JETIR.ORG ISSN: 2349-5162 | ESTD Year : 2014 | Monthly Issue
JOURNAL OF EMERGING TECHNOLOGIES AND INNOVATIVE RESEARCH (JETIR)
An International Scholarly Open Access, Peer-reviewed, Refereed Journal

A STUDY ON AN ECONOMIC IMPACT OF BLENDED LEARNING AMONG STUDENTS IN HIGHER EDUCATION

Dr K Rajalakshmi, M.A, MPhil., Ph.D.,
Assistant Professor, Department of Economics
Chevalier T Thomas Elizabeth College for Women, Chennai. India

Dr K Muneeswari, M.A, MPhil., Ph.D.,
Assistant Professor, Department of Economics,
Queen Mary's College for Women,
Chennai. India

Abstract

Blended learning, an increasingly popular educational approach, integrates traditional face-to-face instruction with online learning activities. This study investigates the effectiveness of blended learning in enhancing educational outcomes and student engagement. A sample of 50 students participated in the study, Results indicate a significant improvement in both academic performance and student satisfaction, with various tools such as online quizzes, discussion forums, and virtual classrooms playing a pivotal role. The findings underscore the importance of strategic tool deployment in maximizing the benefits of blended learning. This research contributes to the growing body of literature supporting the efficacy of blended learning in modern educational settings.

Index Terms: Blended Learning, Technology, Students, Higher Education.

I Introduction

Historically, different learning activities and resources have been adopted by the classroom teachers to encourage the students in achieving their learning objectives. For many decades, visual material, face-to-face presentations, group activities and paper-based evaluations have been considered as the essential constructs of classroom teaching. Recently, the ICT have directed many economic and social changes throughout the world.

Advancement in technology have additionally helped in creativity taking into account human beings approximately themselves and their environment, which in flip needs a simultaneous improvement and change in the academic structure. Therefore, it's far very critical to apprehend the growing want and call for to renowned the dynamic desires of rookies to sell significant and tasty gaining knowledge of studies in academic settings, included with superior technology inside and past the Institution.

Education is no longer just about using pen to paper and learn by heart the facts. In the current scenario, innovative teachers continuously upgrade learning through technology, as manifested by the rapid adoption of technology-assisted teaching methods and blended learning models. It is due to the efforts made by these teachers that at present the education has become successful in fulfilling the requirements of the present-day curious and logical students who want to learn more and more but only based on logic. The notion of blended learning has been recognized for a long time, but the terminology for blended learning could not be well known until the beginning of 21st century.

II Understanding Blended Learning

Blended learning, also known as hybrid learning, is an approach to education that incorporates online educational materials and opportunities for interaction online with traditional place-based classroom methods. Hybrid learning is an educational method where some individuals participate in person and some participate online. The teachers and the facilitators teach remote and in-person learners at the same time using technology. With blended learning, teachers and facilitators combine in-person instruction with online learning activities. Learners complete some components online and do others in person.

Both types of learning involve a mix of in-person and online learning, but those differ in the two stages. With hybrid learning, the in-person learners and the online learners are different individuals. With blended learning, the same individuals learn both in person and online.

Moreover, by examining the economic benefits of blended learning within the framework of the knowledge economy, this study adds valuable insights to the ongoing discourse on education reform and optimization (Giannakos et al., 2018). To contextualize the study and gain a comprehensive understanding of the current research landscape, it is essential to review the relevant literature on blended teaching modes and their impact on student learning outcomes. This literature review will also help identify the gaps that this study aims to address.

Garrison and Vaughan (2008) define blended learning as an educational paradigm which has the strength of face-to-face and online learning-it is an approach in which face-to-face interaction and online learning are made better by the presence of the other. Blended learning enables the students to make use of online material for learning and through this the student can learn at their own pace, time and convenience. With that, the physical presence of the teacher further helps to clear their doubts and problems.

The implementation of blended learning varies widely across institutions and disciplines. According to Graham (2006), there are several models of blended learning, including:

1. **The Rotation Model:** Students rotate between different learning modalities, such as online instruction and face-to-face classroom sessions.

