

A Study on the Impact of Blended Learning among the Selected Ed Tech Startups

B. Thulasipriya^{1*} and Larisha Janet Rodrigues²

¹Assistant Professor, Department of Commerce, PSGR Krishnammal College for Women, Coimbatore, Tamil Nadu, India. Email: thulasipriya@psgrkcw.ac.in

²Ph.D. Research Scholar, Department of Commerce, PSGR Krishnammal College for Women, Coimbatore, Tamil Nadu, India. Email: 21phdce002@psgrkcw.ac.in

*Corresponding Author

Abstract: This study aims to assess the current landscape of blended learning in Ed Tech startups and analyze its impact on selected Ed startups in Bangalore city. The research methodology involves first hand data collection from Ed Tech startup founders, supplemented by secondary data from various sources. A sample of 100 founders was selected for analysis, and methods such as simple percentage analysis and ANOVA were employed. Key findings highlight the predominance of female respondents and the 15-25 age group, emphasizing the importance of tailored content and marketing. Additionally, diverse educational backgrounds among respondents underscore the need for a wide range of course offerings. Given income sensitivity among respondents, pricing models accommodating lower-income individuals are recommended. Platforms like Vedantu and Byju's, showing significant impact from blended learning, should receive focused investment. The future scope for Ed Tech startups lies in personalization, inclusivity, and data-driven strategies, with potential for partnerships, diversified content, social learning, gamification, global expansion, and ethical considerations to drive sustained growth.

Keywords: Blended learning, Ed Tech startups, Ethical considerations, Sustained growth.

I. INTRODUCTION

The practice of using information and communication technology tools in the classroom to provide more interactive, inclusive, and personalised learning experiences is known as "Ed Tech," or education technology. Tablets, interactive online courses, and even robots that can take notes and record lectures for absent students are already commonplace in today's classrooms, which have evolved beyond the cumbersome desktop PCs that were previously the standard. The possibility for scalable, personalized learning has been a major factor in

the growth of the Ed Tech sector. There is no one-size-fits-all approach to how we study, connect with peers and professors, or feel about the same subjects in general. Everybody picks up information at their own rate and in their own way. No of the age or level of learning, Ed Tech solutions make it simpler for teachers to develop personalized lesson plans and learning experiences that promote inclusion and improve the learning skills of all students. In a 2018 survey, 86% of eighth-grade teachers felt that it is crucial to use technology to educate kids. And according to 75% of the study's teachers, using technology helped students' academic achievement. Many would contend that it is crucial to comprehend the advantages that Ed Tech delivers in the form of improved communication, cooperation, and educational quality overall.

II. REVIEW OF LITERATURE

Ashraf Alam [1] analysed to explore the potential of artificial intelligence (AI) in shaping the future of education in India. A qualitative study, following an interpretive paradigm, involved senior executives from leading Ed Tech companies in India. We conducted focused group interviews with a total of 306 senior managers, founders, and directors. The interviews were transcribed and analyzed using NVivo and Concordance software, revealing that AI is poised to revolutionize education in India, disrupting traditional teaching methods. However, the study also identified significant challenges in integrating AI into India's education system. Drawing from the experiences of top managers, this research not only highlights these challenges but also offers potential solutions for effectively navigating the expanding role of AI in the country's education landscape.

Xin Xie, Keng Siau and Fiona Fui-Hoon Nah [4], in this study, the authors examined the progress of information technology has laid the groundwork for educational reform and innovative opportunities. The global COVID-19 pandemic has accelerated the widespread adoption of online education, capitalizing on its benefits such as flexibility, accessibility, global reach, equity, innovation, and efficiency. Many educational institutions now

offer degree programs that blend online and in-person elements. However, online education has its drawbacks, including technological limitations, a lack of a sense of community, distractions, and reduced engagement.

Shannon Dawn Maree Moore, Bruno De Oliveira Jayme, and Joanna Black [2], the authors examine how educational responses to COVID-19 reflect opportunistic disaster capitalism. Before the pandemic, neoliberal influences were already shaping education worldwide, promoting increased privatization within schools. COVID-19 has provided an opportunity for private tech companies to advocate for greater involvement in public education. Essentially, corporations are using this health crisis to advance the neoliberal agenda, promoting policies, practices, and technological infrastructure that support ongoing online learning.

