EFFECT OF BLENDED LEARNING ON ADOLESCENTS' ACADEMIC PERFORMANCE IN SOCIAL SCIENCE

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Abstract:
Effective teachers are pursuing their efforts to enhance learning in terms of technology, reflected through the rapid progress of technology-based teaching and blended learning models. Education has become a reality in fulfilling the needs of present-day creative students. Blended learning is an educational program that combines online digital media with traditional classroom methods and educational devices with the physical presence of both teacher and student.
An attempt is also made to study student teachers' perception of the Blended Learning Programme in terms of Survey type research. After the implementation of the Blended Learning Programme concerning the various dimensions, it is possible to increase the overall learner's academic performance. The study is also carried out to quantitatively analyze the Blended Learning Programme's effectiveness in improving student teachers' academic performance and pedagogical practices. Blended learning helps learners develop their various performances in the educational domain. Academic performance is the summation of different performance areas of learners to improve their abilities. The present paper intends to find out the relationship between learners' academic performance and their impact on blended learning for adolescent learners.
Key Words: Blended learning, Adolescents', Academic performance.

Introduction:

Schools worldwide closed due to COVID-19. 1.2 billion worldwide Children were out of traditional classrooms; therefore, teaching changed radically with a surge of remote and digital learning. Blended learning (B-learning) digital classrooms from W.B.B.S.E suggest that schools begin to start and communicate with all the students to fulfill their academic purposes through Whatsapp and Google Meet. From time to time, provision was made to check their performance through activity tasks, then moved to a more secure platform like Blended Learning Classes (F2F & Online Platform). The author studied these novel learning modes for academic reasons because of their importance.
This study examined how students felt about online classes and what they missed if they had gone as usual. This study suggested ways to improve teaching and prevent the pandemic in a vulnerable situation. This study also examined students' views on B-Learning during the COVID-19 epidemic, which was utilized as an alternative to classroom learning.

Background Study:

Blended learning: Blended learning is a combination of traditional classroom learning with the use of technology in learning, whereby adolescents will have access to multimedia instructional practices (PowerPoint presentations, Activities, and A/V aids, etc.) via the 7 E's of blended learning.
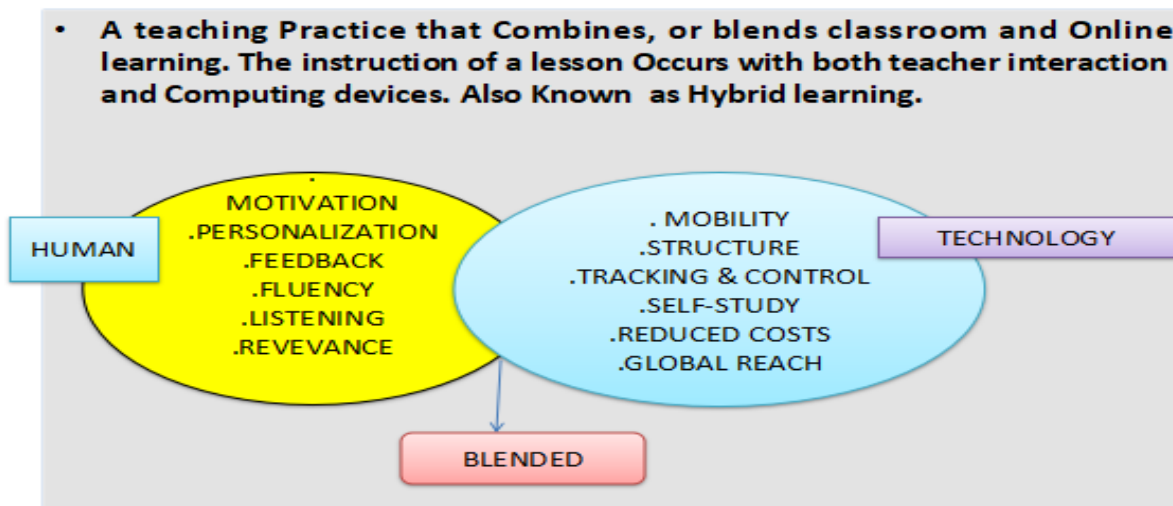
Academic Performance: Academic performance refers to learning outcomes, and in the current study, it refers to adolescents' performance in social science in the 8th grade.

