

## ATTITUDE OF POST GRADUATE STUDENTS TOWARDS BLENDED LEARNING

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### ABSTRACT:

In the current investigation an endeavor to examine the attitude of Post Graduate students towards Blended Learning in Purulia District of West Bengal, India. The Descriptive method was employed. A total of 148 PG Students (Second Semester - 54 and Fourth Semester-94) from Sidho-Kanho-Birsha University in Purulia District of West Bengal were taken as representative samples of the population as a whole. A stratified random sampling technique was adopted to select Post Graduate students. An Attitude Scale (Likert type) was utilized for gathering the data. Mean, S.D., t-test and F-test were used to analyze the data. The study uncovered that the degree of attitude of Post Graduate students towards blended learning in Purulia District of West Bengal is average or moderate. The study additionally uncovered that attitude of Post Graduate students towards blended learning as for their Gender (Male-Female), Locality (Rural-Urban), Semester (2<sup>nd</sup> – 4<sup>th</sup>), Internet User (User- Non user), Family type ( Joint-Nuclear), Caste (Hindu, Muslim, and Sari), Guardians Occupations did not differ significantly. On the other hand, attitude of Post Graduate students towards blended learning with respect to their Streams (Arts, Science and commerce) differs significantly.

**Keywords:** Attitude, Post Graduate Student, Traditional Learning, Online Learning, Blended Learning, Flipped Learning

### INTRODUCTION:

The present era is known as the era of science and technology. Without science and technology, we can't move forward. The field of education is also dominated by technology. In few years ago in the field of education, e-learning plays a fundamental role and it has been continuing even now. Day after day the concept of online learning process becomes much familiar to us. Actually, online learning has so many benefits but due to the proper equipment it does not stand in its peak point. So, our evolving minds are seeking alternatives that will remove the drawbacks of online learning. Such kind of concept promotes to the concept of blended learning. Actually, blended learning is a summation of face-to-face learning and online learning encompasses the temporal and spatial dimension. Sometime it is treated as 'Hybrid learning' or 'Flipped Classroom'. From this new method, learners can achieve two alternatives side by side like the traditional classroom instructor along with technology multimedia-based activities. So, learners can enjoy both of the methods. Blended learning is completely flexible in nature. In this method learners can access online lectures, video, documentaries, assignments, probing questions etc. along with traditional methods.

The rapid development of technology greatly affects the whole education system. Now a days, education and technology cannot stand partition to each other. Technology creates a new thing then educational teaching methods changing with the paralleled with of it (Kazi et al., 2017). In present time, blended learning is dominating the teaching learning method where the learners can avail both the online and traditional learning with more flexibility and also can personalize their learning experience according to the situation. According to Graham (2006) Blended learning is the combination of online and face-to-face instruction. According to Chew, Jones and Turner (2008) blended learning is the amalgamation of education and educational technology. According to Krasnova (2015) "blended learning may be defined as a 'method of teaching that combines the most effective face-to-face teaching

techniques and online interactive collaboration, both constituting a system that functions in constant correlation and forms a single whole.” Blended Learning design focuses attention to nurture social interface and fostering an effective learning environment (Boelens et al. 2017).

So, we can say that blended learning is the combination of offline and online method of learning, along with help of digital multimedia which significantly increases its relevance as well as effectiveness in imparting and performing its desired function. In blended learning, with the help of technology learners’ can learn with their expected time and places (Sheninger, 2019). Blended learning is not a new notion at all rather it came across through various ups and downs. It crosses several phases. The present scenario of this method has not come in a single day. The derivation or the phases of development of this learning started its journey since 1840. Prior to the development of legitimate correspondence and innovation, Sir Pitman sends shorthand by means of postcards and understudies additionally gave appropriate criticism. In the new century, science and innovation has been creating in such manner that the Govt. or on the other hand the private establishments are a lot of cognizant about the advantages of mixed learning. It is so alluring and innovative technique that is the reason it is ruling right now.