Joanna Poon [3], in this paper, the author presents a case study conducted at Nottingham Trent University in the United Kingdom, exploring the advantages of using blended learning as a delivery method. The study examines insights gained from educators who have implemented blended learning and gathers feedback from students through questionnaires and interviews. The research findings serve as the basis for recommendations aimed at improving teaching practices and approaches to enhance students' learning experiences.

III. STATEMENT OF THE PROBLEM

The convergence of several studies highlights critical issues and challenges in the field of education, particularly in the context of technological advancements and global events such as the COVID-19 pandemic. The common problem across these studies is the need to navigate the changing landscape of education in the face of technological advancements and evolving ideologies while maximizing the benefits and mitigating the challenges that arise. This paper aims to assess the current state of blended learning and the impact of blended learning among selected Ed Tech startups in Bangalore city.

IV. OBJECTIVES OF THE STUDY

- To assess the current landscape of blended learning of Ed Tech startups.
- To analyse the impact of blended learning among selected Ed Tech startups in Bangalore city.

V. RESEARCH METHODOLOGY

This study predominantly relies on first hand data gathered from Ed Tech startup founders. The research findings are rooted in direct observations made during this process. To gain insights into the blended learning process and its impact, a sample of 100 founders was selected using a simple random sampling

technique. Additionally, secondary data were sourced from various journals, magazines, and websites. Simple percentage analysis and ANOVA were applied for the purpose of analysis.

VI. ANALYSIS AND INTERPRETATION

Using IBM SPSS software, simple percentage analysis and ANOVA was carried out to evaluate the impact of blending learning among Ed Tech startups in Bangalore city.

TABLE I: TABLE SHOWING GENDER OF RESPONDENTS

Gender	Frequency	Per cent
Female	56	56
Male	44	44
Total	100	100

Source: Computed from primary data.

The Table I shows percentage analysis of gender of the respondents. Out of 100 respondents there are 56 of female respondents (56 per cent) and 44 of male respondents (44 per cent) in the survey conducted resulted female being the highest in number when compared to male.

TABLE II: TABLE SHOWING AGE OF RESPONDENTS

Age	Frequency	Per cent
15-25	57	57
26-35	26	26
36-45	5	5
46-55	7	7
55 And Above	5	5
Total	100	100.0

Source: Computed from primary data.

Interpretation

The Table II shows the age distribution of respondents. 57% are aged 15-25, 26% are aged 26-35, 5% are aged 36-45, 7% are aged 46-55, and 5% are aged 55 and above. The survey found that the 15-25 age groups had the most respondents compared to other age groups.

TABLE III: TABLE SHOWING EDUCATION OF RESPONDENTS

Education	Frequency	Per cent
Post Graduate	33	33
Professional	16	16
Other	51	51
Total	100	100

Source: Computed from primary data.

Interpretation

The Table III presents the education of respondents. Here, 33% are postgraduates, 16% are professionals, and 51% are in other categories, including founders preparing for some professional courses. In the survey, the “other” category had the highest number of respondents compared to postgraduates and professionals.

TABLE IV: TABLE SHOWING ANNUAL INCOME OF RESPONDENTS

Annual Income	Frequency	Per cent
Less Than 50,000	44	44
50,000-1,00,000	4	4
1,00,000-2,50,000	19	19
2,50,000-5,00,000	18	18
More Than 5,00,000	15	15
Total	100	100

Source: Computed from primary data.

Interpretation

The Table IV displays the respondents’ annual income. 44% earn less than 50000, 4% earn between 50000-100000, 19% earn between 100000-250000, 18% earn between 250000-500000, and 15% earn more than 500000. In the survey, those with income less than 50000 had the highest number of respondents compared to other income groups.

ANOVA

Hypothesis

H0: There is no impact of blended learning among selected Ed Tech startups.

H1: There is an impact of blended learning among selected Ed Tech startups.

TABLE V: TABLE SHOWING ANOVA

Ed Tech Startups	Blended Learning	Mean Square	F	Sig.
Peak Mind	Between Groups	4.779	2.856	0.010*
	Within Groups	1.673		
	Total			
Vedantu	Between Groups	4.679	3.270	0.004**
	Within Groups	1.431		
	Total			

Ed Tech Startups	Blended Learning	Mean Square	F	Sig.
Byju’s	Between Groups	4.567	3.306	0.003**
	Within Groups	1.381		
	Total			
Propelld	Between Groups	3.184	1.473	0.186
	Within Groups	2.161		
	Total			
I Nurture	Between Groups	2.288	1.060	0.396
	Within Groups	2.159		
	Total			

Source: Computed from primary data.

