learning approach is no significant difference based on Gender (0.101, $p > 0.05$), Residence (0.568, $p > 0.05$), Family type (1.058, $p > 0.05$), Semester at university (1.302, $p > 0.05$), Nature of course (1.531, $p > 0.05$), Nature of internet access (0.343, $p > 0.05$), Devices used for learning (0.043, $p > 0.05$), Their experience of using the blended mode to get learning (0.813, $p > 0.05$) towards the blended teaching-learning approach.

Keywords: Blended learning, Teaching-learning, Attitude, satisfaction, Post Graduate students.

Introduction

Blended learning has been a popular teaching and learning strategy in recent years, with several educational institutions worldwide adopting it (Wani & Dalvi, 2013). Blended learning is seen as alternative teaching and learning strategy that enables teachers to solve a fundamental problem in online interaction that is the need for more familiarity with conventional face-to-face interactions between students and teachers (Kuo et al., 2014). Blended learning is a form of teaching that uses online communication tools, web-based content, and a learning management system to enable teachers to balance the amount of in-class and computer-internet-based learning (Mulyono et al., 2007). Students gain from this balance because they have access to dependable learning materials and may study at their speed, communicate with teachers, and track their progress. One of the possible advantages of the blended learning strategy is that it reduces the gap between attending face-to-face and online classes (Kuo et al., 2014). It might be any learning program in which more than one delivery modality is employed to enhance educational results and reduce program delivery costs (Natividad et al., 2021).

In summary, it refers to a kind of education that combines face-to-face and online delivery techniques (Chew et al., 2010). Because it mixes the conventional classroom method with the online learning paradigm, blended learning is appealing and practical (Yilmaz & Malone, 2020). Blended learning's mode of delivery provides learners with an efficient and effective educational experience, with the added benefit of increased learner accessibility to programs; thus, the blended model can be used in novel ways to improve both student learning outcomes and instructional delivery costs (Dziuban et al., 2004). Students' communication skills increase due to blended learning, which allows for student-teacher exchanges and accelerates student-teacher involvement in both traditional and online environments (Kumar et al., 2017). Students could speak with their professors and other classmates beyond class, giving teachers and students the freedom to organize their learning, monitor their progress anytime they were, and have consciousness of their learning.

The learner and the lecturer should be physically present in a blended learning setting. Despite this, students should be able to utilize digital tools to exert some control over the pace or themes of their learning (Devi et al., 2021). A comparable approach is the flipped learning model, which uses technology to rearrange the learning experience and maximize crucial face-to-face interaction in the classroom. In a flipped classroom, students

would be encouraged to use a cloud-based learning platform to access digital learning resources on their own time. Before each lesson, resources such as video lectures, podcasts, recordings, and articles would be offered to transfer most of the essential information from teacher to student. This saves up class time for educators to assist students in activities, conduct discussions, and encourage student participation (UGC, 2020).

Review Of Related Literature

In this study, the researcher reviewed and reported on the majority of relevant studies conducted in India and abroad on the attitude towards blended learning approach among Post Graduate students.

