International Journal of Social Science and Humanities
www.humanitiesjournals.com
Online ISSN: 2664-8628 Print ISSN: 2664-861X
Received: 01-06-2025, Accepted: 01-07-2025, Published: 16-08-2025
Volume 7, Issue 4, 2025, Page No. 65-68

Teacher perception of blended learning effectiveness in Government-Sponsored Schools

Suman Basak[1*], Dr. Nekram[2]
[1] Research Scholar, Department of Education, Nirwan University, Jaipur, Rajasthan, India
[2] Assistant Professor, Department of Humanities, Nirwan University, Jaipur, Rajasthan, India

Abstract
Blended learning has emerged as a transformative pedagogical approach, especially in the wake of digital integration in education. This study investigates the perceptions of teachers in government-sponsored schools regarding the effectiveness of blended learning. Utilizing a mixed-methods design, data was collected from 150 in-service teachers through a structured questionnaire comprising demographic details, Likert-scale items, and open-ended questions. Quantitative analysis revealed a moderate level of agreement with blended learning practices, with noticeable concerns regarding infrastructure, institutional support, and teacher preparedness. Chi-square tests indicated no significant association between ICT skill level and perceived ease of implementation, or between training received and perceived effectiveness. Thematic analysis of open-ended responses highlighted recurrent challenges such as student absenteeism, lack of training, and poor internet access. Teachers also expressed a need for better digital infrastructure, curriculum design support, and administrative backing. The results highlight the critical need for systemic reforms and dedicated support mechanisms for educators to ensure the effective integration of blended learning within public education systems. This research offers meaningful implications for policymakers, educational leaders, and teacher preparation initiatives seeking to promote the adoption of blended learning, particularly in contexts with limited resources.

Keywords: Blended Learning, Teacher Perception, Government Schools, ICT in Education, Mixed-Methods Research

Introduction

Blended learning, which combines conservative classroom training with digital learning elements, has become increasingly influential in modern education systems (Cunningham, 2021) [9]. By combining the advantages of in-person teaching with the give of online platforms, this instructional model offers a dynamic and flexible learning experience for students (Anthony *et al*., 2020) [2]. The growing adoption of blended learning is fueled by rapid technological progress, global interconnectedness, and the evolving needs of today's job market, urging educators to integrate digital tools into their teaching strategies (Salcedo, 2022) [18].

Once considered a novel instructional experiment, blended learning has now become a widely accepted methodology across educational tiers, including both school-level and tertiary education (Campbell & Sarac, 2018) [7]. This transition reflects an increased awareness of its potential to promote higher student involvement, tailored learning paths, and enhanced academic performance (Cao, 2023) [8]. Nevertheless, the success of blended learning depends on several key elements: the instructional model design, the caliber of online content, teacher preparedness and professional development, as well as students' accessibility to digital devices and their technological competencies. Effective deployment of blended learning demands considerable infrastructure investments, such as digital software, physical hardware, proper learning spaces, and stable internet access—emphasizing the importance of strategic educational technology planning (Adel & Dayan, 2021) [1]. Moreover, the perspectives and attitudes of teachers play a serious role in the successful adoption of blended education. Teachers' beliefs about the value and feasibility of blended instruction significantly influence their teaching behaviors, openness to innovation, and ultimately, the impact of blended learning within educational institutions.

Literature Review

Understanding how teachers perceive blended learning plays a crucial role in determining its successful implementation in government-sponsored educational settings. These perceptions significantly influence teaching methods and student achievements (Hensley, 2020) [14]. Blended learning refers to a purposeful combination of digital and in-person instruction, requiring a shift in teaching paradigms. Rather than merely replicating traditional teaching with technology, it aims to create innovative instructional opportunities that were previously difficult to facilitate (Boelens *et al*., 2017; Graham & Halverson, 2023) [6, 12]. The effectiveness of blended learning is often contingent on learners' attributes, such as their capacity for self-directed learning and their competence in utilizing digital platforms (Geng *et al*., 2019) [11]. While blended learning settings have the potential to foster active participation and enhance academic performance, they also come with certain challenges. These include the necessity for adequate teacher training, the development of quality digital resources, and addressing disparities in access to technology (Ashraf *et al*., 2021; Ramadan, 2017) [4, 5, 17]. To achieve optimal outcomes, it is essential to comprehend teachers' insolences towards blended learning (Dziuban *et al*., 2018; Keogh *et al*., 2017) [10, 15]. Global education initiatives have explored the potential and effectiveness of blended learning, especially in the context of higher education, given the growing influence of digital communication technologies (Dziuban *et al*., 2018) [10]. Teachers' views are shaped by several factors, including their confidence in using technology, teaching philosophies, and previous exposure to tech-integrated

