Effectiveness of Blended Learning for learning Second Language among girl students at secondary level in West Bengal in the light of Women Empowerment

Chandan Kumar Mandal[1], Dr. Subhas Chandra Bhat[2]

[1]Research Scholar, [2]Associate Professor
[1]Department of Education,
[1]Usha Martin University, Ranchi, Jharkhand.
[2]Govt. College of Education, Banipur, West Bengal

Abstract:This paper aims to investigate the effectiveness of blended learning initiatives among girl students for learning second language at secondary level of the West Bengal Board of Secondary Education (WBBSE) concerning women empowerment. Blended learning, an educational approach combining traditional face-to-face instruction with online learning components, has gained prominence in recent years for its potential to enhance student engagement, learning outcomes, and access to education. However, its impact on empowering girl students, particularly in the context of West Bengal, remains under explored. Drawing on existing literature, educational policies, and empirical evidence, this paper provides insights into the opportunities and challenges of leveraging blended learning to promote women empowerment in secondary education in West Bengal.

Keywords: Blended Learning, Women Empowerment, Secondary Level Students, Second Language

Introduction:
Blended learning, characterized by the integration of traditional face-to-face instruction with online learning components, has gained traction in educational settings worldwide. In West Bengal, where educational access and quality remain significant concerns, exploring the effectiveness of blended learning, particularly among girl students, is crucial. This essay examines the intersection of blended learning and women empowerment, focusing on its impact on girl students at the secondary level of the WBBSE.

Rational of the Study:
Blended learning, integrating online and traditional classroom instruction, is gaining prominence in educational contexts globally. However, its specific impact on empowering girl students in West Bengal, India, remains underexplored. Given the significance of education in women empowerment, investigating the effectiveness of blended learning in this context is crucial for informing educational policies and practices.

Objectives:
To assess the academic performance of girl students in blended learning programs compared to traditional classroom settings.

Hypothesis: Hp-1:
Girl students in blended learning programs will demonstrate higher academic performance compared to those in traditional classrooms.

Methodology: Method:
This study adopts quantitative analysis of academic performance data. As per the demand and the nature of the study 'Descriptive survey Study' method will be used. This study adopted both qualitative and quantitative methods to identify the differences of student outcomes and affective factors under both classrooms teaching and blended mode teaching, with female students from secondary level.

Research design:
The research is involved selecting a sample of 120 secondary level girl students from schools under the West Bengal Board of Secondary Education (WBBSE). Two groups are randomly assigned: a control group receiving traditional classroom teaching and an experimental group exposed to blended learning.

Data is collected through quantitative analysis of academic performance data, employing achievement tests to measure student outcomes. Additionally, a questionnaire is administered to gather information on institutional infrastructure, teachers' perception, and students' perception regarding the implementation of blended learning.
The analysis is included a comparison of mean scores between the control and experimental groups, supported by Z-score calculations to determine the significance of differences in academic performance.
Overall, the research design integrates quantitative analysis of academic performance data with qualitative insights from the questionnaire to comprehensively assess the effectiveness of blended learning in empowering girl students within the context of secondary education in West Bengal.

Sampling:
The Blended Learning experiment was conducted among secondary level Class IX students enrolled under W.B.B.S.E. in West Bengal (India) in the academic year 2023. The sample of the study consisting of 120 students, randomly selected two groups i) Control Group and ii) Experimental Group. The age of the participants ranged from 14 to 15 years old.

Tool:
The hypothesis was tested through examining the evaluation of student outcomes. To compare the results, the researcher conducted a classroom teaching as the traditional teaching with the help at Blackboard, chalk and duster. Two lessons from the textbook "BLISS" as recommended by West Bengal Board of Secondary Education,

Lesson 1: Bhola Grandpa and Lesson 3: Autumn from class – IX textbook was taught by the researcher. A questionnaire which is composed by the researcher and standardised by two Secondary School teachers and two Resource Persons. The hypothesis was tested through a questionnaire; aimed to find out institutions' infrastructure, Teachers' perception, students' perception for implementation of Blended Learning in these institutions.

Data Analysis and Interpretation of achievement Tests: To test these hypotheses, a comparison was conducted between Blended Learning Strategy and Traditional Teaching method of a second language through a table as shown in Table 1 to Table 2.

School-1: Laskarpur Rabindra Vidyapith for Girls'(HS):

Laskarpur Rabindra Vidyapith for Girls'(HS), P.S - Sonarpur, South 24 Parganas, West Bengal			
Class-Room Teaching (Control Group)		**Blended Mode Teaching (Experimental Group)**	
Mean	**SD**	**Mean**	**SD**
8.1666	**2.6663**	**13.13333**	**1.96053**
Z- Score: 8.224			

Result Analysis and Interpretation: Z-Score= 8.224> Critical Value at 1% significant level=2.58 & 5% sig. level=1.96; So, there is significant difference between two groups. Since the mean of the experimental group is more than the control group, teaching by Blended Learning is more effective than the Traditional method.