In a study by Korkmaz & Karakus, (2009) revealed that blended learning models had a greater impact on students' attitudes toward geography classes than traditional learning models, as well as a positive relationship between students' attitudes toward geography classes and their rational thinking levels. Another research by Johnson, (2013) indicated significant differences in the overall opinions of the student groups about blended and online learning. Acar, (2013) found that attitudes regarding using social media for academic purposes were not connected to using other kinds of online learning techniques or getting experience with a Facebook-type page. Wani & Dalvi, (2013) discovered that exposing foundation year students to blended learning activities positively impacted their engagement, contentment with the teacher's role, and test performance while studying English. In a study on perceptions and attitudes toward blended learning, Hassan, (2015) found that students were satisfied with the method because it improved their English language proficiency and made learning English more cooperative, engaging, and enjoyable. A different investigation by AlAbdulkarim & Albarrak, (2015) indicated that students valued collaborative learning more than any other. The findings showed that students had a favourable attitude and were very motivated about the blended approach of teaching research courses. According to Angadi, (2016), there were no significant differences in B.Ed. student-teachers perceptions of blended learning based on their gender or academic level. Most prospective teachers have a positive attitude toward blended learning, and prospective female teachers are substantially more so than their male colleagues (Khan, 2016). Obaidat, (2016) investigation found that teachers' attitudes regarding implementing blended learning in the elementary stage were highly statistically significant (3.79). Lalima & Dangwal, (2017) suggested that blended learning implementation is effective and requires diligent efforts, the appropriate mentality, sizable funding, and strongly motivated instructors and learners. Alzahrani & Toole, (2017) revealed that pupils have both experiences utilizing the Internet and a favourable opinion about it. Interesting exchanges surrounding the student study year included positive and negative responses to Internet use and a preference for integrated learning. According to the findings of another research by Birbal et al., (2018), instructors believed that technology and learning flexibility were the most significant or valued aspects of blended learning. Additionally, there were notable differences in the students' opinions depending on their gender and part-time or full-time employment level. Akbarov et al., (2018) research demonstrated that students like blended learning in EFL use over conventional classroom instruction, and there is also a positive correlation between these preferences. Bakeer, (2018) discovered that students' opinions about incorporating blended learning seemed to have a favourable impact on improving their language abilities, independent development, and learner engagement. The studies of Aladwan et al., (2018) showed that blended learning benefits learners and that most participants completely comprehend the objectives of e-learning when they participate in blended learning. Nortvig et al., (2018) revealed numerous aspects, such as educator involvement in virtual interactions and interactions between students, instructors, and material. They intended links between offline and online and between campus-related and training activities. Blended learning is more suitable than conventional learning (Ikhwan & Widodo, 2019). Another study by Karaaslan & Kılıç, (2019) revealed that top achievers tended to favour blended learning. Students demonstrated strong preferences for the perception and notions of blended learning, according to Vaksalla et al., (2019). The usefulness of using evolving ICT tools, strategies, and approaches as a new, inventive kind of online instruction and learning platform was discovered by Dahal et al., (2020). Rahman et al., (2020) conducted a study and discovered that blended learning via the i-Learn platform provides excellent flexibility, allowing students to learn anytime and anywhere. Saboowala & Mishra, (2020) indicating that blended learning for school teachers' professional development after the pandemic would push the frontiers of learning by fostering international cooperation between diverse educational societies. This study relied on the interactive impact of the highest education level of the educator and the instructors who have applied education and instruction via online line sessions. Abbacan-Tuguic, (2021) identified technological weaknesses, which include the absence of educational devices and erratic internet access, which limit the effective application of blended learning adaptation. In another study Jnr, (2022) demonstrated that social variables, including usage, difficulty, work satisfaction, lengthy effects, enabling circumstances, and IT experience, greatly impact lecturers' perceptions of adopting BL efforts to enhance educational tasks in higher education. Falah & Chairuddin, (2022) revealed that 76.3% of students responded that they were happy with the integration of blended learning, indicating that this was a good viewpoint from the students.

Considering all of these factors, the researchers felt that there is a gap in which more research must be conducted to study in-depth outcomes about the attitude towards the blended teaching-learning approach. Therefore, the researchers choose this particular study.

Research Questions

- What is the level of attitude of postgraduate students towards blended teaching learning?
- What is the level of satisfaction of postgraduate level students towards blended teaching learning?
- How is the attitude differing towards blended learning based on gender, residence, family type, semester etc.?

Research Objectives

- To study the level of attitude of Post Graduate students towards the blended mode of teaching and learning.
- To study the level of satisfaction of Post Graduate students towards the blended mode of teaching and learning.
- To find out the mean difference of their attitude towards blended teaching-learning based on gender, residence, family type, semester, nature of the course, nature of internet access, their experience of using the blended mode to get learning, and the devices used for learning.

Hypothesis Of The Study

H01: There exist no significant mean differences regarding attitude towards blended teaching-learning based on gender.

