



Attitude Of Pupil Teachers Towards Blended Learning In The Garhwal Himalayan Region

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Abstract: In the 21st century, it is necessary to use ICT in Education according to the need and expectations of the learner. ICT enhances the quality of Education in several ways, which facilitates the learner to gain knowledge and education through different approaches like multimedia, computer software, video & audio etc. All these mediums provide quality to the Education process. In India and particularly in the Himalayan region, we can see the lack of awareness of the use of ICT in Education. As such we need to integrate ICT and the traditional teaching method to make the education process easier and more effective. In the complex geographical conditions of the Himalayan region the integration of different learning approaches, such as blended learning, can make a huge difference in the field of education in both ways, qualitatively and quantitatively. The study aims to examine the attitude of pupil teachers of the Garhwal Himalayan region towards blended learning. The sample consists of 171 pupil teachers in the teacher education institutes of the Garhwal Himalayan region. A self-constructed tool consisting of 35 statements was used to measure the pupil teacher's attitude and knowledge of blended learning. An online questionnaire was circulated to collect the data. A descriptive survey was adopted to collect the data, it was then analyzed with Excel software. The result showed that most of the pupil teachers have an average level of attitude towards blended learning. Gender-wise there is a significant difference in the attitude of pupil teachers towards blended learning.

Keywords: Attitude • Pupil teachers • Garhwal Himalayan region • ICT • Blended learning.

Introduction

In the present era of digitalization, the use of technology in Education enhances the quality of the teaching-learning process. The Education and Human resources of any nation ensure its future. The present study covers a brief part of the Garhwal Himalayan region of India. In the Garhwal Himalayan region, different socio-economic, environmental, political, and diverse demographic systems are the characteristics of this region. Mountain communities residing in the Garhwal Himalayan region are one of the characteristics of the region. A lack of basic resources, services and poor infrastructure is a barrier to bringing most of the residents of the Garhwal Himalayan region to the mainstreaming of Education and life. The poor socio-economic background of the people residing in the above region makes it

unaffordable and inaccessible to the opportunities of quality education. This is resulting in the increase of marginalization of the deprived community of the Garhwal Himalayan region for Education.

Traditional teaching is one of the popular ways of teaching in India including the Garhwal Himalayan region. Due to the complex geographical conditions and different socio-economic backgrounds of the residents of this region, this way of teaching and education has its limits with respect to accessibility. On the other hand, the e-learning medium of education also has some limits as it lacks the personal touch of teachers as in the traditional way of teaching. The only way to make quality education accessible and possible for the diverse need of Garhwal Himalayan region residents is to implement an integrated form of traditional and ICT-based teaching and learning. Blended learning as an



integrated method has all the innovative solutions for the problems of Garhwal Himalayan region classrooms. It will help to make qualitative higher education accessible to the Garhwal Himalayan region learners.

The blend of traditional teaching and ICT-based teaching-learning has been impressive and attractive. Over the years different avenues for research have been provided by such a blend of approaches. At present the blended mode of learning has been accepted by several educational institutions as the most attractive and effective mode of teaching and learning because of its recognized strength in imparting timely, continuous, and flexible learning (Porter et al 2014). Randy Garrison (2004) defines blended learning as a rational mixture of traditional face-to-face and online learning experiences. The UGC (2021) has mentioned the advantages of Blended learning for learners improved learning skills, better access to information, better satisfaction, learning results and equal benefits and opportunities for the teacher and the learner. Face-to-face instruction, simulation, CD-ROM-based education, Web-based education, Internet-based education, E-learning curriculum, Audio-Video conferencing, Electronic performance support system (EPSS), printed books and offline videos etc. are the components of blended learning (Bersin & Associates (2003). Carman (2005) discussed the five components of blended learning: self-paced learning, live events, assessment, collaboration, and performance support. Jeyalatha & Anandan (2015), investigate the level of attitude of teacher educators concerning subject and experience towards using the blended learning method. The normative survey method was applied to the study.