2. The Flex Model: Online learning is the primary mode of instruction, supplemented by in-person support as needed.

3. The A La Carte Model: Students take some courses online and others in a traditional classroom setting.

4. The Enriched Virtual Model: Students complete most coursework online but attend required face-to-face sessions.

Effective implementation requires careful planning, faculty training, and consideration of student needs. Studies by Vaughan (2007) and Owston et al. (2013) emphasize the importance of designing blended courses that are pedagogically sound and technologically supported.

Despite the positive outcomes, blended learning also presents challenges that must be addressed. Key issues include:

- Digital Divide: Not all students have equal access to the necessary technology and internet connectivity, which can create disparities in learning opportunities (Muilenburg & Berge, 2005).
- Faculty Training: Instructors need proper training and support to effectively design and deliver blended courses (Graham et al., 2013).
- Student Readiness: Students must possess self-regulation and time management skills to succeed in a blended learning environment (Broadbent & Poon, 2015).

Blended learning represents a promising approach to modern education, combining the benefits of traditional and online learning. While the literature indicates positive impacts on student engagement, flexibility, and achievement, it also highlights the need for addressing challenges related to technology access, faculty preparedness, and student readiness. As institutions continue to adopt and refine blended learning models, ongoing research and evaluation will be crucial to maximizing its potential benefits.

III Implications of Blended Learning

The advent of technology in education has transformed traditional teaching methodologies, leading to the emergence of blended learning. This model aims to provide a balanced approach that leverages the benefits of both in-person and online learning environments. The economic implications of this shift are significant, influencing various aspects of student life and institutional operations.

- Cost Savings

One of the primary economic benefits of blended learning for students is the potential for cost savings. Traditional education often involves significant expenses related to commuting, housing, and physical materials. Blended learning reduces the need for frequent travel and on-campus presence, allowing students to save on transportation and accommodation costs. Additionally, digital resources often replace expensive textbooks, further reducing financial burdens.

- Flexibility and Employment

Blended learning offers students greater flexibility in managing their schedules. This flexibility can lead to increased opportunities for part-time employment, enabling students to earn an income while pursuing their studies. The ability to work alongside academic commitments helps students finance their education and gain valuable work experience, which can be advantageous in the job market post-graduation.

- Access to Diverse Resources

The integration of online components in blended learning provides students with access to a wide range of digital resources, including online libraries, lectures, and interactive tools. These resources often come at a lower cost compared to traditional physical resources. Moreover, the availability of open educational resources (OERs) and massive open online courses (MOOCs) allows students to supplement their learning without incurring additional costs.

- Institutional Efficiency

From an institutional perspective, blended learning can lead to cost efficiencies that may indirectly benefit students. Universities and colleges can optimize their use of physical infrastructure, potentially reducing the need for extensive campus facilities. This can result in lower tuition fees or the reallocation of funds to enhance educational quality and student support services.

- Challenges and Considerations

Despite the economic advantages, blended learning also presents challenges that must be addressed to ensure equitable access and effectiveness. Not all students have reliable access to high-speed internet and necessary technology, creating a digital divide that can exacerbate existing inequalities. Institutions must invest in support systems to provide all students with the tools and resources required for successful participation in blended learning.

Furthermore, the initial implementation of blended learning programs can entail significant costs related to technology infrastructure, faculty training, and content development. Institutions must carefully plan and allocate resources to manage these initial investments effectively.

IV Objectives of the Study

1. To analyse the challenges and problems faced in using the course book and its online.

2. To study the economic impact of blended learning on students in higher education.

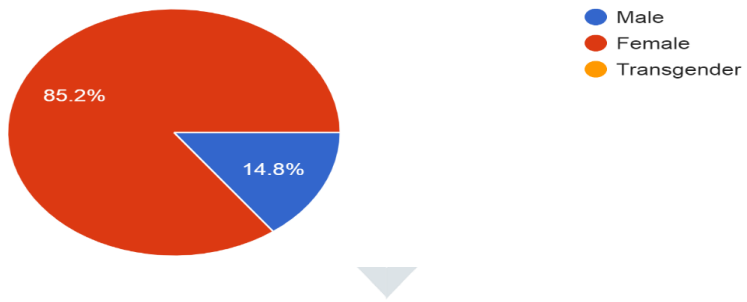
V Methodology

This study utilized a quantitative research design to investigate students' perceptions of blended learning in higher education. Data were gathered through a structured questionnaire, yielding 50 samples. The respondents, who had experience with blended learning in their bachelor's or master's degree programs, shared their subjective opinions on their self-perceptions of blended learning. The questionnaire collected demographic information and evaluated the respondents' attitudes and satisfaction with blended learning.

