

A Comparative Study between Offline and Online Classes for College Students

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Abstract -This study was conducted to compare the effectiveness and student satisfaction levels associated with traditional offline classes and modern online classes among college students. The shift to online learning, accelerated by the Covid-19 pandemic, has introduced questions about maintaining teaching quality and student engagement. The research utilized a convenience sampling technique, collecting data from 130 college students via an online survey using Google Forms. A majority of respondents had attended online classes, showing widespread adoption of digital learning. Zoom (83.1%) was the most preferred platform for online classes. However, the satisfaction level with offline classes was higher (40% strongly agree) than with online classes. The study concluded that while offline classes are valued for promoting better interaction, clarity, and motivation, online classes offer crucial convenience and flexibility. Therefore, the most beneficial approach is the adoption of a blended learning model to enhance learning outcomes and maintain academic quality for college students.

Key Words: Learning, Interaction, Satisfaction, Motivation

JEL Code: I2, D83, D91, A22

I.INTRODUCTION

At present, the education system has evolved significantly with the integration of modern technology to enhance learning experiences and provide better access to educational resources.

Traditionally, teaching was conducted in an offline mode, where students and teachers interacted face-to-face in physical classrooms. Although this method promotes direct communication, discipline, and motivation, it has certain limitations such as restricted access to diverse learning materials. With technological progress, online learning has emerged as a powerful alternative, allowing students to attend virtual classes from anywhere using the internet. Despite challenges like connectivity issues and reduced personal interaction, online learning has gained immense popularity due to its flexibility and accessibility. The shift became especially crucial during the Covid-19 pandemic, when educational institutions worldwide adopted online platforms to ensure the continuity of learning despite physical restrictions.

II.REVIEW OF LITERATURE

Rohi Rani and Dr. Laxman Shinde (2024)¹ the paper “Comparative Study of Offline and Online Teaching with Respect to Gender and Residential Background” examined how online and offline teaching methods affect students’ academic performance using the Moodle platform. The study included 110 students from various schools and compared results by gender and residential background. Statistical analysis using t-tests showed no significant difference in performance between male and female students or

between urban and rural students. This indicates that Moodle-based teaching had a consistent effect across demographics. The study concludes that online teaching platforms like Moodle can be equally effective for diverse student groups, though further research is needed to explore the broader impacts of different teaching methods in education.

Dr. Kirandeep Kaur et al. (2024)² the study “A Comparative Study to Assess the Level of Satisfaction Regarding Traditional Versus Online Learning Among Students of Selected Colleges of Adesh University, Bathinda, Punjab”. Using a quantitative, non-experimental design with 180 students, the research found that 77.77% of students were highly satisfied with traditional (offline) learning, while only 33.33% showed high satisfaction with online learning. Students reported that offline classes helped them stay focused, interactive, and motivated due to direct communication with teachers and peers. The study concludes that traditional learning provides higher satisfaction and better understanding, though online education can serve as a useful supplement for flexible access and continuity of education.

Priyanka (2023)³ the paper “A Comparative Study of Offline and Online Modes of Learning” examines students’ preferences and experiences with both learning methods during and after the COVID-19 pandemic. The study collected data from 100 students across various Indian states through surveys. Results revealed that 53.5% of students preferred offline learning, citing better focus, motivation, and interaction with teachers and peers. In contrast, 46.5% favored online learning for its time efficiency and flexibility. Most students (70.7%) preferred hard copies of study materials, and 79% reported that excessive screen time affected their vision. The research concludes that while offline learning remains more effective for concentration and communication, online learning serves as a valuable complementary tool.

Mrs. Karpagam K. et al. (2023)⁴ The study “A Comparative Study to Assess the Satisfaction of Online vs Offline Classes Among School Children” aimed to compare students’ satisfaction levels with online and offline learning methods after the COVID-19 pandemic. Results showed that 76% of students

were highly satisfied with offline classes, while only 3% felt the same about online classes. Offline classes were preferred for better understanding, focus, and discipline, whereas online classes faced issues like distractions and poor internet connectivity. The study concluded that students experienced greater satisfaction and engagement in traditional classroom settings, though online learning remains valuable as a supplementary mode of education.

Ulfat Amin et al. (2022)⁵ the article “Comparative Study on Effectiveness of Online and Offline Learning among Higher Education Students in Kashmir”. The study involved 550 higher education students selected through random sampling and used Google Forms for data collection. Findings revealed that most students found offline learning to be more effective, interactive, and focused, with 46.5% agreeing that they concentrate better in physical classrooms. However, 53.3% preferred online learning during the pandemic for safety and convenience. The authors concluded that while offline learning remains superior for engagement and reliability, online learning served as a vital alternative during the pandemic. They recommended a blended approach for future education systems to balance flexibility and interaction

Dr. N.S. Lissy and Dr. J. Mahalakshmi (2022)⁶ the article “A Comparative Study between Offline and Online Classes among Students” compares the learning outcomes of students taught through online and offline modes. Online education provides flexibility. The study concludes that both methods are equally effective if the qualities of teaching and student participation are maintained.

