Original Research Article

BLENDED EDUCATION: MEANINGFUL USE OF TECHNOLOGY

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Abstract:

Blended education has become the need of an hour. It has a wide scope and is considered as a boon for academic world. Moreover, blending offline and online teaching and learning is actually a meaningful use of technology. Therefore, this topic was selected for the purpose of research with the objective of knowing the viewpoint of teachers and investigating the effectiveness of blended education in real life. The researcher used structured questionnaire to collect primary data from various respondents. Total 320 teachers filled the questionnaire based on their personal experience. After the data collection process, it was analyzed in SPPS software in which percentage, frequency, mean and standard deviation values were calculated. The researcher concluded blended education as a very effective mode of teaching and learning considering the advantages highlighted in this paper. The results also indicate that blended education helps not only in personal development but also in professional development.

Keywords: *Blended Education System, Teaching and Learning, Education, Teachers, Punjab*

Introduction

Education system has exceptionally changed over the years. New methods of teaching and learning in online and offline classes were discovered for the convenience of students as well as teachers. But the blended mode of education is still a best alternative. It is very flexible both for the teachers and students. Blended education actually combines both online and offline teaching and learning. It is a teaching and learning model where the needs of students as well as teachers are fulfilled *[Cakmak Kevser, 2021].* This model promotes the use of:

- Hardware
- Software
- Technology
- Smart classrooms
- Smart devices

Blended Learning

Every student has a different need. They are not comfortable in traditional learning method i.e. in classroom. So they continuously need personal attention of teachers. To fulfill their need, they prefer online classes to connect

direct with teacher via web conferencing *[D Meenakshi, 2019]*. This helps students to learn from home or from anywhere all around the world. Students are able to retain 25 to 60 percent more during online learning process as compared to only 8 to 10 percent in traditional learning via classrooms *[Quigley Eoghan, 2019]*. Blended education system offers following benefits:

- Students get 24/7 access of online learning.
- Access to unlimited resources available on online websites.
- Time flexibility and ability to develop problem solving and time management skills.
- Students can use educational technology to improve their score.
- Boost and support to educational needs.
- Students can learn in a self-paced manner.
- Students get more opportunities for learning.

Blended Teaching

Traditional teaching method is basically teacher centered. Few years back, teachers and researchers suggested a need to blend traditional strategies with digital technology. After the spread of COVID-19, need for blended education was felt keeping in mind the situation of pandemic. Now this approach is common in most of the educational institutes because it is not only convenient but also helps in personal as well as professional development. For example, teachers have an option to take one class in campus and another one via web conferencing *[Best Jackson, 2020]*.

Literature Review

Josephine Maria (2016) conducted a study to know the perception of student teachers in relation to blended education. The data was collected in two phases and from colleges that are affiliated to Pondicherry University and are located in Puducherry. The researcher analyzed the primary data using descriptive (mean and standard deviation) and inferential techniques (parametric and non-parametric tests).

Sen Deepshikha (2016) suggested many ways to overcome challenges faced by students, research scholars and to the teachers of Library & Information Science (LIS). The study also provided views regarding blended learning. The researcher suggested the use of latest technologies for professional development. Well planned blended education in universities is capable to gaining reputation for quality education.

D Meenakshi (2019) conducted a research in Gojan Engineering College located in Chennai (Tamilnadu). The researcher used purposive sampling technique to collect primary data from 120 students. Statistical techniques like percentage analysis, descriptive analysis, t – test and correlation analysis were used to critically analyze the data. The researcher concluded a significant improvement in learning by adopting blended approach.

Objectives

1. To evaluate the effectiveness of blended education system.
2. To know the viewpoint of teachers in relation to blended education.

Research Methodology

The well structured questionnaire was used as a tool to collect primary data from teachers working at different

levels in different educational institutes. Total 320 responses were collected to evaluate the effectiveness of blended education system and to know the viewpoint of teachers in relation to blended education. The primary data was analyzed by descriptive analysis through statistical software SPSS. The advantages of bended education included in questionnaire were given ranking on the basis of their mean values.

Analysis and Interpretation

The primary data collected from teachers through structured questionnaire is presented in tabular form after critically analyzing via statistical software SPSS.

Table 1 Demographic Profile of Respondents

Dimensions	Categories	No. of respondents	Percentage of respondents
Gender	Male	140	43.8 %
	Female	180	56.3 %
Age	Below 30 years	108	33.8 %
	31-40 years	84	26.3 %
	41-50 years	92	28.7 %
	51 and Above	36	11.3 %
Educational Qualification	Graduate	28	8.8 %
	Post-graduate	252	78.8 %
	Professional	40	12.5 %
Designation	School Teacher	36	11.3 %
	Lecturer	88	27.5 %
	Assistant Professor	108	33.8 %
	Associate Professor	44	13.8 %
	Professor	44	13.8 %
Total		**320**	**100 %**

Source- Primary Survey Data

Table 1 shows the demographic profile of the respondents. Out of 320 respondents, female respondents were more than male respondents. 180 respondents were female comprising 56.3 percent and 140 respondents comprising of 43.8 percent were male. Majority of the respondents (33.8 percent) belong to the "Below 30 Years" age group, 84 respondents belong to the category of "31-40 years", 92 respondents belong to the age group of "41-50 years" and only 36 respondents were "51 and Above". Talking about educational qualification, 252 respondents were "Post-graduate", 40 respondents were "Professional" and only 28 respondents were Graduate". All respondents have different designation and our primary survey data shows that 44 respondents were "Professor", 88 respondents were "Lecturer", 44 respondents were "Associate Professor", 108 respondents were "Assistant Professor" and only 11.3 percent respondents were "School teacher".