Academic performance in school:

Many resources are devoted to identifying, evaluating, tracking, and encouraging students' development in schools despite the fact that education is not the only road to success in the working world. Parents are invested in their children's academic success because they know it will lead to better opportunities in the future. While schools have a vested interest in encouraging good behaviour for the same reasons, they are also often motivated by worries about the school's reputation and the potential of financial aid from government entities. Educators at the state and federal levels are responsible for identifying problem areas in schools and developing solutions by establishing benchmarks for achievement.

According to Masrom (2018), a student's performance in the classroom is measured by their self-reported CGPA/GPA from the previous semester and their predicted GPA for the current semester. Most universities and colleges today use students' grade point averages (GPAs) as a quick and easy way to compare how well they are doing overall in their academic programmes. The GPA is more accurate since it shows how students in different classes and programmes compare academically.

Review of related literature:

Kundu, A., & Bej, T. (2022) both studied that Time for Attitudinal Change and Critical Thinking: Implementing Blended Learning in an Indian Elementary Classroom. This empirical study examined how blended learning affects student learning attitude and critical thinking. Secondarily to examine teachers' views on blending potentials in a poor elementary classroom. It was found that The favourable association between students' learning attitude and critical thinking skills. Even in a school with weak technology and underprepared but willing teachers, blending improved student learning attitude and critical thinking.

Alsalhi, N. R., & others (2021) they examined on The Effect of Blended Learning on the Achievement in a Physics Course of Students of a Dentistry College and showed that the efficacy of several approaches to teaching a "Practical physics course" and presents its findings side by side. Results showed that there were differences in performance between the sexes among the experimental group. The findings of this study call for more investigation into the efficacy of blended learning in higher education.

Ceylan, V. K., & Kesici, A. E. (2017). their studied on Effect of blended learning to academic achievement.n this study, the effects of blended learning on the middle school students' academic achievement level and product evaluation scores were investigated. Blending Web technologies with instructional environments improves learning outcomes. Educational technologies and Software's "problem solving, computer programming, and software product creation" unit was taught through blended learning over seven weeks. Blended learning with web technology assisted the experimental group (such as video-conference, Learning Management System, Discussion blogs , etc.). Results showed that the experimental group has access to all these enriched contents that the control group only receives in the classroom through current teaching methods.

Nair, Tara S.; Bindu, R. L. (2016) thay examined that Effect of Blended Learning Strategy on Achievement in Biology and Social and Environmental Attitude of Students at Secondary Level. Blended Learning is mostly understood as the use of resources which combine e-learning with other educational resources. In this study, a blended learning strategy was designed to create a meaningful learning environment through a combination of Objectives (Cognitive, Affective & Psychomotor), Methods (Exploratory, Guided Discovery, Self-paced learning), and Media (Synchronous — Instructor-led Classrooms, Field visits) and Asynchronous — Surveys, Web/Computer-Based Learning). Task-based learning pushes students to complete particular tasks within a set period through specific activities. This study examined how blended learning affected Kerala secondary school students' biology and social and environmental attitudes. It was found that the Blended Learning improves Biology, Social, and Environmental Attitude in secondary school pupils.

This approach includes 7 phases, given by Thorn (2003), making it ideal for teachers to apply in the classroom to make learning more effective and engaging for students and themselves.

Phases are given below:

Phase 1: In the first stage, we elicit In order to assess the level of familiarity that pupils already have with the material.

Phase 2: Become Engaged Use a combination of lecture and demonstration (by displaying an object, photograph, or short video) to increase students' interest.

Phase 3: Exploration Supervised observation, inquiry, prediction, hypothesis development, experimentation, data collection, and conclusion drawing using natural objects and models. The teacher encourages the student to take part in all of the events.

Phase 4: Explain Students are given the chance to explain what they've learned, define any unfamiliar terms they may encounter, and synthesize the findings from their exploratory work. Understanding is facilitated by means of explanatory texts, movies, and other such tools.

Phase 5 : Exploration Supervised investigation, speculation, hypothesis formation, experimentation, data collecting, and analysis of findings based on natural objects and models. The instructor stresses the importance of student involvement in all activities.

Phase 6 : Explanation Students are given the opportunity to articulate their understanding, define any new concepts they uncover, and draw conclusions based on their research.