Padmalini Singh.et.al (2021)⁷ the study titled on a comparative study on effectiveness of online and offline learning in higher education, education system has transformed significantly in recent years with the growth of digital technology. Despite facing challenges like technical issues and limited internet connectivity, online learning proved essential during the Covid-19 pandemic. It allowed education to continue uninterrupted when physical classes were suspended. Many students still prefer offline learning for its direct interaction and better understanding, while others appreciate online learning for its convenience.

Dr. M. Vaanmalar (2020)⁸ the study titled “A Comparative Study between Offline and Online Classes for Students” explores the effectiveness of online and offline learning methods. Online learning provides flexibility, accessibility, and reduced costs, while offline classes foster direct interaction and community learning. Despite the benefits, online education can cause isolation and require higher self-discipline. Overall, both methods have unique advantages and limitations, and combining them through blended learning could enhance educational outcomes by merging flexibility with interpersonal interaction.

III.STATEMENT OF THE PROBLEM

- The shift from traditional classroom learning to online education has created a major challenge in maintaining the quality and effectiveness of teaching among college students.
- While online classes offer flexibility and accessibility, they often lack personal interaction and focus. Offline learning, though more engaging, can be limited by time and location constraints.
- This creates uncertainty about which mode better supports student performance and satisfaction. Therefore, this study aims to compare the effectiveness of offline and online classes for college students to determine the more beneficial learning approach.

IV.OBJECTIVE OF THE STUDY

- To assess the level of satisfaction of students with online learning.
- To analyze the level of satisfaction of students with traditional learning.
- To study the students’ preferences regarding learning methods.
- To evaluate the students’ attitudes toward online and offline learning.

V.METHODOLOGY OF THE STUDY

The study was conducted among college students. The sample size consisted of 130 college students who were selected using a convenience sampling technique. An online survey method via Google Forms was adopted to collect data from the selected

respondents with the help of a semi-structured tool and demographic variables. Data collection was carried out over a period of two months, from September 2025 to October 2025. The data were analyzed using SPSS software and interpreted in terms of frequency and percentage analysis.

VI.ANALYSIS AND INTERPRETATIONS

Table 1.1 Gender of the respondents

Particulars	No.of.Respondents	Percentage
Female	32	24.6
Male	98	75.4
Total	130	100.0

Interpretation

Table 1.1 shows that majority of respondents are male (75.4%), while females make up 24.6%.

Table 1.2 Age of the respondents

Particulars	No.of.Respondents	Percentage
21-25 years	56	43.1
26-35 years	06	4.6
Below 20 years	68	52.3
Total	130	100.0

Interpretation

Table 1.2 indicate that, Most students are below 20 years (52.3%), followed by 21–25 years (43.1%). This shows that respondents are mainly young college students.

Table 1.3 qualifications of the respondents

Particulars	No.of.Respondents	Percentage
HSC	24	18.5
Others	08	6.2
PG	30	23.1
SSLC	02	1.5
UG	66	50.8
Total	130	100.0

Interpretation

Table 1.3 shows that, over half of the respondents are undergraduates (50.8%), with 23.1% postgraduates and 18.5% HSC.

Table 1.4 Did you attend any online classes?

Particulars	No.of.Respondents	Percentage
No	08	6.2
Yes	122	93.3
Total	130	100.0

Interpretation

Table 1.4 indicates that, majority (93.8%) attended online classes, showing widespread adoption of online learning during the study period.

Table 1.5 If yes, means your attend any online class earlier?

Particulars	No.of.Respondents	Percentage
No	38	29.2
Yes	92	70.8
Total	130	100.0

Interpretation

Table 1.5 shows that, 70.8% had attended online classes earlier, showing prior familiarity with digital learning tools.

Table 1.6 whether your college has begun online classes in the wake of corona?

Particulars	No.of.Respondents	Percentage
No	16	12.3
Yes	114	87.7
Total	130	100.0

Interpretation

Table 1.6 indicates that, 87.7% reported that their colleges had begun online classes in response to COVID-19, reflecting institutional adaptation.

Table 1.7 what are the tools used for online class?

Particulars	No.of.Respondents	Percentage
Google classroom	02	1.5
Google meet	14	10.8
Others	04	3.1
Whatsapp	02	1.5
Zoom App	108	83.1
Total	130	100.0

Interpretation

Table 1.7 shows that, Zoom (83.1%) was the most preferred platform, followed by Google Meet (10.8%); other tools like WhatsApp and Google Classroom were rarely used.

Table 1.8 how much time would you like to spend in a day for online classes

Particulars	No.of.Respondents	Percentage
2-4 hours	50	38.5
4-6 hours	64	49.2
6-8 hours	08	6.2
Less than 8 hours	08	6.2
Total	130	100.0

Interpretation

Table 1.8 state that, 7. Most students preferred 4–6 hours per day (49.2%), showing moderate tolerance for extended screen time.

Table 1.9 Suitable duration for online classes (per class)

Particulars	No.of.Respondents	Percentage
30 mins	42	32.3
45 mins	78	60.0
More than 45	10	7.7
Total	130	100.0

Interpretation

Table 1.9 shows that, 45 minutes (60%) was considered ideal, aligning with standard attention spans for online learning.