As we as a whole realize that the blended learning is the mix of on the web and conventional learning strategy. Normal and online education have their own constraints. Consequently, the majority of the modernized educational institutions blend the two systems into one, which is why the system is known as blended system. The most important rationale to blend these systems was to merge their advantages and removes the disadvantages. Blended learning is flexible, new, and relatively low cost. It is also personalizing in nature. Such kind of nature makes it unique from the other learning methods. This method allows students to learn according to their situation and momentum because the setting in which the learner is situated plays an important role in determining the output of the whole process. If the learner wants to learn, he can learn it whether he or she is at home thus doing away with the rigidity of the formal setting and providing a lucid and mobile scope of learning. Apart from it, the learners can also be able to learn the traditional method too. We can see that the traditional learning is not attractive. It is monotonous and even there is no diversity from the point of curriculum. So, the students may show their negative attitude towards it. For the advancement of technology, mobiles are available in the market. Mainly the students are very much attractive for it. They learn various things from it. They pursue such kind of mental zeal to learn from mobile devices. Apart from it, this method increases the quality or quantity of pupil's interactions. Students can learn part-timely through this method. It will be also benefited for physical disabilities or for whom who live in different cities. Akkoyunlu & Soylu (2006) examined students’ views on blended learning environment. It showed that the students take pleasure in the blended learning environment. Achievement levels and frequency of participation of students influenced their views on blended learning environment. The highest score was given to face-to-face contact in a blended learning application. This finding exemplified the significance of interaction and communication for the success on-line learning. Hinkhouse (2013) found that instructors must be directly involved in the creation of online content and resources for their students for more efficient online learning. Means et al. (2013) found that students in online learning conditions were found to perform modestly better on average than those receiving face-to-face instruction. In those studies that contrasted blended learning with traditional face-to-face instruction, the advantage over face-to-face classes was significant, but not in those studies that contrasted purely online with face-to-face conditions. Neyestani & Babri (2015) exposed that the majority of the respondents said agree with blended learning. Also, statistical analysis showed that there was no significant relationship between varies age and attitude. Khan (2016) revealed that compared to male prospective teachers and those of the arts stream, the female prospective teachers and prospective teachers who were from science streams had a highly favorable attitude towards blended learning methods. Krasnova & Vanushim (2016) revealed that the immediate ramifications for the creation, advancement, and conveyance of online courses in blended learning. Roland et al. (2018) showed that students pursuing a secondary specialization had a more constructive attitude to blended learning in terms of online interaction and technology. Paduraru et al. (2019) found that Undergraduate students have positive perception towards blended learning and the authors are tried to implement a model for undergraduate learners. Attard & Holmes (2020) investigated how teachers use blended learning strategies and how their students respond to these pedagogical practices. Taghizadeh & Hajhosseini (2020) discovered that TEFL students have a very positive perception towards blended learning and online learning environments, meaning that it is very beneficial to their skill, knowledge, and other development. Şenturk (2021) examined the effects of blended learning teaching-learning approach on academic achievement and twenty-first-century skills of preservice teachers during the teaching principles and methods course.

With the importance of blended learning in mind, many questions arise in the minds of the researchers, such as whether or not PG students support this approach in their teaching learning process. Do they support this system? How do they feel about blended learning? In order to find out the answers to these questions, the researchers used the current study to investigate the attitudes of Post Graduate students towards blended learning. The following were the objectives of this study:

1. To discover the attitude of PG students towards Blended learning in Purulia District of West Bengal.
2. To find out the difference between the attitude of Post Graduate students towards Blended learning with reference to their gender, locality, semester, internet access (user & non-user) and family types.
3. To find out the difference among the attitude of Post Graduate students towards Blended Learning with reference to their stream, religion and guardian occupation.

The hypotheses of this study are in the null form:

**H<sub>01</sub>:** There will have more unfavorable attitude of Post Graduate Students towards Blended learning.

**H<sub>02</sub>:** There is no significant difference between the attitude of Post Graduate students towards Blended learning with reference to their gender, locality, semester, internet access (user & non-user) and family types.

**H<sub>03</sub>:** There is no significant difference among the attitude of Post Graduate students towards Blended Learning with reference to their stream, religion and guardian occupation.

## **METHODOLOGY:**

In this study, the descriptive method was used. It is a common and widely used scientific research technique that entails breaking down phenomena into their constituent parts. The primary objective of descriptive analysis is to explain the present state of affairs. This research was intended as an enlightening quantitative approach. As per Gay and Airisian (2009), clear exploration included gathering information all together the test speculations or to address question concerning the current status of the subject of study. It implies that spellbinding exploration would help the analyst in gathering the information.

### ***Population***

All the PG students of Sidho-Kanho-Birsha University treated as population for the present study.

### ***Sample and Sampling Procedure***

148 PG students (54 -2<sup>nd</sup> Semester & 94- 4<sup>th</sup> Semester) of Sidho-Kanho-Birsha University in Purulia District of West Bengal were chosen as a representative sample of the entire population. The sample was chosen using the stratified random sampling technique.

### ***Instrument***

The attitude of PG students towards blended learning was assessed by using an attitude scale (Likert type). The scale was constructed by the researchers. There were 30 positive and negative items on the scale. In scoring procedure, weightage given 5, 4, 3, 2, 1 for positive items and in the case of negative items, reverse scoring was used.

### ***Statistical Techniques***

In order to analyze and represent the collected data, the researchers used Mean, S.D. t-test, and ANOVA.

## **RESULTS & DISCUSSIONS:**

### **Testing of H<sub>01</sub>:**

There will be more unfavourable attitude of PG students towards Blended learning.

