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Awareness of Secondary School Teachers towards Blended Teaching-Learning

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ABSTRACT

This study was undertaken to study the Blended Teaching-Learning awareness among the secondary school teachers, and to compare the awareness among female and male teachers, rural and urban teachers, <10 years and ≥10 years teaching experienced teachers, as well as arts and science teachers. This study was followed descriptive survey research method. All the secondary school (under WBBSE) teachers of Howrah District, West Bengal was included as population of the study. The data was collected by self-made awareness scale form Stratified Randomly selected 242 Sample (14 secondary schools from rural area and 9 secondary schools from urban). Findings of the study were that: secondary school male teachers have significantly greater awareness towards blended teaching-learning than female teachers; urban teachers have significantly better awareness than rural teachers; secondary school teachers with lesser teaching experience has better awareness than the teachers with greater teaching experience; and science teachers has better awareness than arts teachers. In summary, blended teaching-learning transforms the teachers' role from knowledge provider to coach, guide and mentor. So, it is primarily needed to make all the teachers as highly aware in blended teaching-learning irrespective of their gender, locality, teaching experience, and educational stream differences.

Keywords: Blended Teaching-Learning, Teachers' Awareness, Secondary School Education.

INTRODUCTION

Education is the "third eye" of a person; it provides insight into all affairs, teaches how to act justly and rightly, aids in realising the true meaning of life, eliminates darkness and destroys illusion, increases our fame, transforms us into cultured, pure beings, points us in the right direction, feeds us like a mother, and leads us to where we want to go. It is a very social activity, and good teachers who spend a lot of time getting to know their students personally have historically been associated with effective education. Building effective learning environments and providing enough support materials for training require a solid knowledge basis. The teacher plays a crucial role in the conversion of knowledge from information. In the process of teaching, the teacher and the students establish an interactive setting. Technology is one method used by instructors and students to establish a collaborative learning environment, and it calls for significant reforms in the educational system. It is only possible when technology is used competently and with maturity. Information and communication technology (ICT) is viewed as a technology that will have significant effects on the educational system.

Over the past two decades, information technology has evolved rapidly around the world, changing almost every field of endeavour. New tools and methods have been produced by technology

advancements, but they have also formed a generation of students who interact with the online and offline worlds in a variety of ways. Currently, 30.2 crore people in India use the internet (Nagasubramani, 2015). In recent decades, there has been a gradual increase in the population's acceptance of and usage of information and communication technology. Particularly, there has been a significant uptake of e-learning. The use of e-learning has several advantages, including increased study freedom, increased student control over the learning and evaluation processes, and the creation of customised and tailored information for each student. However, using e-learning has also led to a number of issues, including the breakdown of the student-teacher relationship, a lack of motivation when students must manage their own study time, a sense of isolation when students must study alone in front of a computer, and the difficulty of legally defending the grades received through the use of e-learning systems. A possible solution to those problems can be found in the use of Blended Learning or Hybrid Learning (Nagasubramani, 2015). UGC (2020) in the Concept note, define Blended Teaching-Learning as "pedagogical approach means a mixture of face-to-face and online activities and the integration of synchronous and asynchronous learning tools, thus providing an optimal possibility for the arrangement of effective learning processes. Blended learning is the term given to the educational practice of combining digital learning tools with more traditional classroom face to face teaching". Although blended learning has several definitions, most of them seem to agree on its fundamental characteristics. At its most basic level, blended learning is described as the style of learning that mixes the traditional face-to-face model with the e-learning model, thereby maximising the advantages of both approaches and producing a richer learning experience (Akkoyunlu & Soylu, 2008; Usta, 2007). Blended learning, according to Adas and Abu Shmais (2011), produces an environment that is conducive for students' education. It was described by Garrison and Vaughan (2008) as "the thoughtful Fusion of the two models to create a unique learning experience appropriate with the context and Intended Educational Purpose". Similar to this, Lim, Morris, and Kupritz (2007) claim that it is a learning strategy that has multiple ways to improve learning results with a low cost associated.

OBJECTIVES:

1. To compare the female and male secondary school teachers in respect of their awareness about blended teaching-learning.
2. To compare the rural and urban secondary school teachers in respect of their awareness about blended teaching-learning.
3. To compare the less than 10 years experienced and more than equal 10-year experienced secondary school teachers in respect of their awareness about blended teaching-learning.
4. To compare the arts and science secondary school teachers in respect of their awareness about blended teaching-learning.

HYPOTHESES:

Ho1 There is no significance difference between female and male secondary school teachers in respect of their awareness about blended teaching-learning.

Ho2 There is no significance difference between rural and urban secondary school teachers in respect of their awareness about blended teaching-learning.