H02: There exist no significant mean differences regarding attitude towards blended teaching-learning based on residence.

H03: There exist no significant mean differences regarding attitude towards blended teaching-learning based on the family type.

H04: There exist no significant mean differences regarding attitude towards blended teaching-learning based on semester.

H05: There exist no significant mean differences regarding attitude towards blended teaching-learning based on the nature of course.

H06: There exist no significant mean differences regarding attitude towards blended teaching-learning based on the nature of internet access.

H07: There exist no significant mean differences regarding attitude towards blended teaching-learning based on their experience of using the blended mode to get learning.

H08: There exist no significant mean differences regarding attitude towards blended teaching-learning based on the devices used for learning.

Methods And Participants

The present study was a survey-based descriptive study. The researcher has selected only 313 students from different departments of Post Graduate level students of Uttar Dinajpur district, W.B., as a sample. The researcher also used random sampling techniques for selecting the sample. The investigator extensively used SPSS 23 to analyze the Mean, S.D, t-test, and ANOVA.

Tool used for the study

To test the hypotheses, the investigator developed a scale on Attitude towards the Blended Teaching Learning Approach of the Post Graduate level students (ATBTLA). The ATBTLA of the post graduate students was assessed based on a 3-point Likert scale from 1 to 3, similar to the previous investigations conducted and used by Hassan, (2015); Obaidat, (2016); Yulia, (2017); Aladwan et al., (2018); Bakeer, (2018); Abbacan-Tuguic, (2021); Fenech et al., (2021); Falah & Chairuddin, (2022); Nyaaba & Sandawey, (2022). The questionnaire was constructed with 30 items which were distributed into eight dimensions, i.e., teaching-learning process (3 items), learning activities (4 items), psychological aspects (5 items), curriculum (3 items), technological facilities (5 items), efficiency of teacher (4 items), performance of the learners (3 items), evaluation process (3 items).

Data Collection Procedure

In order to begin gathering data, the Raiganj University was chosen randomly in the district of Uttar Dinajpur, West Bengal. Following that, the investigators notified the authorities and the pertinent PG students of each department well in advance for the purpose of data gathering. The researcher created online questionnaires using Google Forms, and the questionnaire was distributed via WhatsApp, Email, and other social media platforms. Before and throughout the data-collecting procedure, the students received clear instructions on how to complete questionnaires. In the end, 313 completed responses were gathered using the random sample approach. However,

10 responses were turned down due to specific issues with incompleteness. After gathering and sorting the surveys, the investigators evaluated all of the questionnaire questions using the direct and reverse scoring methods. Positive items were scored using the direct technique (Agree-3, Neutral-2, Disagree-1), while negative items were scored using the reverse method (Agree-1, Neutral-2, Disagree-3).

Results Of The Study

A) Level of the attitude of the Post Graduate students towards the blended learning approach:

Table1: Mean, SD of the level of attitude scale

Group	Number	Mean	S.D
Post Graduate students	313	61.029	4.9906

For determining the level of attitude

$M \pm \sigma$

$M + \sigma = 61.029 + 4.9906 = 66.019$

$M - \sigma = 61.029 - 4.9906 = 56.038$

Table 2: Represent the level of attitude among the Post Graduate students towards the blended learning approach