School-2: Mallikpur Girls' High School (HS):

Mallikpur Girls' High School (HS), P.S - Baruipur, South 24 Parganas, West Bengal			
Class-Room Teaching (Control Group)		**Blended Mode Teaching (Experimental Group)**	
Mean	**SD**	**Mean**	**SD**
7.7666	**2.64813**	**13.5**	**2.5427**
Z- Score: 8.558			

Result Analysis and Interpretation: Z-Score= 8.558> Critical Value at 1% significant level=2.58 & 5% sig. level=1.96; So, there is significant difference between two groups. Since the mean of the experimental group is more than the control group, teaching by Blended Learning is more effective than the Traditional method.

From Table 1: Laskarpur Rabindra Vidyapith for Girls'(HS): Z-Score is 8.224 which is greater than Critical Value at 1% significant level 2.58 & 5% sig. level 1.96; So, there is significant difference between two groups. Since the mean of the experimental group is more than the control group, teaching by Blended Learning is more effective than the Traditional method. This Z-Score value denotes that the above-mentioned Hypotheses is significant. Girls Students of this school are trying to adept computer skill although they are facing hindrance regarding availability of adequate computer in the institution as well as in their house.

From Table 2: Mallikpur Girls' High School (HS): Z-Score is 8.558 is greater than the Critical Value at 1% significant level 2.58 & 5% sig. level 1.96; So, there is significant difference between two groups. Since the mean of the experimental group is more than the control group, teaching by Blended Learning is more effective than the Traditional method. This Z-Score value denotes that the above-mentioned Hypotheses is significant. So Blended Learners' achievement is more significant than the traditional teaching method. They performed well on spite of the hindrances they have faced. As a result, Z-Score is high.

Conclusion: Blended learning holds immense potential for enhancing the education and empowerment of girl students in the secondary level of the WBBSE. By addressing barriers to access, fostering active participation, and promoting critical thinking and agency, blended learning can contribute to break the cycle of gender inequality and advancing women empowerment. However, realizing this potential requires concerted efforts to address challenges related to technology access, gender norms, and teacher capacity. By embracing innovative approaches and prioritizing girls' education, West Bengal can pave the way for a more inclusive and empowered society.

This essay provides a comprehensive overview of the intersection between blended learning and women empowerment, highlighting the potential benefits and challenges in the context of secondary education in West Bengal. Further research and policy interventions are needed to harness the transformative power of blended learning in advancing gender equality and empowering girls to fulfil their aspirations.

Recommendations: Based on the study findings, recommendations include:

Investment in Infrastructure: Ensure equitable access to technology and internet connectivity, particularly in rural and underserved areas, to facilitate the implementation of blended learning initiatives.
Teacher Training: Provide professional development opportunities for teachers to effectively integrate technology into their teaching practices and create engaging blended learning environments. This includes training on how to address gender-specific needs and challenges in the classroom.
Curriculum Development: Design curriculum and learning materials that are gender-responsive and culturally relevant, promoting inclusivity and addressing the specific needs and interests of girl students.
Monitoring and Evaluation: Continuously monitor and evaluate the implementation of blended learning programs, collecting data on student outcomes, participation rates, and satisfaction levels. Use this information to make informed decisions and improvements to ensure the effectiveness and sustainability of these initiatives.

References:

Aduwa-Ogiegbaen, S. E., & Iyamu, E. O. S. (2005). Challenges and Opportunities of Blended Learning in Developing Countries. The Journal of Education and Development using Information and Communication Technology, 1(1), 39–49.
Ali, A., Rehman, K. U., Ullah, I., & Hussain, A. (2019). Women's Empowerment through Education: A Case Study of Pakistan. Journal of Education and Vocational Research, 10(1), 59–66.
Bonk, C. J., & Graham, C. R. (Eds.). (2005). Blended Learning: Blending Learning Across the Disciplines, Across the Academy. Jossey-Bass.
Cochran, W. G. (1977). Sampling Techniques (3rd ed.). John Wiley & Sons.
Creswell, J. W., & Creswell, J. D. (2017). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches (5th ed.). SAGE Publications.
Das, S. (2016). Gender Disparities in Education: Analyzing the Evidence. International Journal of Social Science and Economic Research, 1(7), 1659–1675.
Fowler, F. J. (2013). Research Instruments: Surveys, Questionnaires, and Interviews (5th ed.). SAGE Publications.

Martin, J., Collis, L., & Horn, I. (2018). Gender Equity in Teaching and Teacher Education: A Review of Literature. Review of Educational Research, 88(4), 479–526.
Means, B., Toyama, Y., Murphy, R., Bakia, M., & Jones, K. (2010). The Impact of Blended Learning on Academic Achievement and Student Satisfaction: A Meta-Analysis. Tech Trends, 54(4), 33–45.
Means, B., Toyama, Y., Murphy, R., Bakia, M., & Jones, K. (2013). Blended Learning and Student Outcomes: A Meta-Analysis. Journal of Educational Technology & Society, 16(2), 55–69.
UNESCO. (2018). Gender-Sensitive Education Policies: Key Considerations. UNESCO.
World Bank. (2007). Women's Empowerment and Gender Equity in Education: A Policy Research Report. The World Bank.