instruction. Additionally, their belief in the ability of blended learning to support diverse learners and foster inclusive education further influences their adoption of such methods (Ashraf *et al*., 2021) [4, 5]. Teachers are more likely to integrate blended learning into their classrooms if they perceive it as useful, user-friendly, and compatible with their current instructional strategies. In many cases, educators are already employing digital tools in their lessons, even if they do not specifically refer to it as blended learning (Picciano, 2009) [16]. The acceptance and practicality of blended learning are largely dependent on the realities within government-sponsored schools, such as limited resources, technological infrastructure, and policy directives. Blended learning is typically characterized by the integration of face-to-face and online instructional methods (Wang *et al*., 2023) [19]. It strategically utilizes various resources to enhance student outcomes by blending classroom interactions with digital learning activities (Arifin, 2020) [3]. Furthermore, it promotes a learner-centered, adaptable, and flexible educational experience, offering multiple avenues for students to acquire and refine knowledge and competencies (Hashim & Hamidon, 2022) [13].

Materials and Methods

Research Design

This research employed a mixed-methods approach, integrating quantitative survey data analysis with qualitative thematic interpretation to provide a comprehensive understanding of the subject. The aim was to evaluate the perception of teachers regarding the efficiency of blended learning, particularly in government-sponsored schools. This approach allowed for comprehensive exploration of both numerical trends and contextual insights.

Participants

The study included in-service teachers from government-sponsored schools. A total of n = 150 teachers (approximate sample based on dataset) voluntarily participated in the study. The participants varied in terms of gender, age group, teaching experience, subject specialization, ICT skill level, and whether they had received training in blended learning.

Instrument

A structured questionnaire was used, consisting of three sections:

- **Section A:** Demographic Information (e.g., gender, age, teaching experience, subject, training status, ICT skill level)

- **Section B:** Likert-Scale Items (Q1–Q10) to measure perception of blended learning effectiveness, using a 5-point scale:

Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree

- **Section C:** Open-Ended Items for qualitative feedback:
- "Challenges Faced"
- "Support Needed"

Data Collection Procedure

Data was collected via an online during the academic year 2024–25. Participants were briefed about the purpose and confidentiality of the study.

Data Analysis

Quantitative Analysis

- Descriptive statistics (frequency, percentage) were calculated for demographic variables and Likert responses.
- Cross-tabulation and Chi-square statistical tests were conducted to examine potential associations between categorical variables and to determine the significance of observed relationships.
- ICT Skill Level and perception of ease of implementation (Q1)
- Training received and perception of effectiveness (Q5)

Qualitative (Thematic) Analysis

- Open-ended responses were analyzed using thematic coding.
- Recurrent keywords and phrases (e.g., *"lack of training," "student absenteeism," "better internet"*) were grouped and counted to identify dominant themes.
- Bar charts were used to visualize the frequency of themes.

Results and Interpretation

The sample consisted of teachers with varied teaching experience, age, and subject specialization. A majority of the respondents identified as possessing either *intermediate* or *advanced* ICT skill levels, while a smaller segment self-identified as *beginners*. Notably, only a subset of teachers had received formal training in blended learning, as reflected in Figure 1, suggesting a training gap in government-sponsored school settings. This indicates a mixed level of digital readiness among teachers. While many have moderate to strong ICT skills, the lack of formal training could limit their confidence and effectiveness in implementing blended learning strategies.

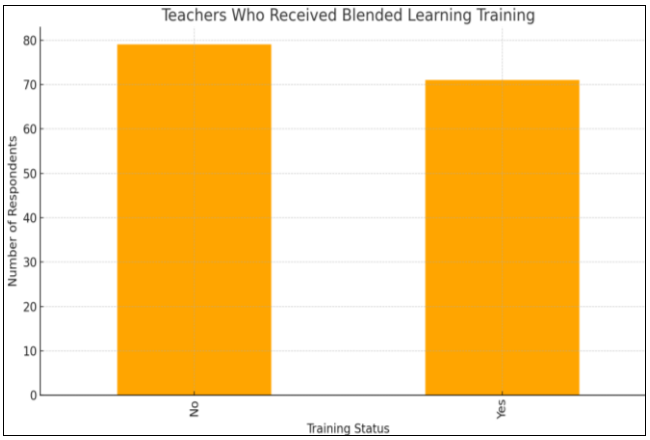

Fig 1: Teachers who received blended learning training

The Likert-scale items assessed perceptions on aspects such as ease of implementation, student engagement, effectiveness, and institutional support. As illustrated in Figure 2, responses were distributed across the spectrum, with a tendency toward *Neutral* and *Agree* categories. Items related to infrastructure support (e.g., Q5 and Q9) showed higher frequencies of *Disagree* or *Strongly Disagree*, indicating dissatisfaction.