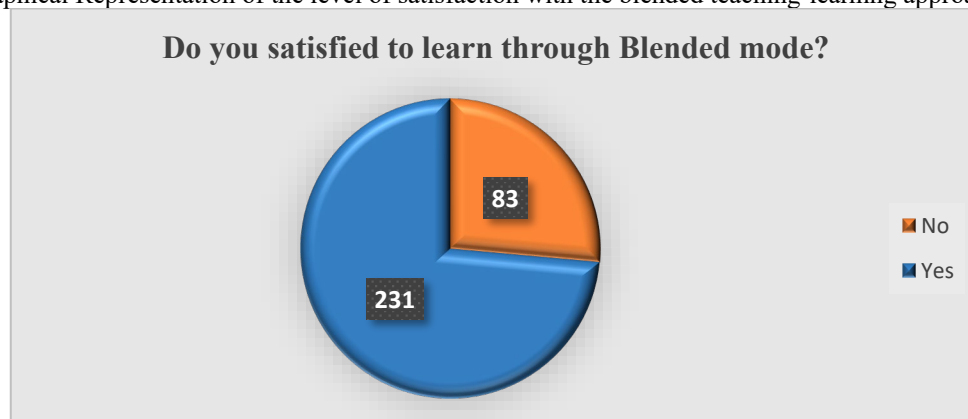
Scores	Frequency	Percentage	Level of Attitude Towards Blended Learning
≥ 66.019	50	15.97%	High
Between 56.038 to 66.019	215	68.89%	Moderate
≤ 56.038	48	15.33%	Low
Total	313	100%	

Source: Primary data (collected by Researcher, 2023)

Based on the above table, we can observe that out of the total 313 Students, 50 (15.97%) of students have scored above 66.019, 215 (68.89%) Students have scored between 56.038 to 66.019, and 48 (15.33%) students have scored below 56.038 on the attitude scale towards blended learning. Therefore, the majority of students (68.89%) scored between 56.038 and 66.019, indicating a moderate attitude towards the blended learning approach among Post Graduate level students (Mahato et al., 2021).

B) Level of satisfaction of the Post Graduate students towards the blended teaching-learning approach:

Fig 1: Graphical Representation of the level of satisfaction with the blended teaching-learning approach



Source: Primary data (collected by Researcher, 2023)

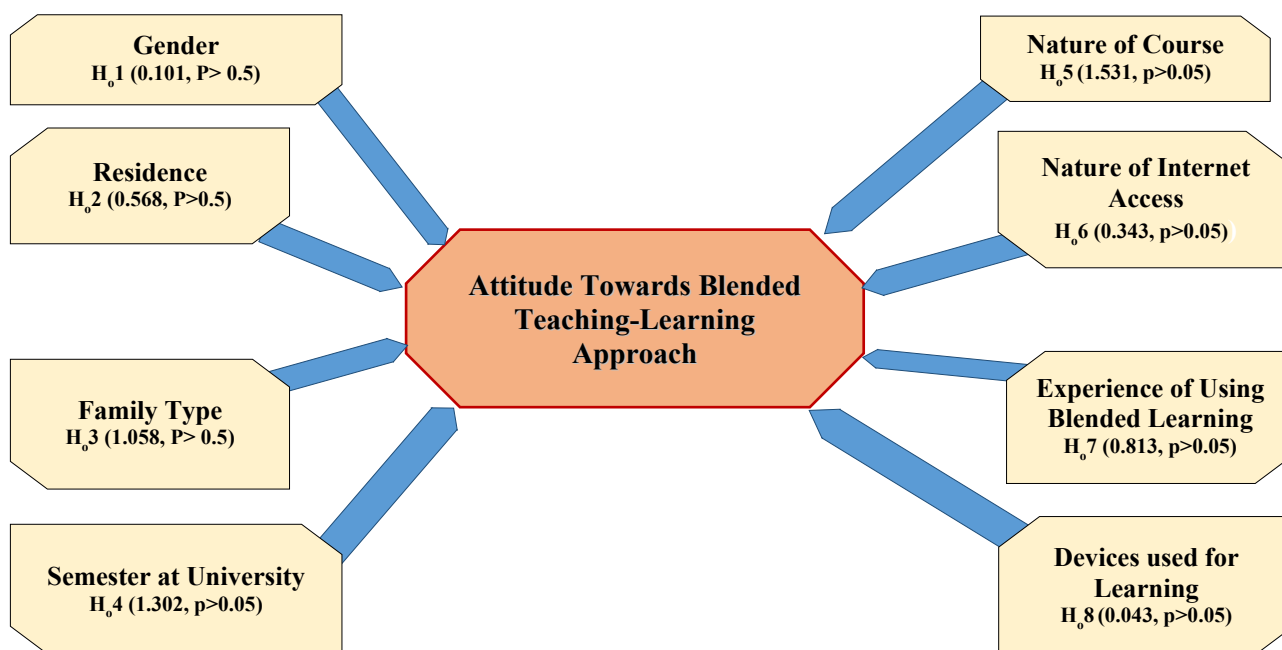
The above figure shows that out of 313 students, 231(73.80%) students responded with yes regarding their level of satisfaction with blended teaching-learning. On the other hand, 83 (26.51) students responded against no. So, most of the students are satisfied with the blended teaching-learning approach.