VI Findings

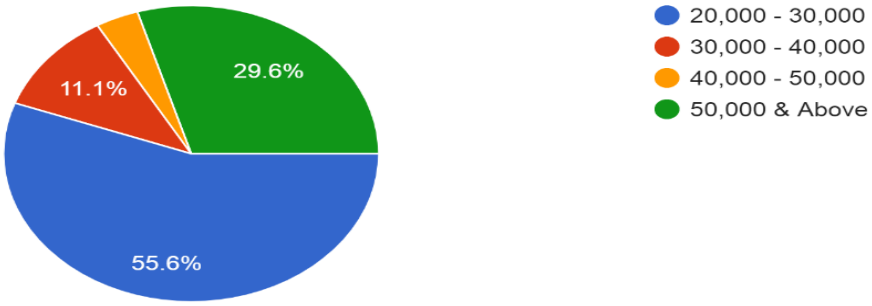
The findings of the survey conducted on students' perceptions of blended learning in higher education reveal significant insights. The majority of respondents expressed positive attitudes towards blended learning, highlighting its flexibility and the effective combination of online and face-to-face instruction. The survey also indicated high levels of satisfaction with the blended learning experience, noting improvements in engagement and academic performance. However, some concerns were raised regarding technical issues and the need for better support and resources. Overall, the data suggest that while blended learning is generally well-received, there are areas that require attention to enhance the overall learning experience.

Figure 1: Gender Distribution



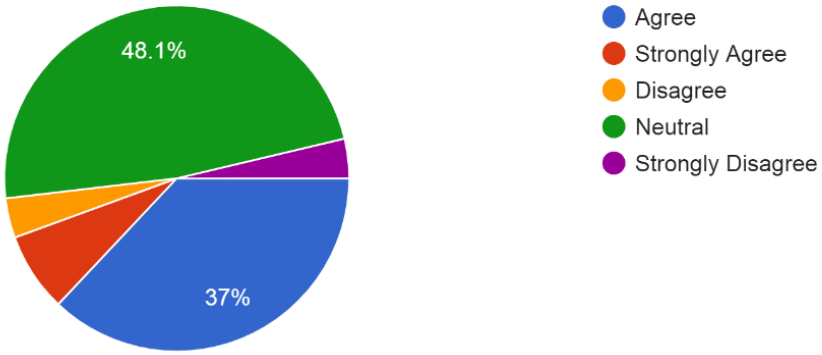
The gender distribution of the study's participants indicates that a significant majority were female, comprising 85.2% of the sample, while males made up 14.8%. This imbalance suggests that the study's findings may be more reflective of female students' perceptions of blended learning, and the experiences and opinions of male students might be underrepresented.

Figure 2: Income range of the participants



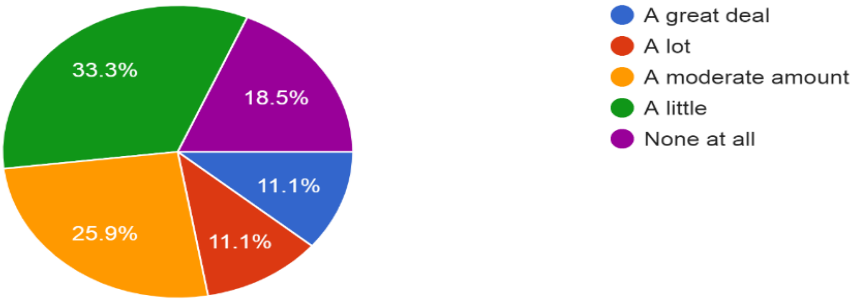
This data indicates that the majority of participants, 55.8%, fall within the income range of Rs.20000 to Rs.30000 per month. A smaller proportion, 11.1%, fall within the next income bracket of Rs.30001 to Rs.40000 per month. The income brackets of Rs.40001 to Rs.50000 and Rs.50001 and above represent 3.7% and 29.8% of the participants, respectively. This distribution provides insight into the economic background of the study participants and can help contextualize their perceptions and experiences related to blended learning in higher education.