Interpretation

The Table V illustrates the impact of blended learning among selected Ed Tech startups. Notably, the F-values for Peak Mind, Vedantu, Byju’s, Propelld, and sports and I Nurture are 2.856, 3.270, 3.306, 1.473, and 1.060, respectively. Overall, this data suggests that blended learning does have an impact on selected Ed Tech startups.

Therefore, we can accept the alternative hypothesis and reject the null hypothesis.

VII. FINDINGS AND SUGGESTIONS

- Since a significant proportion (44%) of respondents earn less than 50000 annually, explore pricing models that accommodate lower-income individuals. This might include offering tiered pricing plans, discounts, or scholarships to make your Ed Tech products more accessible.
- Given the F-values that suggest varying impacts of blended learning on different Ed Tech startups, delve deeper into understanding what factors contribute to these differences. Conduct follow-up research or surveys to pinpoint the specific aspects of blended learning that resonate with users and drive positive outcomes.
- Continuously collect feedback from users to understand their preferences, pain points, and needs better. This can help refine your offerings and provide a more personalized experience to cater to the diverse demographic represented in the survey.
- Explore collaboration opportunities with educational institutions, industry experts, or organizations that align with your target demographic. Partnerships can help you access a broader audience and provide valuable resources to your users.

- Considering that Vedantu and Byju's have shown higher F-values and, therefore, a more significant impact from blended learning, allocate resources and efforts to further develop and promote these platforms. Explore what elements of their blended learning approach are driving success and aim to replicate or enhance them.

VIII. CONCLUSION

The data analysis reveals several key insights for Ed Tech startups. The survey highlighted the predominance of female respondents and the 15-25 age groups, emphasizing the importance of tailoring content and marketing strategies to these demographics. The diversity in respondents' educational backgrounds underscores the need to offer a broad spectrum of courses to accommodate various learning levels and objectives. Furthermore, income sensitivity among respondents suggests the necessity of implementing flexible pricing models to ensure accessibility. Vedantu and Byju's, showing significant impacts from blended learning, merit focused investment and further exploration into the factors driving their success. Finally, ongoing user engagement and feedback collection remain critical for refining Ed Tech offerings and adapting to evolving user preferences and needs.

IX. FUTURE SCOPE

Looking ahead, the future of Ed Tech startups lies in personalization, inclusivity, and data-driven strategies. Leveraging AI and machine learning for personalized learning experiences, expanding efforts to make Ed Tech inclusive for all users, and harnessing data analytics for informed decision-making are paramount. Partnerships with educational institutions and industry experts can enhance credibility and reach. Diversifying educational content, incorporating social learning, and exploring gamification techniques can boost

engagement. Global expansion, longitudinal studies, and ethical considerations are also pivotal for long-term success. By embracing these approaches, Ed Tech startups can navigate the evolving landscape, cater to diverse user needs, and position themselves for sustained growth.

REFERENCES

- [1] A. Alam, "Possibilities and challenges of compounding artificial intelligence in India's educational landscape," *International Journal of Advanced Science and Technology*, vol. 29, no. 5, pp. 5077-5094, 2020.
- [2] S. D. M. Moore, B. D. O. Jayme, and J. Black, "Disaster capitalism, rampant edtech opportunism, and the advancement of online learning in the era of COVID-19," *Critical Education*, vol. 12, no. 2, 2021.
- [3] J. Poon, "Blended learning: An institutional approach for enhancing students' learning experiences," *Journal of Online Learning and Teaching*, vol. 9, no. 2, p. 271, 2013.
- [4] X. Xie, K. Siau, and F. F. H. Nah, "COVID-19 pandemic—online education in the new normal and the next normal," *Journal of Information Technology Case and Application Research*, vol. 22, no. 3, pp. 175-187, 2020.
- [5] YourStory, "EdTech Startups Embracing Hybrid Learning: Athena, GuruQ, STEMROBO, PeakMind," YourStory. [Online]. Available: <https://yourstory.com/2022/07/edtech-startups-hybrid-learning-athena-guruq-stemrobo-peakmind>
- [6] EduTech.Coffee, "101 Top EdTech Startups and Companies in Bangalore," EduTech Coffee, [Online]. Available: <https://www.edutech.coffee/post/101-top-edtech-startups-companies-bangalore>