Ho3 There is no significance difference between less than 10 years experienced and more than equal 10-year experienced secondary school teachers in respect of their awareness about blended teaching-learning.

Ho4 There is no significance difference between arts and science secondary

school teachers in respect of their awareness about blended teaching-learning.

METHODOLOGY

Method: Descriptive survey research method was employed for the present study.

Variables: The present study has one main variable and four categorical variables.

- *Main Variable:* Awareness of Blended Teaching-Learning.
- *Categorical Variables:* Gender, Locality, Teaching Experience, and Educational Stream.

Population: All the secondary school teachers of Howrah District, West Bengal was included as population of the study.

Sample and Sampling Technique: At first, the researcher was categorized all the secondary schools under WBBSE of Howrah district into two strata: 1. Rural school and 2. Urban school. Then, the researcher was randomly selected fourteen secondary schools from rural area and nine schools from urban area. Then, as sample the researcher was selected all the teachers of these schools who were available and willing at the time of data collection. Finally, the total of 242 secondary school teachers was selected as sample for this study. So, the Stratified Random Sampling Technique was followed in the study to select the sample.

Tool Used: To collecting the data the researchers were constructed a structured questionnaire as "Scale of Teachers' Awareness towards Blended Learning Skills". The scale has 22 items. The scale was organized in five-point Likert type rating scale which sought teacher's awareness. The respondents were asked to indicate their level of agreement with items in the scale by ticking one of the responses was assigned as follows: Strongly Agree (SA), Agree (A), Neutral (N), Disagree (D), and Strongly Disagree (SD).The statements are scored in such a manner that if the response to a positive question is Strongly Agree (SA), a score of 5 is given, for Agree (A), a score of 4 is given, for Neutral (N), a score of 3 is given, for Disagree (D), a score of 2 is given, and for Strongly Disagree (SD), a score of 1 is given. On the other hand, in case of negative statements, the above scoring procedure is completely reversed. To ensure the reliability of the scale, the test-retest approach was followed and to ensure the validity of the scale, the expert validation approach was followed.

Procedure of Data Collection: After preparing the tool, the researcher visited to twenty-three selected secondary schools (14 from rural area and 9 from urban) one by one. Visiting each school, the researcher first sought permission to collect data from the TIC/Head. Then a proper rapport was presented to the teachers and then the data collection questionnaire was given to all those teachers who expressed interest to provide the data one by one and after some time the data containing questionnaires were collected from all the teachers. Finally thanked them and left.

Statistical Techniques Used: The collected data were analysed through application of required statistical techniques i.e. Mean, Standard Deviation (S.D.), and t-test.

DELIMITATION:

The present study was delimited into those secondary school teachers whose school under WBBSE.

ANALYSES AND INTERPRETATION

Analysis of Objective-1& Hypothesis-1:

Table-1: t-Test between Female and Male Teachers

Gender Groups	N	Mean	SD	SE_d	t-Obtained Value	df	Critical Value	Decision
Female	112	68.93	8.12	1.136	16.12**	240	2.60	Null Hypothesis is Rejected at 0.01 Level of Significance
Male	130	87.23	9.36					

N= No. of Individuals, SD = Standard Deviation, df= Degree of Freedom

Interpretation:
Considering the mean blended teaching-learning awareness of two gender groups, t-test has been applied. The table-1 shows that the obtained 't'-value with respect to the mean Awareness score of Blended Teaching-Learning between the Female and Male secondary school teachers is significant at 0.01 levels of significance. Therefore, Male secondary school teachers have better Awareness towards Blended Teaching-Learning than the Female secondary school teachers.

Analysis of Objective-2 & Hypothesis-2:

Table-2: t-Test between Rural and Urban Teachers

Locality Groups	N	Mean	SD	SE_d	t-Obtained Value	df	Critical Value	Decision
Rural	148	71.33	10.22	1.277	14.98**	240	2.60	Null Hypothesis is Rejected at 0.01 Level of Significance
Urban	94	90.46	8.76					

N= No. of Individuals, SD = Standard Deviation, df= Degree of Freedom

Interpretation:
Considering the mean blended teaching-learning awareness of two locality groups, t-test has been applied. The table-2 shows that the obtained 't'-value with respect to the mean Awareness score of Blended Teaching-Learning between the Rural and Urban secondary school teachers is significant at 0.01 levels of significance. Therefore, urban secondary school teachers have better Awareness towards Blended Teaching-Learning than the rural secondary school teachers.