Figure 3: Accessibility of the Content



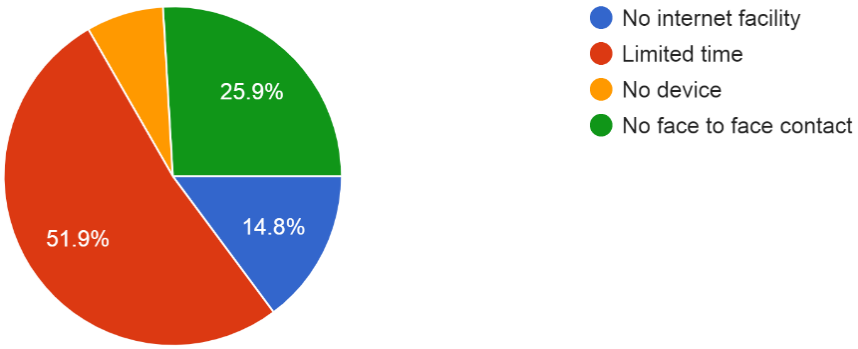
This indicates that a significant portion (38.4%) of the respondents agreed that they can access content anytime, anywhere without interruptions. However, nearly half (48.1%) of the respondents were neutral on this statement, suggesting a lack of strong opinion either way. A smaller percentage (7.4%) disagreed with the statement, indicating that they perceive interruptions or barriers to accessing content in their blended learning experience.

Figure 4: Impact on Performance



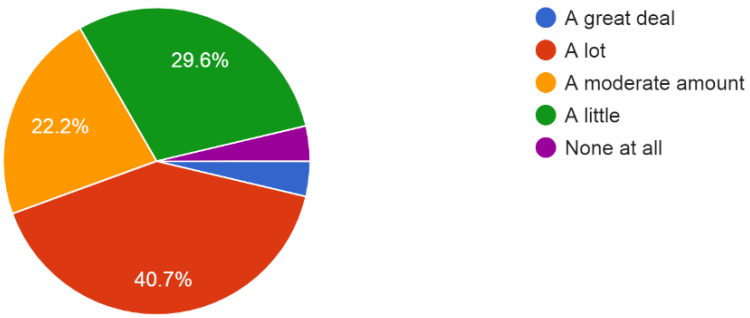
These responses indicate varying degrees of perceived impact on performance due to the blended learning model. The majority of respondents perceive at least some impact, with a significant proportion indicating a moderate amount (25.9%) or a little (33.3%). A smaller percentage believe that the model affects their performance to a great deal or a lot (11.1% each), while a notable portion (18.5%) feel that it has no effect on their performance. Overall, the responses suggest that while many students perceive some impact, opinions vary regarding the extent of this impact.

Figure 5: Accessibility of the Internet Facility



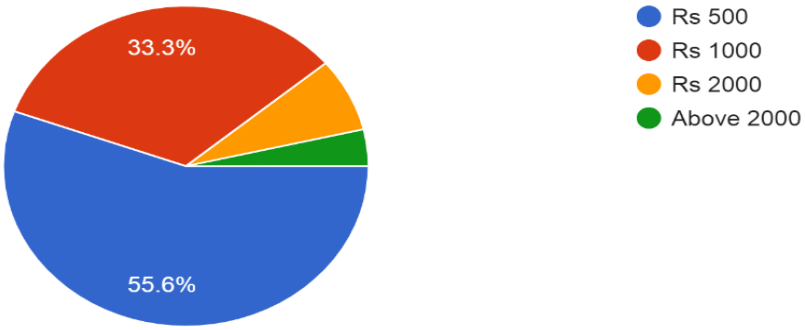
These responses provide insight into the primary difficulties students face in completing their coursework within a blended learning environment. The majority of respondents (51.9%) identified limited internet access as the most challenging aspect, highlighting the critical role of internet connectivity in engaging with course materials and activities. A significant portion (25.9%) also cited the lack of face-to-face contact as a challenge, suggesting the importance of interpersonal interaction in the learning process. A smaller percentage identified the absence of internet altogether (14.8%) or the lack of a suitable device (7.4%) as their main challenges, indicating additional barriers to accessing and engaging with coursework materials.