Category	N	Mean	S.D
Post Graduate Students	148	114.80	11.87

On the basis of cut-off point the investigators verified the H<sub>01</sub>. The cut-off point here is  $M \pm 1\sigma$ . Mean=114.80., N=148 and  $\sigma=11.87$ . This means,  $114.80 + 1 \times 11.87 = 126.67$  is  $M + 1 \sigma$ . And  $M - 1 \sigma = 114.80 - 1 \times 11.87 = 101.93$ . Most Post Graduate students (71 in numbers i.e., 47.97 percent of Post Graduate students were lies between 101.93 and 126.67 scores, It can therefore be said that the attitude of post-graduate students is moderate or average towards blended learning.

**Table 1:** The attitude of Post Graduate students in Purulia District of West Bengal towards Blended learning

Scores	Frequency	Percentage	Levels of Attitude
Above 126.67	16	10.81	High
Between 101.93-126.67	71	47.97	Moderate / Average
Below 101.93	61	41.22	Low
<b>TOTAL</b>	<b>148</b>	<b>100 %</b>	

**Table -2:** Distribution of t-test regarding various variables

Groups / Variables	Number	Mean	SD	SED	Mean Deference	df	t	Level of Significance	
Male	71	114.35	14.915	1.95	0.87	148	0.45	0.05	Not Significant
Female	77	115.22	8.207						
Rural	100	115.78	8.76	2.07	3.01	148	1.45	0.05	Not Significant
Urban	48	112.77	16.52						
2 <sup>nd</sup> Semester	54	113.04	14.95	2.09	2.78	148	1.33	0.05	Not Significant
4 <sup>th</sup> Semester	94	115.82	9.62						
Internet user (Yes)	91	113.56	13.35	1.99	3.23	148	1.62	0.05	Not Significant
Internet user (No)	57	116.79	8.79						
Family (Joint)	92	114.62	13.37	2.02	0.49	148	0.24	0.05	Not Significant
Family(Nuclear)	56	115.11	8.98						

**Testing of H<sub>0</sub>:**

**Gender (Male & Female)**

From the table-2 in respect of PG Male and Female students, it can be recognized that the df is 148. Therefore, at a level of 0.05, if it is 1.98 or more a t-test is significant. Since the estimated value of 't' 0.45 is less than the table value 1.98 (0.45 < 1.98), the disparity in attitude between PG Male and Female students toward blended learning is not significant at level 0.05. It is fair to say that there is no significant difference in attitudes toward blended learning among PG male and female students. It may be because of male and female students have almost same zeal and both have mobile devices too. Therefore they can access this online and offline learning method very easily.

**Locality (Rural & Urban)**

In the case of PG Rural and Urban students, from table-2, it can be found that the df is 148. Therefore, at a level of 0.05, a t-test is significant if it is 1.98 or more. The difference in attitude between PG Rural and Urban students towards blended learning is not significant at the 0.05 level since the approximate value of 't' 1.45 is lower than the table value of 1.98 (1.45 < 1.98). Basically, it is happened that urban students have always shown more positive attitude than rural students, but in this context they all have same attitude towards blended learning. When the researchers are trying to find out the reason, they realize that Purulia is rural city; it is not a big city, geographical area is also not large that is why the attitude of PG students towards blended learning not differ significantly, that mean they have almost same attitude towards blended learning.

**Semester (2<sup>nd</sup> & 4<sup>th</sup>)**

From the table-2 in respect of PG 2<sup>nd</sup> and 4<sup>th</sup> Semester students, it is possible to find that the df is 148. Therefore, at a level of 0.05, a t-test is significant if it is 1.98 or more. As the estimated value of 't' 1.33 is less than the table

value of 1.98 ( $1.33 < 1.98$ ), at level 0.05. So it is said that, there is no noteworthy disparity between the attitude of PG 2<sup>nd</sup> and 4<sup>th</sup> semester students towards blended learning. Today's learners are very much modern throughout graduation level. They learn to use mobile devices or computers from graduation level. So they developed their attitude towards online mode from the graduation level. The gap between 2<sup>nd</sup> and 4<sup>th</sup> semester is only 6 months. 6 months of difference is not a contributing factor for significant difference in the attitude of PG students towards blended learning.

**Internet (User & Non User)**

The df is considered to be 148. A t-test is also significant at a level of 0.05 if it is 1.98 or more. At level 0.05, It is not significant since the approximate value of 't' 1.62 is lower than the 1.98 ( $1.62 < 1.98$ ) table value. Hence, there is no considerable variation between the attitude of PG Internet user and the non-internet user students towards blended learning. It appears that we expected that internet user should have positive attitude towards blended learning but in this context we can not found any significant difference in their attitudes. Although no-internet user have some experience from their peer groups or TV or from anyone.

