



COMPARATIVE STUDY OF OFFLINE AND ONLINE TEACHING WITH RESPECT TO GENDER AND RESIDENTIAL BACKGROUND

Rohi Rani**Research scholar****Department of education****Davv, indore****Dr. Laxman Shinde****Professor and Head****Department of education****Davv, indore**

ABSTRACT

This study compared online and offline teaching methods using the Moodle platform and assessed their impact on students' academic performance. It found no significant difference in performance based on gender or urban/rural locality, suggesting that the Moodle platform had a similar effect across all demographics. The study emphasizes the need for further research to understand the potential benefits of different teaching modalities in educational settings.

Keywords: Academic Performance, Moodle, Offline Teaching, and Online Teaching.

INTRODUCTION

The evolving nature of learning is intricately tied to the methodology employed, which must align with the skill sets expected to be acquired by students. The inclusion of Information and Communication Technology (ICT) in education, particularly through e-learning and tools such as Moodle, is considered instrumental in modernizing the teaching and learning process. Gunawardena (1999) emphasizes the role of computers and internet in enhancing access to diverse perspectives, fostering learner autonomy, and improving critical thinking skills. The evaluation of online teaching and assessment tools allows the active participation of students, teachers, and institutional administrators as key stakeholders. In the present study, students' academic achievement was assessed using online and offline teaching modalities. Moodle was employed for online teaching, while the offline approach relied on traditional lecture methods. This exploration aims to compare and evaluate the impact of these diverse teaching methods on students' performance.

REVIEW OF RELATED LITERATURE

Sharma et al., (2022) conducted a study on “A Study on the Online - Offline and Blended Learning Methods”. The purpose of this survey research was to collect students’ responses to understand their perspectives on the different modes of learning. A questionnaire was designed, and a survey was conducted among 654 undergraduate engineering students. A chi-square test was conducted and the findings of the study revealed that most of the students preferred online teaching in comparison to offline.

Priyanka (2023) A study on “A Comparative Study Of Offline And Online Modes Of Learning”. The objective of the study was to compare online and offline modes of learning. Online survey was used for data collection carried out in the form of Google Forms . This data is collected from 100 students and data was analyzed by descriptive statistics. The findings of the study revealed that students prefer offline learning over online learning.

Umek et al., (2017) conducted a study on “An assessment of the effectiveness of Moodle e-learning system for undergraduate public administration education”. The objective of the study was to analyze how introduction of Moodle e-learning platform as part of the teaching process is related with students’ performance, i.e., the average grade and the average number of admissions to the exams. The sample of the study consists of member of the University of Ljubljana (Faculty of Public Administration) in the period from 2008 till 2014. The results of the analysis (using a t-test) show a significant improvement in performance at the different (faculty-, student- and course-) levels after introducing the Moodle. The data show that the greatest improvement is seen among students with lower high school grades.

Chen et al., (2023) conducted a study on “Effects of a Moodle-based E-learning environment on E-collaborative learning, perceived satisfaction, and study achievement among nursing students: A cross-sectional study”. The objective of the study was to determine whether using ELEM for educational applications can significantly improve e-collaborative learning, perceived satisfaction, and study achievement among nursing students in a pediatric nursing course. Nonrandomized pretest-posttest quasi-experimental research design was used. Eighty-four students (52 in the non-ELEM group and 32 in the ELEM group) completed both the pretest and posttest. The students who used Moodle-based ELEMs combined with classroom teaching showed significantly higher levels of e-collaborative learning, perceived satisfaction, and study achievement in the pediatrics nursing course. ELEMs for educational purposes can serve as effective complementary learning tools for pediatric nursing courses.

RATIONALE OF THE STUDY

Based on the review of literature it can be said that these studies collectively indicate that students' preferences for online or offline learning methods can vary significantly. Additionally, the integration of e-learning platforms like Moodle has shown to positively impact student performance across diverse academic disciplines, emphasizing the potential benefits of incorporating such technologies into educational settings. Furthermore, the findings from

nursing education highlight the potential of Moodle-based ELEMs to enhance collaborative learning, satisfaction, and study achievement among students, particularly in specialized courses such as pediatric nursing

METHODOLOGY

TABLE: 1

S.no	Institutions					Groups	Gender	Number	Total
1	Govt. girls	higher	secondary	school		Experimental group	Female	31	=60
2	Govt. boys	higher	secondary	school			bijhberia	Male	
3	Government girls	higher	secondary	school		Control group	Female	30	=50
4	Government boys	higher	secondary	school			boys wanpoh	Male	
									110

TOOLS EMPLOYED

The researcher developed the Moodle course and the achievement test, and established both their content and face validity.

PROCEDURE OF DATA COLLECTION.

The study obtained authorization from the Chair of the Head of Department of Education DAVV Indore via email to the Chief Education Officer in Anantnag to proceed with data collection from specific schools. A pre-test covering three education subject units was conducted for the experimental and control groups, each lasting about 45 minutes.

The treatment involved providing the experimental group with a special advanced orientation before starting the Moodle course, while the control group experienced traditional instructional procedures. After completing three units, both groups underwent a post-test using the same achievement test. Clear instructions were given before the tests to ensure consistency and understanding across all students.

OBJECTIVES

- 1) To compare the mean scores of treatment groups with respect to male and female.
- 2) To compare the mean scores of treatment groups with respect to urban and rural locality.

HYPOTHESES

- 1) There is no significant difference on the mean scores of treatment groups with respect to male and female.
- 2) There is no significant difference on the mean scores of treatment groups with respect to urban and rural locality.

DATA ANALYSIS

First objective: To compare the mean scores of treatment groups with respect to male and female.

Null hypothesis: There is no significant difference on the mean scores of treatment groups with respect to male and female.

For testing the hypothesis, the data were analyzed by applying t-test.

Table 2:

Independent t-test for equality of means						
Gender	N	Mean	Sd	T	Df	Sig
Male	50	33.46	8.21	.285	108	.776
Female	60	33.00	8.59			

The results of the independent t-test with a t value of .285 and 108 degrees of freedom reveal that the significance level is .776. This suggests that there is no statistically significant difference between the mean scores of the treatment groups for male and female participants.

Second objective: There is no significant difference on the mean scores of treatment groups with respect to urban and rural locality.

Null hypothesis: There is no significant difference on the mean scores of treatment groups with respect to urban and rural locality.

Table 4 :

Independent t-test for equality of means						
Residential background	N	Mean	Sd	T	df	sig
Urban	52	32.8462	8.68	-.428	108	.669
Rural	58	33.5345	8.17			

The independent t-test results indicate a t value of -.428 with 108 degrees of freedom and a significance level of .669. This suggests that there is no statistically significant difference in the mean scores of the treatment groups based on the urban and rural locality of the participants.

FINDINGS OF THE STUDY:

Based on the findings from the independent t-tests, it can be concluded that there is no statistically significant difference in the mean scores of the treatment groups based on the participants' gender (male and female) or urban and rural locality. These results suggest that the treatment administered through the Moodle platform had a similar effect on both male and female participants, as well as on individuals from urban and rural areas. Therefore, the treatment does not appear to have a differential impact based on gender or locality. It's essential to note that the lack of statistical significance does not necessarily imply that there is no real-world significance. Other factors should also be considered when interpreting these results, such as the practical importance of any observed differences, potential confounding variables, and the overall context of the study.

CONCLUSION:

In conclusion, the study suggests that the Moodle-based teaching approach had a consistent impact across different demographics, and further research and consideration should be undertaken to comprehensively assess the varied influences and potential benefits of different teaching modalities in educational settings.

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