102 teacher educators were selected for the study by simple random technique. The result of the study indicated a high level of attitude of teacher educators towards the blended

learning method. The result also indicated that the teacher educators of art and science subjects had the same attitude towards blended learning. Eryilmaz (2015), studied the effectiveness of a blended learning environment. For the study 110 respondent were included from Turkey University, where the introduction of computer lessons was delivered in the blended learning environment in face-to-face, online and blended learning teaching. Comparative study of a blended learning environment with online content shared with students including forms, images, and video lessons etc. it was found that there is a significant difference between online and face-to-face teaching in the blended learning environment and students learn more effectively from blended learning. The study by Birbal et al (2018) finds out the attitude of student teachers towards blended learning. The study also investigated the readiness of the student teachers towards blended learning from different dimensions. They were compared based on their demographic variables such as age, gender, year, group, student characteristics, part-time and full-time status and place of residence. It included 807 student teachers from two university campuses. The results indicated that students viewed learning flexibility and technology as the most important and valuable aspects of assured learning. Differences were found in the attitudes of students based on affection, gender, part-time-status, primary & secondary, specialty, year group and age.

Objective of the study

1. To study the level of attitude of the pupil teachers of the Garhwal Himalayan region towards blended learning.
2. To compare the attitude of the pupil teachers of the Garhwal Himalayan region towards blended learning with respect to gender, stream, and locality.

Hypotheses of the Study



H01: There is no significant difference between the attitude of Garhwal Himalayan region's male and female pupil teachers towards blended learning.

H02: There is no significant difference between the attitude of Garhwal Himalayan region's Arts and Science stream pupil teachers towards blended learning.

H03: There is no significant difference between the attitude of Garhwal Himalayan region's pupil teachers towards blended learning, living in urban and rural areas.

Research Methodology

In this study, the Quantitative Research approach was applied and to collect and analyze the data survey method was used. Garhwal University is an institute of higher education in the Garhwal Himalayan region of Uttarakhand. There are seven districts in the Garhwal region of Uttarakhand. It has three campuses of Garhwal University- Birla Campus, Srinagar Garhwal, B.G.R. Campus Pauri, and S.R.T Campus, Badshahithaul, Tehri. In addition, there are 121 institutes and colleges affiliated with the HNBGU Garhwal University. The present study was limited to the Garhwal Himalayan region's pupil teachers of all three campuses of H.N.B.G.U. Central University. The study was also limited to gender, stream, and locality wise.

Analysis and interpretation

1. Demographic characteristics of the pupil teachers

Table 1: Demographic Characteristics.

Gender	N (%)	Stream	N (%)	Locality	N (%)
Male	70(41%)	Arts	82(48%)	Urban	79(46%)
Female	101(59%)	Science	89(52%)	Rural	92(54%)
Total	171(100%)	Total	171(100%)	Total	171(100%)

Table 1 shows the demographic characteristics of pupil teachers who participated in the study, out of which there were 70 male and

Population and Sample

The pupil teachers of the three campuses of H.N.B.G.U. central university in the Garhwal Himalayan region was selected by the purposive sampling technique, as the total population. 171 pupil teachers out of a total of 202 participated in the study by filling out an online questionnaire through Google Forms.

Tools and Techniques Used

A self-constructed questionnaire was used to collect the required data. The tool consisted of 35 statements on the Blended Learning Approach with a five-point rating scale. The items of the questionnaire were equipped with knowledge and attitude towards blended learning.

Procedure for Data Analysis

The tool was constructed while considering the related studies. All the registered pupil teachers in the TEIs of the three affiliated colleges and campuses of H.N.B.G.U. central university in the Garhwal Himalayan region was selected for the study. The tool was online and distributed equally to all the pupil teachers. Google Form online questionnaire for collecting the data was adopted as the method. The data thus obtained were analyzed using Microsoft Excel software. To analyze the data, statistical techniques were applied. The following results were obtained as can be seen in the tables given below.