Phase 7 : Explanatory writings, videos, and other media are helpful in this regard since they shed light on complex concepts.
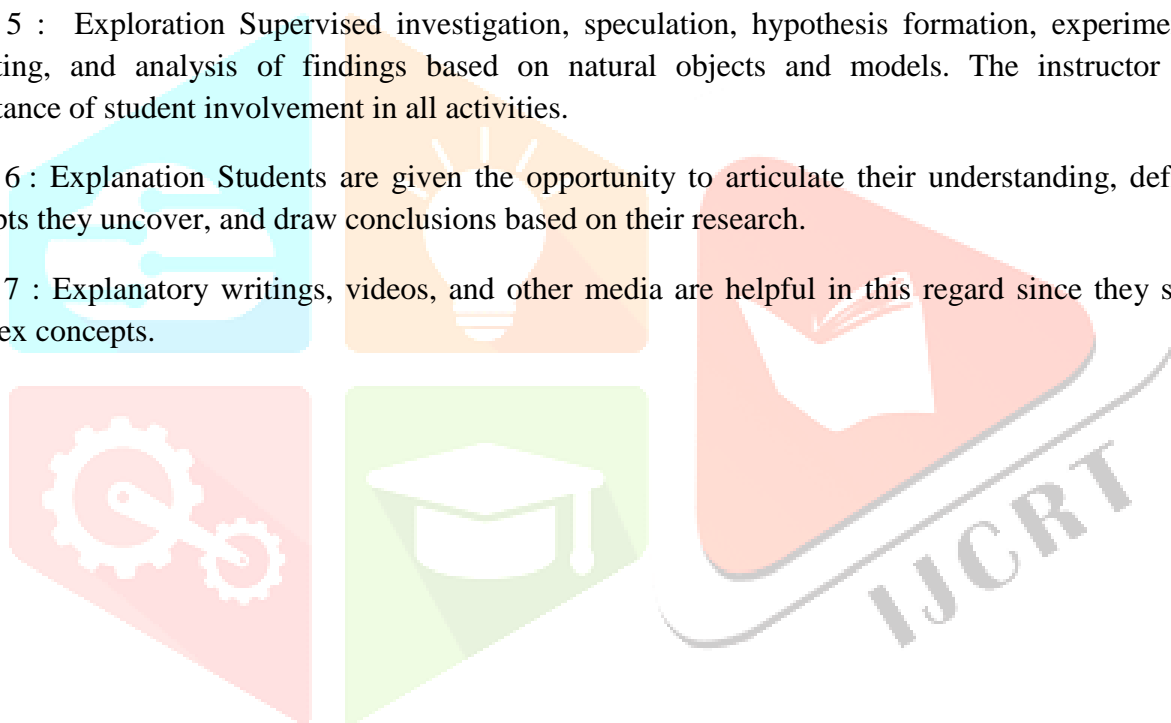
Thorn (2003), defined blended learning as a way of meeting the challenges of tailoring learning development to the needs of individuals by integrating the innovative and technological advances offered with the best of traditional learning.

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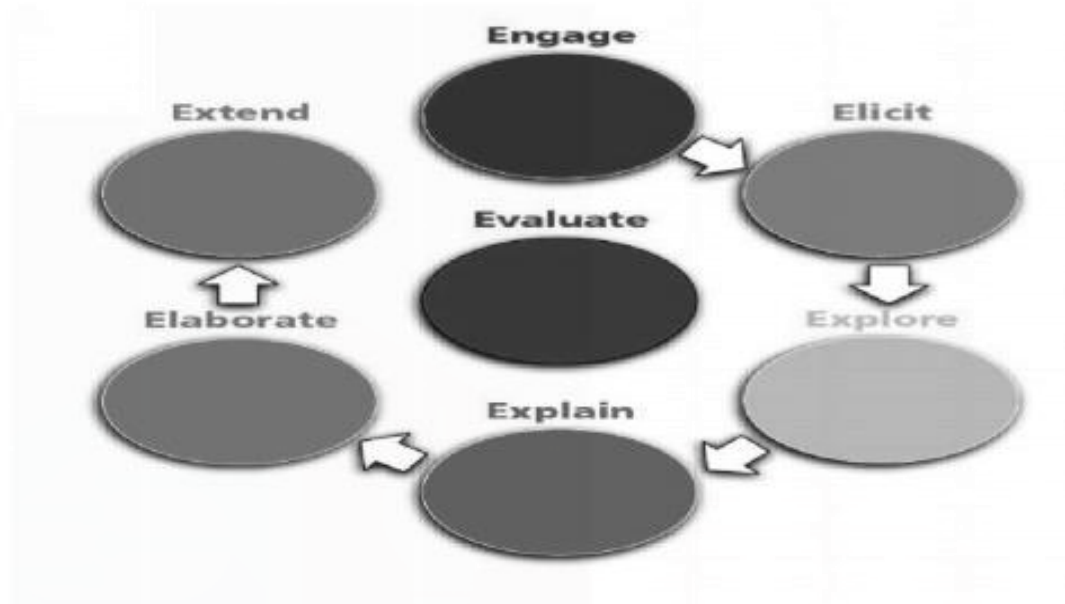
Research Gap:

The literature review found a research gap that the views of students/e-learners attitude towards Blended learning during the COVID-19 epidemic in Indian schools/colleges/institutions with the help of E-learning to keep the learning system open for academic practices.