Table 1.10 how much time you need as break between two online classes

Particulars	No.of.Respondents	Percentage
10 mins	42	32.3
15 mins	54	41.5
Less than 15 mins	14	10.8
More than 15 mins	20	15.4
Total	130	100.0

Interpretation

Table 1.10 indicates that, 15-minute break (41.5%) between classes was found most suitable.

Table 1.11. General reference for online class or offline class

Particulars	No.of.Respondents	Percentage
Both	32	24.6
Offline	40	30.8
Online	58	44.6
Total	130	100.0

Interpretation

Table 1.11 shows that, 44.6% preferred online classes, 30.8% preferred offline, and 24.6% liked both, showing a positive inclination toward digital learning.

Table 1.12. Satisfaction level of online classes

Particulars	No.of.Respondents	Percentage
Agree	46	35.4
Disagree	22	16.9
Neutral	34	26.2
Strongly disagree	28	21.5
Total	130	100.0

Interpretation

Table 1.12 indicates that, majority of the students are agree to online classes 35.4%

Table 1.13. Satisfaction level of offline classes

Particulars	No.of.Respondents	Percentage
Agree	38	29.2
Disagree	20	15.4
Neutral	20	15.4
Strongly Disagree	52	40.0
Total	130	100.0

Interpretation

Table 1.13 indicates that, majority of the students are strongly disagree to offline classes 40.0%

Table 1.14. Online teaching is more interesting than Offline teaching

Particulars	No.of.Respondents	Percentage
Agree	30	23.1
Disagree	46	35.4
Neutral	14	10.8
Strongly	40	30.8
Total	130	100.0

Interpretation

Table 1.14 shows that, 35.4% disagreed those online classes are more interesting; hence, offline classes remain more engaging.

Table 1.15 Online teaching is more convenient than Offline teaching

Particulars	No.of.Respondents	Percentage
Agree	38	29.2
Disagree	32	24.6
Neutral	28	21.5
Strongly	32	24.6
Total	130	100.0

Interpretation

Table 1.15 indicates that, Opinions were mixed around 29.2% agreed online classes are more convenient, but 24.6% disagreed.

Table 1.16 Online teaching is more motivating than Offline teaching

Particulars	No.of.Respondents	Percentage
Agree	42	32.3
Disagree	26	20.0
Neutral	24	18.5
Strongly	38	29.2
Total	130	100.0

Interpretation

Table 1.16 shows that, about 32.3% agreed that online learning is more motivating, showing moderate support for digital platforms.

Table 1.17 Mixed method of learning using both Offline as well as online teaching learning is the best approach for maximizing students learning.

Particulars	No.of.Respondents	Percentage
Agree	46	35.4
Disagree	10	7.7
Neutral	40	30.8
Strongly	34	26.2
Total	130	100.0

Interpretation

Table 1.17 shows that, 35.4% agreed and 26.2% strongly agreed that combining online and an offline method is best for maximizing learning outcomes.

Table 1.18 Do you like to attend online exam

Particulars	No.of.Respondents	Percentage
No	26	20.0
Yes	104	80.0
Total	130	100.0

Interpretation

Table 1.18 indicates that, Strong 80% of students preferred online exams for convenience and accessibility.

VII.FINDINGS

- Majority of respondents are male (75.4%)
- Most students are below 20 years (52.3%)
- Most of the respondents are undergraduates (50.8%)
- Majority of the respondents are attended online classes (93.8%)
- 70.8% had attended online classes earlier
- Zoom (83.1%) was the most preferred platform
- Most of the students preferred 4–6 hours per day (49.2%)
- 44.6% preferred online classes, 30.8% preferred offline
- Satisfaction with offline classes (40% strongly agree) was higher than with online classes (35.4% agree)

- 35.4% disagreed that online classes are more interesting
- 29.2% agreed online classes are more convenient
- 80% of students preferred online exams for convenience and accessibility.

VIII.SUGGESTION

- Since students showed interest in both online and offline classes, colleges should adopt a blended learning model that combines classroom teaching with digital platforms.
- Institutions should enhance internet connectivity, provide better technical support, and ensure stable platforms for smooth online learning.
- Conduct workshops and training programs to help both teachers and students become more comfortable with online teaching tools, software usage, and digital learning techniques.
- Class duration and break intervals should be designed thoughtfully.
- The offline mode should encourage discussions, group activities, practical learning, and peer collaboration to improve understanding and communication skills.

IX.CONCLUSION

The study clearly shows that both online and offline learning methods have their own advantages and limitations. Offline classes promote better interaction, clarity, and motivation among students, while online classes offer greater convenience and flexibility. The findings indicate that although students appreciated the usefulness of online learning, they still valued offline teaching for better understanding and engagement. However, a large number of students also supported the idea of integrating both methods. Therefore, the best way forward is to adopt a blended learning approach, where online platforms are used to supplement traditional classroom teaching. This balanced method will help colleges enhance student learning outcomes, maintain academic quality, and meet the needs of modern education.

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