101 female pupil teachers with a percentage of 41 and 59 respectively. Of the total 171 pupil teachers there were 82 arts stream pupil



teachers and 89 science stream pupil teachers with a percentage of 48 & 52 respectively and

79 urban and 92 rural pupil teachers with a percentage of 46 & 54 respectively.

2. Mean and Std. of the pupil teacher’s attitude towards blended learning in the total sample.

Table 2: Mean and Std. a score of the pupil teacher’s attitude towards blended learning.

Category	Variable	N	Mean	Std./σ
Pupil-teacher	Attitude towards Blended learning	171	126	13

Table 2: The cut-off point here is $M \pm 1\sigma$. Mean=126, N=171 and $\sigma = 13$. The Mean and σ of the attitude towards blended learning scores

on the total sample were 126 and 13. This means, $126 + 1 \times 13 = 139$ is $M + 1 \sigma$. Moreover, $126 - 1 \times 13 = 113$ is $M - 1 \sigma$.

3. Percentage analysis of pupil teacher’s attitude towards blended learning.

Table 3: Level of an attitude of pupil teachers towards blended learning (percentage analysis).

Score	Frequency	Percentage	Level of attitude
Below 113	18	10%	Low
Between 113-139	124	73%	Moderate/Average
Above 139	29	17%	High

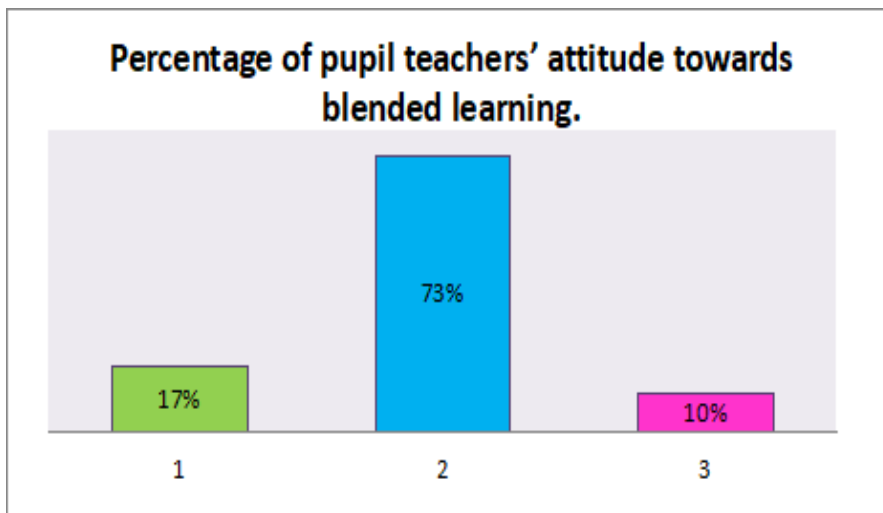


Fig 3: Percentage of pupil teachers’ attitude towards blended learning.

Table 3 and Fig 3 show that 10 % of pupil teachers have a low level of attitude towards blended learning, 73 % of pupil teachers have a moderate level of attitude towards blended learning and 17 % of pupil teachers have a high level of attitude towards blended learning. It shows that the most of pupil

teachers had an average and favorable level of attitude towards blended learning.

Hypothesis 1: There is no significant difference between the mean scores of male and female pupil teachers’ attitudes towards blended learning.



Gender	N	Mean	SD	df	P(T<=t) two tail	Level of Significance
Male	70	130.41	11.60	169	0.00316431	Significant
Female	101	124.61	13.01			

Table 4.1 Mean, SD and P values of male and female pupil teachers’ attitudes towards blended learning.

* Significant 0.05 level

The above Table 4.1 shows that, the mean scores of male and female pupil teachers is 130.41 and 124.61 respectively with a standard deviation of 11.60 and 13.01 respectively. The male pupil teacher’s mean scores are higher than the female pupil teacher’s scores. The calculated P (T<=t) Two tail value (0.00316431) is smaller ($p < 0.05$) than the table value at 0.05 level with $df = 169$.