Table 2 Scope of Blended Education

Categories	Frequency	Gender		Total
		Male	**Female**	
Personal Development	No. of respondents	4	8	12
	Percentage of respondents	1.3 %	2.5 %	3.8 %
Professional Development	No. of respondents	8	8	16
	Percentage of respondents	2.5 %	2.5 %	5.0 %
Both	No. of respondents	120	148	268
	Percentage of respondents	37.5 %	46.3 %	83.8 %
None of the Above	No. of respondents	8	16	24
	Percentage of respondents	2.5 %	5.0 %	7.5 %
Total	No. of respondents	140	180	320
	Percentage of respondents	43.8 %	56.3 %	100.0 %

Source- Primary Survey Data

Table 2 shows the scope of blended education in personal and professional terms. Only 12 respondents comprising of 4 male and 8 female respondents believe that blended education system helps in personal development, 16 respondents comprising of 8 male and 8 female respondents think that blended learning helps in professional development. 268 out 320 respondents believe that blended education helps in both and 24 respondents comprising of 8 male respondents and 16 female respondents believe that blended education helps in neither personal development nor professional development.

Table 3 Advantages of Blended Education

Variables	1	2	3	4	5	Mean	SD	Rank
Convenience of Learning from any Place	4 (1.3 %)	8 (2.5 %)	8 (2.5 %)	68 (21.3 %)	232 (72.5 %)	4.61	0.768	5
Flexible Timing	0	12 (3.8 %)	20 (6.3 %)	108 (33.8 %)	180 (56.3 %)	4.42	0.772	2
Affordable	4 (1.3 %)	8 (2.5 %)	20 (6.3 %)	100 (31.3 %)	188 (58.8 %)	4.44	0.820	3

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It is the Need of the Hour	0	4 (1.3 %)	12 (3.8 %)	68 (21.3 %)	236 (73.8 %)	4.67	0.609	6
Makes Learning More Easy and Effective	0	4 (1.3 %)	32 (10 %)	72 (22.5 %)	212 (66.3 %)	4.54	0.725	4
Gives Motivation	20 (6.3 %)	16 (5 %)	52 (16.3%)	140 (43.8 %)	92 (28.7 %)	3.84	1.091	1

Source- Primary Survey Data

Table 3 shows the advantages of adopting blended education in terms of teaching as well as learning. Among 320 respondents, 92 respondents strongly agree, 140 respondents agree, 52 respondents feel neutral, 16 respondents disagree and only 20 respondents strongly disagree with the statement that the blended education gives "Gives Motivation" and this statement has the mean value of 3.84 and is therefore given the first rank. This statement is followed by "Flexible Timing" having the mean value of 4.42 and is given second rank. 188 respondents strongly agree, 100 respondents agree, 20 respondents think neutral, 8 respondents disagree and 4 respondents strongly disagree that blended teaching and learning is "Affordable" and is given third rank considering mean value 4.44 and standard deviation 0.820. 212 respondents strongly agree, 72 respondents agree, 32 respondents feel neutral, only 4 respondents disagree and not even a single respondent strongly disagree with the statement that blended education "Makes Learning More Easy and Effective" and is given fourth rank considering mean value 4.54 and standard deviation 0.725. Total 232 respondents strongly agree, 68 respondents agree, 8 respondents feel neutral, 8 respondents disagree and only 4 respondents strongly disagree with the statement "Convenience of Learning from any Place" and this statement is given fifth rank considering the mean value 6.61 and standard deviation 0.768. This statement is followed by "It is the Need of the Hour" and is given sixth rank because 236 respondents strongly agree, 68 respondents agree, 12 respondents feel neutral and only 4 respondents disagree with the statement.

Conclusion

This paper evaluates the effectiveness of blended education system in comparison to traditional method of teaching and learning. It is aimed to know the scope of blended education considering their dependent and independent variables. The respondents were asked questions regarding their gender, age, educational qualification, scope of blended education in terms of personal and professional development, etc. Results indicate the effective outcomes of adopting blended education as a technological development in academic world. Various advantages of blended education were highlighted by teachers according to their personal experience. Teachers believe that blended education gives motivation to teachers and learners and it is one of the major advantages of blended education. Moreover, blended education not only provides flexible timing but is also affordable. In simple words, blended education makes teaching and learning more easy and effective.

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