Analysis of Objective-3& Hypothesis-3:

Table-3: t-Test between <10 years and ≥10 years Experienced Teachers

Teaching Experienced Groups	N	Mean	SD	SE_d	t-Obtained Value	df	Critical Value	Decision
<10 years	133	91.46	7.84	1.223	23.04**	240	2.60	Null Hypothesis is Rejected at 0.01 Level of Significance
≥10 years	109	63.27	11.14					

N= No. of Individuals, SD = Standard Deviation, df= Degree of Freedom

Interpretation:
Considering the mean blended teaching-learning awareness of two teaching experienced groups of secondary school teachers, t-test has been applied. The table-3 shows that the obtained 't'-value with respect to the mean Awareness score of Blended Teaching-Learning between the <10 years and ≥10 years teaching experienced secondary school teachers is significant at 0.01 levels of significance. Therefore, secondary school teachers with <10 years teaching experienced have better Awareness towards Blended Teaching-Learning than the secondary school teachers with ≥10 years teaching experienced.

Analysis of Objective-4 & Hypothesis-4:

Table-4: t-Test between Arts and Science Teachers

Educational Stream Groups	N	Mean	SD	SE_d	t-Obtained Value	df	Critical Value	Decision
Arts	140	77.57	8.27	1.143	2.47*	240	1.97	Null Hypothesis is Rejected at 0.05 Level of Significance
Science	102	80.39	9.43					

N= No. of Individuals, SD = Standard Deviation, df= Degree of Freedom

Interpretation:
Considering the mean blended teaching-learning awareness of two teacher groups of educational streams, t-test has been applied. The table-4 shows that the obtained 't'-value with respect to the mean Awareness score of Blended Teaching-Learning between the Arts and Science secondary school teachers is significant at 0.05 levels of significance. Therefore, science secondary school teachers have better Awareness towards Blended Teaching-

Learning than the arts secondary school teachers.

FINDINGS

1. Secondary school male teachers have better awareness towards blended teaching-learning than the secondary school female teachers.
2. Urban secondary school teachers have better awareness towards blended teaching-learning than the rural secondary school teachers.
3. Secondary school teachers with <10 years teaching experienced have better awareness towards blended teaching-learning than the secondary school teachers with ≥10 years teaching experienced.
4. Secondary school science teachers have better awareness towards blended teaching-learning than the secondary school arts teachers.

CONCLUSION

As more education institutions move towards blended teaching-learning as a means of enhancing teaching and learning it is important to understand teachers' awareness for engaging in blended teaching-learning (Birbal, Ramdass, & Harripaul, 2018). As the findings of this study show, the awareness of secondary school teachers towards blended learning is significantly high among male teachers than female teachers, urban teachers than rural teachers, lesser experienced teachers than greater experienced teachers, and science teachers than arts teachers. This could be because in a regular Indian household, the time to explore new things is comparatively more with men than that with women of the house. Rural teachers have lesser opportunities to using internet services in comparison to urban teachers. Newly appointed teachers are belonging to new generation who are growing with the e-learning and Information and Communication Technology (ICT) based learning systems. Science teachers may greatlyuse e-learning systems than the arts teachers. This suggests that improvement and preparation of teachers in many aspects of blended learning is necessary to implement blended learning in a teacher education programme. There have been many developments in using blended learning that could innovate new possibilities (e.g. increasing use of video communication, e-portfolios, and social networking tools such as blogs and wikis) (Alfahad et al., 2015).

A fully digital approach is equally ineffective for improving learning. Despite a few minor drawbacks, the conventional method of teaching and learning adds a much-needed human touch to the learning process. Students' personalities and behaviors are directly influenced by the teachers' personalities and behaviors. Face-to-face communication satisfies affect goals together with cognitive and psychomotor goals. It cultivates among the students the best value system. The ratio of students to teachers is high. The teacher at the moment was unable to focus on all of the children at once. Additionally, students struggle to focus in class for extended periods of time. We can solve this issue by utilizing blended teaching-learning.

Blended Learning can encourage learners' creativity and simplify the learning environment in order to enhance their self-discipline and motivation (Baker, 2010; Kuh 2009; Ladkin, Case, Gayá, Wicks, & Kinsella, 2009). According to Lo, Johnson, and Tenorio (2011) when students use blended learning their perception level of deep thinking and problem solving is higher. Also, it helps teachers to engage in live instruction in class, using communicative activities which encourage language production (Richards, 2010; Senior, 2010). Finally, it is concluded that Blended Teaching-Learning shifts the teacher's role from knowledge provider to coach and mentor. This shift does not mean that teachers play a passive or less important role in students' education (UGC, 2020). So, it is primarily needed to make all the teachers as highly aware in blended

teaching-learning irrespective of their gender, locality, teaching experience, and educational stream differences.

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