**Family Types (Joint & Nuclear)**

From the table-2 in respect of PG Joint Family and Nuclear Family students, it can be known that the df is 148. Therefore, at a level of 0.05, a t-test is significant if it is 1.98 or more. As the estimated value of 't' 0.24 is lower than the value in the table 1.98 ( $0.24 < 1.98$ ), at level 0.05, the difference between the attitude of students of the PG Joint family and the Nuclear family towards blended learning is not significant. As we know that this study is on blended learning, if the study will about online or e-learning or m-learning then we expect that nuclear family's students have more favorable attitude, because it would be the matter of expenditure of family. However, since blended learning is a mixture of online and offline learning, the effect is negligible.

**Testing of H<sub>03</sub>:**

**Stream (Arts, Science & Commerce)**

**Table- 3: Results of one way ANOVA for Stream**

Sources of Variance	df	Sum of Squares	Mean Square	F	Level of Significance	
Between Groups	2	3347.275	1673.64	13.97	0.01 & 0.05	Significant
Within Groups	145	17372.042	119.81			
<b>Total</b>	<b>147</b>	<b>20719.32</b>				

The calculated F-value from Table-3 (13.97) is established to be greater than the critical value of F (4.75 & 3.06) for 2 and 145 df at significance levels of 0.01 and 0.05. It indicates that the attitude towards blended learning among the PG students with respect to their stream differs significantly. It is therefore concluded that streams have a significant effect on the attitude of PG students towards blended learning. In this study this is the one result where it differs from each other. In respect of stream, we know that arts students are always traditional and they are technically not so sound, on the other hand commerce and science students are technically sound, they uses internet online classes from the graduation level and they uses laptops or computers for their practical work from very beginning of higher education.

**Religion (Hindu, Muslim & Sari Dharma)**

**Table- 4: Results of one way ANOVA for Religion**

Sources of Variance	df	Sum of Squares	Mean Square	F	Level of Significance	
Between Groups	2	167.28	83.638	0.59	0.01 and 0.05	Not Significant
Within Groups	145	20552.04	141.74			
<b>Total</b>	<b>147</b>	<b>20719.32</b>				



From Table-4, at the significance level of 0.01 and 0.05, the calculated F-value (0.59) is found to be less than the critical value of F (4.75 & 3.06) for 2 and 145 df. It shows that the attitude towards blended learning among university students with regard to their religion does not vary significantly. It is also concluded that religious faith has no major impact on the university students' attitude towards blended learning. In present era, mobile, internet, laptops computers are available to irrespective of class-caste-religion, upper class and lower class students'. So it is very natural to say that in respect of religion, students' have no significant attitude towards blended learning.

### **Guardian Occupation**

**Table-5: Results of one way ANOVA for Guardian Occupation**

Sources of Variance	df	Sum of Squares	Mean Square	F	Level of Significance	
Between Groups	2	145.63	72.82	0.513	0.01 and 0.05	Not Significant
Within Groups	145	20573.69	141.89			
<b>Total</b>	<b>147</b>	<b>20719.32</b>				

From Table-5, the measured F-value (0.513) is found to be less than the critical value of F (4.75 & 3.06) for 2 and 145 df at significance levels of 0.01 and 0.05. It demonstrates that there is no significant difference in the attitude of university students towards blended learning with respect to their Guardian's occupation. It is therefore concluded that the occupation of the Guardian has no meaningful effect on the attitude towards blended learning among the University students. We said it before that if the method of learning will only through online version, then we can see another result. But is the benefits of blended learning that poor or rich students' can also avail this kind of learning method. So as expected in respect of guardian occupation have also no significant result towards blended learning.

### **CONCLUSION:**

The present research is carried out to ascertain the attitude of PG students towards Blended Learning. The study results show that there is an average level of attitude of PG students towards Blended learning (47.97%). Though there is almost similar numbers of students (41.22%) possess low level of attitude towards Blended Learning and only a few numbers of students (10.81%) have high level of attitude towards Blended Learning. In relation to gender, locality, semester, Internet usage, family type, religion and occupation, there is no considerable differentiation in PG students' attitudes toward blended learning. Furthermore, there was a considerable difference in the attitude of PG students toward blended learning depending on their stream. As a result, today's students are technology natives. Furthermore, the use of technology in the teaching-learning environment makes the process more effective and essential. So it's a high time to infuse technology with the teaching-learning environment. So that students can discover the knowledge and information by their own choice, level and pace. Hence the significance of blended learning takes place. And Blended Learning has got a wide acceptance in higher education in all over the world. Viewing this scenario the present results are not acceptable. From this it can be concluded that there is a strong need of awareness program about Blended Learning and it is extremely necessary among the PG students of Purulia district.

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