Table 3: Number, Mean, SD and t-test regarding different demographic variables

Demographic Variables		Number (N)	Mean (M)	SD (σ)	df	Mean Difference	SEd	t-value	Sig. (2-tail)	Remarks*
Gender	Male	156	61.00	4.81	311	.0573	.565	0.101	.919	(p>0.05)*
	Female	157	61.05	5.17						
Residence	Rural	184	61.16	5.40	311	.3258	.573	0.568	.570	(p>0.05)*
	Urban	129	60.83	4.34						
Family Type	Nuclear	228	60.84	5.25	311	.6712	.634	1.058	.291	(p>0.05)*
	Joint	85	61.51	4.17						
Semester at University	1 st sem	153	60.65	5.29	311	.6712	.563	1.302	.194	(p>0.05)*
	3 rd sem	160	61.38	4.66						
Access to the Internet at home	Yes	293	61.00	5.06	311	.3966	1.155	0.343	.732	(p>0.05)*
	No	20	61.40	3.84						
Their experience of using the blended mode to get learning	Yes	253	60.91	5.12	311	.5830	.717	0.813	.417	(p>0.05)*
	No	60	61.50	4.38						

Source: Primary data (collected by Researcher, 2023)

Fig 2: Research Model of SPSS Analysis



Source: Primary data (collected by Researcher, 2023)

Gender and Attitude towards BL:

Table 3 and figure 2 shows that the determined 't'-value is 0.101, less than the critical value at 0.05 level of significance with 311 degree of freedom. There is no significant difference in the attitudes of male and female students toward the blended learning approach. The data from table 3 also shows that the mean value of male groups and female groups are 61.00 and 61.05, respectively S.D are 4.81 and 5.17, respectively. It is reasonable to conclude that attitudes regarding blended learning among PG male and female students are similar.

Residence and Attitude towards BL:

Table 3 and figure 2 shows that the determined 't'-value is 0.568, less than the critical value at 0.05 level of significance with 311 degree of freedom. There is no significant difference in the attitudes of rural and urban students toward the blended learning approach. Besides, the mean value of Rural and Urban students is 61.16

and 60.83, respectively S.D are 5.40 and 4.34. It is reasonable to conclude that attitudes regarding blended learning among PG rural and urban students are not much different.

Semester and Attitude towards BL:

Table 3 and figure 2 shows that the determined 't'-value is 1.302, which is less than the critical value at 0.05 level of significance with 311 degree of freedom. There is no significant difference in the attitudes of the 1st semester and 3rd semester students towards the blended learning approach. However, the mean value of 1st semester and 3rd semester groups are 60.65 and 61.38, respectively S.D are 5.29 and 4.66, respectively.

Access to the Internet and Attitude towards BL:

Table 3 and figure 2 shows that the determined 't'-value is 0.343, which is less than the critical value at 0.05 level of significance with 311 degree of freedom. There is no significant difference in the attitudes towards the blended learning approach based on access to the internet at home. The data from table 3 also shows that the mean value of access to the internet (Yes) and access to the internet (No) are 61.00 and 61.40, respectively S.D are 5.06 and 3.84, respectively.

Experience of using BL and Attitude towards BL:

Table 3 and figure 2 shows that the determined 't'-value is 0.813, which is less than the critical value at 0.05 level of significance with 311 degree of freedom. There is no significant difference in the attitudes towards blended learning based on their experience of using the blended mode to get learning. Besides, the mean value of their experience of using the blended mode to get learning was not much different.