While there is moderate agreement about the conceptual value of blended learning, there are concerns regarding its practical implementation—especially around institutional support, digital resources, and teacher preparation.

A chi-square test was conducted to explore the association between ICT skill level and perception about the ease of implementing blended learning (Q1). The results were not statistically significant ($\chi^2 = 3.38$, $p = 0.91$), as shown in the Chi-Square Summary table.

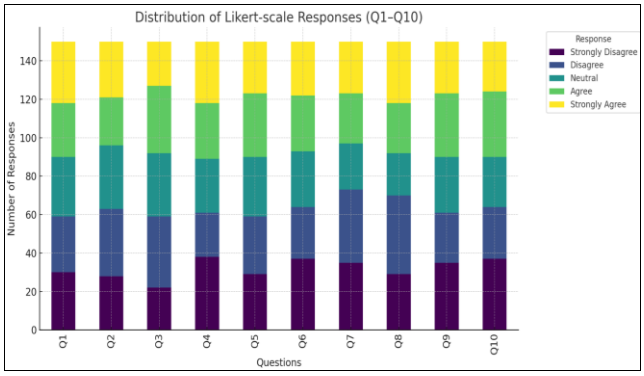

Fig 2: Distribution of Likert scale Response

Table 1: Chi- square Statistic

Test	Chi-square Statistic	p-value	Significant ($\alpha = 0.05$)
ICT Skill Level vs Q1	3.38	0.908	No
Received Training vs Q5	3.96	0.411	No

This suggests that ICT skill level does not significantly influence a teacher's perception of the effectiveness or ease of using blended learning. Other variables, such as infrastructure and workload, might be more impactful.

A similar test was conducted to examine the association between having received blended learning training and agreeing with its effectiveness (Q5). This too was not statistically significant ($\chi^2 = 3.96$, $p = 0.41$). The perceived effectiveness of blended learning may not be solely dependent on training. Teachers might assess effectiveness based on lived classroom experience, student engagement, and contextual challenges.

Teachers were asked to report open-ended responses on the challenges faced and the support they require. The most frequently cited challenges included student absenteeism, lack of training, and poor internet infrastructure, as visualized in Figure 3. Support needs were primarily better internet and devices, curriculum design support, and administrative backing, as shown in Figure 4.

These responses reflect structural barriers that go beyond teacher capability. Infrastructure and institutional commitment are critical to successful blended learning implementation. Teachers are willing to adopt innovative pedagogies but need robust support mechanisms.

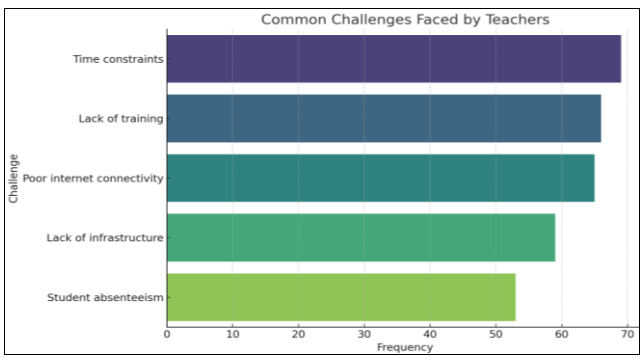

Fig 3: Common Challenges Faced by Teachers

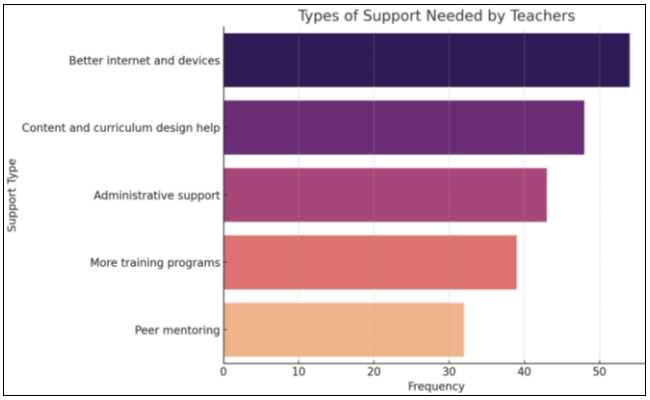

Fig 4: Types of Support Needed by Teachers

Conclusion

The data reveals a moderately positive perception of blended learning among teachers in government-sponsored schools. However, gaps in training, infrastructure, and institutional support significantly constrain effective implementation. Addressing these issues through targeted policy interventions, resource allocation, and regular training programs could enhance the impact and sustainability of blended learning approaches.