Objectives of the study:

The following study is carried out with the following Objectives:

1. To examine the relationship between blended learning and adolescents' social science performance in the classroom.

2. To analyze the relationship between blended learning and the academic performance of adolescents' male and female in social science.

Hypothesis of the study:

H01: There would be significant relation between blended learning and academic performance of adolescents' in Social science.

HO2: There would be significant relation between blended learning and academic performance of male adolescents' in Social science.

HO3: There would be significant relation between blended learning and academic performance of female adolescents' in Social science.

Methodology: The study was descriptive survey in nature. A sample of 200 adolescents' in 8th grade from a school of West Bengal District North 24 Parganas affiliated to W.B.B.S.E will be selected randomly.

Tools used:

The following tools were used for data collection in the present study:

1. Self constructed Blended Learning questionnaire.

2. Self constructed Criterion referenced test of Academic Performance.

Statistical techniques used :

To find out the relationship between blended learning and academic performance of 8 th grade students in the subject of Social science, Karl Pearson's Product Moment Correlation was used.

INTERPRETATION OF RESULTS :

H01: There would be significant relation between blended learning and academic performance of adolescents' in Social science.

showing relation of blended learning and academic performance of adolescents' in Social science.

SL.NO	VARIABLES	N	MEAN	df	r	Level of significance
1.	Blended learning	200	62.67	199	0.51	0.5 level of significance
2.	Academic performance	200	156.67	199		

It is evident from the table 1, that value of coefficient of correlation between Blended learning and Academic Performance of male adolescents is 0.51 which is significant at 0.05 and not significant at 0.01 level of significance. It means that blended learning and academic performance were significantly correlated with each other. Hence, the research hypothesis that "There would be significant relation between blended learning and academic performance of adolescents' in Social science" was accepted.

H02: There would be significant relation between blended learning and academic performance of male adolescents' in Social science.

SL.NO	VARIABLES	N	MEAN	df	r	Level of significance
1.	Blended learning	100	65.78	99	0.48	0.01 level of significance
2.	Academic performance	100	161.29	99		

It is evident from the table 2 that value of coefficient of correlation between blended learning andacademic performance of male adolescents is 0.48 which is significant at 0.01 and not significant at 0.05 level of significance. It means that blended learning and academic performance are significantly correlated with each other. Hence, the research hypothesis that "There would be significant relation between blended learning and academic performance of male adolescents' in Social science" was accepted.

HO3: There would be significant relation between blended learning and academic performance of female adolescents' in Social science.

SL.NO	VARIABLES	N	MEAN	df	r	Level of significance
1.	Blended learning	100	68.7	99	0.46	0.01 level of significance
2.	Academic performance	100	164.8	99		

It is evident from the table 3 that value of coefficient of correlation between blended learning and Academic Performance of female adolescents' is 0.46 which is significant at 0.01 level of significance. It means that blended learning and academic performance are significantly correlated with each other. Hence, the research hypothesis that "There would be significant relation between blended learning and academic performance of female adolescents' in Social science" was accepted.

Conclusion:

1. Adolescents' social science and blended learning grades were statistically significantly correlated. Adolescents' use of blended learning positively correlates favorably with their academic progress.

2. The academic success of male adolescent students in social science was statistically significantly correlated with the integrated learning model. When Adolescent boys use blended learning techniques, their academic performance improves.

3. The academic success of female adolescent social science students was found to be highly correlated with blended learning. Girls in adolescence who use blended learning generally achieve better academic outcomes.

It has been concluded that the blended learning technique, which mixes self-paced, live online, and face-to-face classroom instruction can improve students' academic performance in educational programs. Therefore, blended learning programs were designed to allow adolescents to enhance their practical learning skills and develop their foundational cognitive concepts.

The present investigation will link blended learning and academic performance, which is essential to adolescents' advancement and achievement in the present and future.

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