Hence, the null hypothesis is not accepted. “There is a significant difference between mean scores of male and female pupil teacher’s attitude towards blended learning.”

Hypothesis 2: There is no significant difference between the mean scores of arts stream and science stream pupil teachers’ attitudes towards blended learning.

Table 4.2 Mean, SD and P value of arts and science stream pupil teachers’ attitude towards blended learning.

Stream	N	Mean	SD	df	P(T<=t) two tail	Level of Significance
Arts	82	126.17	13.71	169	0.422308373	Not Significant
Science	89	127.74	11.82			

* Significant 0.05 level.

Table 4.2 shows that the mean scores for Arts stream and Science stream pupil teachers are 126.17 and 127.74 respectively with a standard deviation of 13.71 and 11.82. The mean scores of science pupil teachers are higher than the mean scores of Arts pupil teacher’s scores. The calculated P (T<=t) two-tail value (0.422308373) is greater ($p > 0.05$) than the table value at 0.05 level with $df = 169$. Hence, the null hypothesis is accepted. “There

is no significant difference between mean scores of Arts and Science pupil teacher’s attitude towards blended learning.”

Hypothesis 3: There is no significant difference between mean scores of urban and rural locality pupil teachers’ attitudes towards blended learning.

Table 4.3 Mean, SD and P value of urban and rural locality pupil teachers’ attitude towards blended learning.

Locality	N	Mean	SD	df	P(T<=t) two tail	Level of Significance
Urban	79	128.25	12.84	169	0.230183656	Not Significant
Rural	92	125.90	12.63			

*Significant 0.05 level.



Table 4.3 shows that the mean scores for urban and rural locality pupil teachers are 128.25 and 125.90 respectively with a standard deviation of 12.84 and 12.63. The mean scores of urban area pupil teachers are higher than the mean scores of rural area pupil teachers scores. The calculated P ($T \leq t$) two-tail value (0.230183656) is greater ($p > 0.05$) than the table value at 0.05 level with $df = 169$. Hence, the null hypothesis is accepted. "There is no significant difference between mean scores of urban and rural locality pupil teacher's attitude towards blended learning".

Conclusion and Discussion

The finding of the present study indicates that pupil teachers have a positive attitude towards blended learning. Out of the total sample, 73% of pupil teachers showed an average level of attitude towards blended learning and 17% of pupil teachers showed a high level of attitude towards blended learning. It indicates that the pupil teachers of the Garhwal Himalayan region would welcome and will be ready for the implementation of blended learning. Before executing a blended learning approach, the local administrating bodies, NGOs, policy-makers, and whoever is involved in the education system must take into consideration that basic facilities needed for blended learning should be available in the Garhwal Himalayan region, such as internet connectivity, infrastructure and basic digital training programmers for both teachers and students. The result of the study indicates that there is a significant difference in the attitude between male and female pupil teachers towards blended learning. Male pupil teachers have a more favorable attitude towards blended learning than female pupil teachers. Stream and locality wise there is no significant difference in the attitude of pupil teachers towards blended learning. It simply means they are willingly ready to get an education through blended methods irrespective of their stream and locality.

Suggestions and Recommendation

The present study indicates an average level of positive attitude of students towards blended learning. To develop readiness towards this approach it is suggested that awareness programs should be performed at a large scale. This collaborative effort of various agencies like the Govt., Education system, Higher education institutions and NGOs working in the field of education should be welcomed. For further research, it is suggested to cover the entire area of the Garhwal Himalayan region. This will enable us to find out the attitude of people towards blended learning on a large scale. Besides this, the research can be further extended to the other components of innovative learning like distance education, e-learning, ICT etc. It is also suggested that various other variables related to the blended learning approach should be considered for further research, i.e., academic achievement, critical thinking, problem-solving and creativity.

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