References

1. Adel A, Dayan J. Towards an intelligent blended system of learning activities model for New Zealand institutions: an investigative approach. Humanities and Social Sciences Communications, 2021, 8(1). https://doi.org/10.1057/s41599-020-00696-4
2. Anthony B, Kamaludin A, Romli A, Raffei AFM, Phon DNE, Abdullah A, *et al*. Blended learning adoption and implementation in higher education: a theoretical and systematic review. Technology Knowledge and Learning,2020:27(2):531. https://doi.org/10.1007/s10758-020-09477-z
3. Arifin M. The effect of blended learning model with Moodle on the students' writing achievement. IJEMS Indonesian Journal of Education and Mathematical Science,2020:1(2):19. https://doi.org/10.30596/ijems.v1i2.4639
4. Ashraf MA, Meijia Y, Zhang Y, Denden M, Tlili A, Liu J, *et al*. A systematic review of systematic reviews on blended learning. trends, gaps and future directions. Psychology Research and Behavior Management,2021:15:25. https://doi.org/10.2147/prbm.s331741
5. Ashraf MA, Tsegay SM, Meijia Y. Blended learning for diverse classrooms: qualitative experimental study with in-service teachers. SAGE Open, 2021, 11(3). https://doi.org/10.1177/21582440211030623
6. Boelens R, Wever BD, Voet M. Four key challenges to the design of blended learning: a systematic literature review. Educational Research Review,2017:22:1. https://doi.org/10.1016/j.edurev.2017.06.001
7. Campbell C, Sarac B. The role of technology in language learning in the twenty-first century. perspectives from academe, government, and the private sector. Hispania,2018:100(5):77. https://doi.org/10.1353/hpn.2018.0019
8. Cao W. A meta-analysis of effects of blended learning on performance, attitude, achievement, and engagement

across different countries. Frontiers in Psychology, 2023, 14. https://doi.org/10.3389/fpsyg.2023.1212056

9. Cunningham D. A case study of teachers' experiences of blended teaching and learning. Journal of Online Learning Research,2021:7(1):57. https://www.learntechlib.org/primary/p/213808/
10. Dziuban CD, Graham CR, Moskal P, Norberg A, Sicilia N. Blended learning the new normal and emerging technologies. International Journal of Educational Technology in Higher Education, 2018, 15(1). https://doi.org/10.1186/s41239-017-0087-5
11. Geng S, Law KMY, Niu B. Investigating self-directed learning and technology readiness in blending learning environment. International Journal of Educational Technology in Higher Education, 2019, 16(1). https://doi.org/10.1186/s41239-019-0147-0
12. Graham CR, Halverson LR. Blended learning research and practice. Handbook of Open, Distance and Digital Education, 2023, 1159. https://doi.org/10.1007/978-981-19-2080-6_68
13. Hashim N, Hamidon Z. Blended learning in technical and vocational education and training TVET training institute. International Journal of Academic Research in Progressive Education and Development, 2022, 11(1). https://doi.org/10.6007/ijarped/v11-i1/12343
14. Hensley N. Teacher perceptions of blended learning to support 21st century learners, 2020. https://dc.etsu.edu/cgi/viewcontent.cgi?article=5312&context=etd
15. Keogh J, Gowthorp L, McLean M. Perceptions of sport science students on the potential applications and limitations of blended learning in their education: a qualitative study. Sports Biomechanics,2017:16(3):297. https://doi.org/10.1080/14763141.2017.1305439
16. Picciano AG. Blending with purpose: the multimodal model. Journal of the Research Center for Educational Technology,2009:5(1):4. http://files.eric.ed.gov/fulltext/EJ837540.pdf
17. Ramadan K. What is blended learning A multiple case study. Literacy Information and Computer Education Journal,2017:8(2):2598. https://doi.org/10.20533/licej.2040.2589.2017.0344
18. Salcedo CN. Perception of blended learning in faculty and students of higher learning. International Journal of Education and Practice,2022:10(3):227. https://doi.org/10.18488/61.v10i3.3069
19. Wang X, Chen X, Wu X, Lü J, Xu B, Wang H. *et al*. Research on the influencing factors of university students' learning ability satisfaction under the blended learning model. Sustainability,2023:15(16):12454. https://doi.org/10.3390/su151612454