Table 4: Number, Mean and SD in attitude towards blended learning approach based on the nature of course and devices used for learning

Variables	Number (N)	Mean (M)	SD (σ)
Nature of Course	Language	49	61.347
	Science	218	61.206
	Social Science	46	59.848
Devices used for learning	By using Smartphone	193	60.974
	By using Laptop/Desktop	75	61.173
	By using Tab/Notepad	45	61.022

Source: Primary data (collected by Researcher, 2023)

Table 5: The significant mean differences regarding attitude towards blended learning based on the nature of course and devices used for learning

Result of ANOVA based on Nature of Course					
Sum of Squares		Mean Square		F-value	Sig.
Between Groups	Within Groups	Between Groups	Within Groups		
75.993	7694.748	37.997	.218	1.531@	.218
Result of ANOVA based on Devices used for learning					
2.146	7768.595	1.073	25.060	.043@	.958

Source: Primary data (collected by Researcher, 2023)

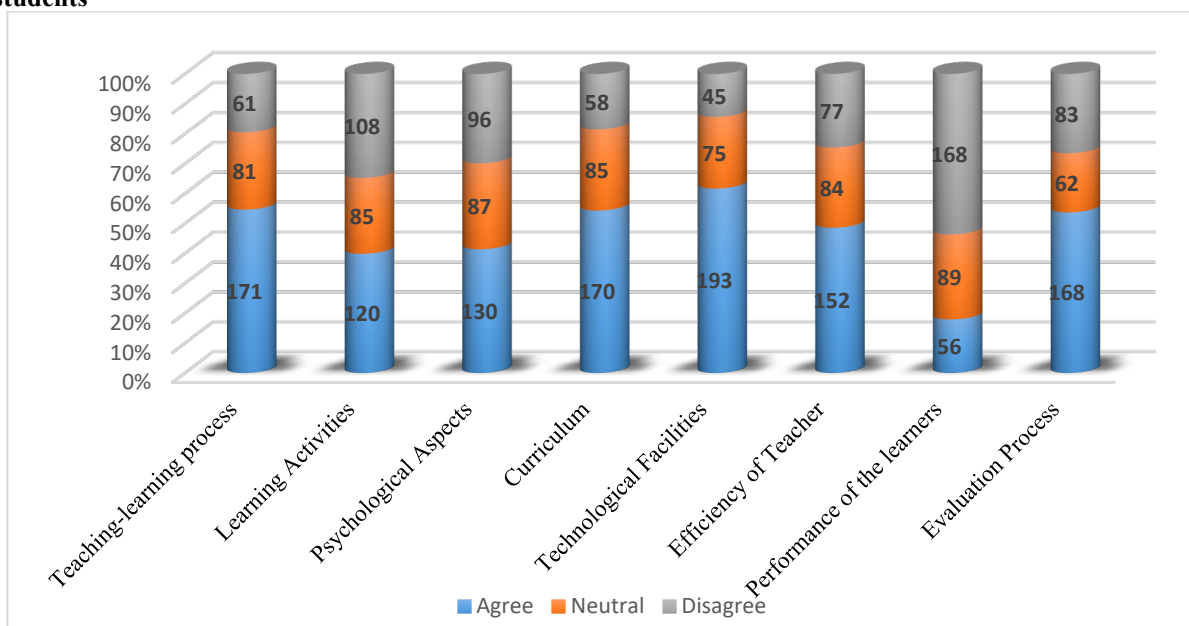
@ Not Significant [Table Value of 'F' against df-310/2, 310/2 at 0.05 and 0.01 level of significance]

*At 0.05 level of Significance 3.03

*At 0.01 level of significance 4.68

The above table and figure 2 shows that the calculated **F-value** is less than the critical value at 0.01 and 0.05 level of significance. Therefore, the null hypothesis is failed to reject at both level of significance. Hence, there is a no significant mean difference based on the nature of course and devices used for learning with respect to their attitude towards the blended learning approach.