Figure 6: Amount of Discomfort experienced by the Participants



These responses indicate varying degrees of discomfort experienced by students as a result of increased screen time. While a small percentage (3.7%) reported experiencing no screen fatigue at all, a similar percentage (3.7%) reported experiencing it to a great extent. The majority of respondents reported experiencing screen fatigue to some degree, with 22.2% indicating a moderate amount, 29.6% indicating a little, and 4.7% indicating a lot. This suggests that a significant portion of students are affected by screen fatigue to some extent, which may impact their ability to engage with coursework effectively.

Figure 7: Levels of expenditure on Internet facility



These responses indicate the varying levels of expenditure on internet services among the respondents. The majority of participants (55.6%) reported paying Rs.500 per month for internet access, followed by 33.3% who pay Rs.1000. A smaller percentage of respondents reported paying higher amounts, with 7.4% paying Rs.2000 and 3.7% paying above Rs.2000. This distribution reflects the diverse financial situations and priorities of the respondents when it comes to internet expenses.

VII Conclusion

Blended learning presents a transformative approach to higher education, offering substantial economic benefits to students through cost savings, increased flexibility, and access to diverse resources. However, to maximize these benefits and ensure equitable access, institutions must address the associated challenges and invest in the necessary support systems. As blended learning continues to evolve, it holds the potential to reshape the economic landscape of higher education, making quality education more accessible and affordable for students worldwide.

References

1. Allen, I. E., & Seaman, J. (2017). Digital Learning Compass: Distance Education Enrollment Report 2017. Babson Survey Research Group.
2. Bernard, R. M., Borokhovski, E., Schmid, R. F., Tamim, R. M., & Abrami, P. C. (2014). A meta-analysis of blended learning and technology use in higher education: From the general to the applied. Journal of Computing in Higher Education, 26(1), 87-122.
3. Bonk, C. J., & Graham, C. R. (Eds.). (2012). The Handbook of Blended Learning: Global Perspectives, Local Designs. John Wiley & Sons.
4. Broadbent, J., & Poon, W. L. (2015). Self-regulated learning strategies & academic achievement in online higher education learning environments: A systematic review. The Internet and Higher Education, 27, 1-13.
5. Garrison, D. R., & Kanuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. The Internet and Higher Education, 7(2), 95-105.
6. Graham, C. R. (2006). Blended learning systems: Definition, current trends, and future directions. In C. J. Bonk & C. R. Graham (Eds.), The Handbook of Blended Learning: Global Perspectives, Local Designs (pp. 3-21). John Wiley & Sons.
7. Graham, C. R., Woodfield, W., & Harrison, J. B. (2013). A framework for institutional adoption and implementation of blended learning in higher education. The Internet and Higher Education, 18, 4-14.

8. Lim, D. H., & Morris, M. L. (2009). Learner and instructional factors influencing learning outcomes within a blended learning environment. Educational Technology & Society, 12(4), 282-293.
9. Means, B., Toyama, Y., Murphy, R., Bakia, M., & Jones, K. (2010). Evaluation of evidence-based practices in online learning: A meta-analysis and review of online learning studies. U.S. Department of Education.
10. Muilenburg, L. Y., & Berge, Z. L. (2005). Student barriers to online learning: A factor analytic study. Distance Education, 26(1), 29-48.
11. Owston, R., York, D. N., & Murtha, S. (2013). Student perceptions and achievement in a university blended learning strategic initiative. The Internet and Higher Education, 18, 38-46.
12. Picciano, A. G., Dziuban, C. D., & Graham, C. R. (Eds.). (2013). Blended Learning: Research Perspectives, Volume 2. Routledge.
13. Vaughan, N. (2007). Perspectives on blended learning in higher education. International Journal on E-Learning, 6(1), 81-94.
14. Garrison, R.; Vaughan, N. (2008). "Blended Learning in Higher Education: Framework, Principles and Guidelines"; San Francisco, CA: John Wiley & Sons.
15. Blended Mode of Teaching and Learning: Concept Note University Grants Commission New Delhi
16. . Allen, I. E., & Seaman, J. (2017). Digital Learning Compass: Distance Education Enrollment Report 2017. Babson Survey Research Group.
17. Hrastinski, S. (2019). What do we mean by blended learning? TechTrends, 63(5), 564-569.