Fig 3: Dimension-wise attitude towards blended teaching-learning approach among post graduate level students



Source: Primary data (collected by Researcher, 2023)

The eight dimensions of attitude towards the blended teaching-learning approach by post graduate students are depicted in the diagram above. In this first-dimensional graphical representation, students are dealing with the teaching-learning process. The majority of the students have given positive responses. In the second dimension, 120 students (out of 301 total) responded positively to learning activities. On the other hand, 130 students responded positively to psychological aspects regarding blended mode. Besides, many post graduate students believe that a curriculum organized through blended mode is very well. In the technology facilities dimension, 193 students responded positively to agree, while 75 students responded neutral, and 45 responded negatively with technological facilities. In the fifth dimension, most students positively responded to the teacher's efficiency. After that, the graphical representation reflects a critical aspect of the learner's performance that most students struggle with the conceptual clarity of their respective courses. In another area, the majority of students were satisfied with the evaluation process in the blended teaching-learning process. Therefore, it is clear that most students support the blended teaching-learning approach.

Discussion And Conclusion

The present study revealed that most students (68.89%) scored between 56.038 and 66.019, indicating a moderate attitude towards the blended learning approach among Post Graduate level students supported by (Mahato et al., 2021). It also found that most students were satisfied with the blended teaching-learning approach. Besides this, it is also revealed that there is no significant difference in the attitudes based on Gender (0.101, $p > 0.05$) supported by (Tongpoon-Patanasorn & White, 2020), Residence (0.568, $p > 0.05$) supported by (Jnr, 2022), Family type (1.058, $p > 0.05$), Semester at university (1.302, $p > 0.05$), Nature of course (1.531, $p > 0.05$), Nature of internet access (0.343, $p > 0.05$) (Mahato et al., 2021), Devices used for learning (0.043, $p > 0.05$), Their experience of using the blended mode to get learning (0.813, $p > 0.05$) towards blended teaching-learning approach supported by (Hapuarachchi, 2016). It is reasonable to conclude that attitudes regarding blended learning among PG students are similar (Das, 2021).

Besides, the eight dimensions of attitude towards the blended teaching-learning approach by post graduate students revealed that the majority of the students had given positive responses. The study also revealed that 120 students (out of 301 total) responded positively to learning activities (Lim & Morris, 2009). On the other hand, 130 students responded positively to psychological aspects regarding blended mode. Besides, many post graduate students believe that a curriculum organized through blended mode is very well. In the technology facilities dimension, 193 students responded positively to agree, while 75 responded neutral and 45 responded negatively with technological facilities (Gumennykova et al., 2020). After that, the graphical representation reflects a critical aspect of the learner's performance that most students struggle with the conceptual clarity of their respective courses. In another area, the majority of students are satisfied with the evaluation process in the blended teaching-learning process (Sieweng & Muuk, 2015). Therefore, it is clear that most students support the blended teaching-learning approach.

According to the findings, students believed that providing the course in a blended style made it easier to follow and boosted their learning. The online material was well-illustrated and simple to comprehend. The online activities boosted engagement and were well structured regarding goals and duration. It is critical that the course's intended learning objectives align with the online activities in order to ensure that the two elements are linked. Every course should be introduced in blended mode. Blended learning necessitates a deliberate approach to instructional design such that the program is blended in design, not merely in delivery.

Limitations Of This Study And Future Research

In this study, the investigator chose only 313 students to post graduate level students at Uttar Dinajpur district of W.B., India. The study was restricted to enrolled samples of PG 1st and 3rd semester students. Also, the investigator only used the descriptive survey method for data collection and analyzed the data accordingly.

In order to achieve better content validity, future research may consider using additional items and dimensions. Also, further study can be carried out on challenges regarding blended teaching learning in secondary-level students from different parts of the country. Also, future studies could include more universities and larger samples from different areas.

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Disclosure of Conflict Interest

The authors declare that they have no conflicts of interest.

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