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Engagement and Learning Outcomes in Commerce and Management: A Study of Online vs Traditional Teaching in Commerce and Management

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Abstract:
The COVID-19 pandemic has completely changed how universities teach students. This study looks at how well online teaching works compared to traditional classroom teaching in Commerce and Management courses. The research involved 180 students and 35 teachers from well-known Indian universities, using both surveys and interviews. We examined things like how engaged students were, what they learned, how well they understood concepts, communication quality, and overall satisfaction.
The results show that online teaching is great for flexibility, reaching more students, and building technology skills. However, traditional classroom teaching is still better for face-to-face interaction, maintaining discipline, and helping students understand complex ideas more deeply. The study finds that combining both approaches using online tools along with in-person learning works best for Commerce and Management subjects. This research provides solid evidence and practical suggestions for teachers, universities, and education officials who want to improve how higher education is delivered.

Keywords: Online Learning; Traditional Teaching; Commerce Education; Management Studies; Blended Learning; Pedagogical Effectiveness; Higher Education; Digital Pedagogy; Student Engagement; Learning Outcomes.

INTRODUCTION

The world of higher education has changed dramatically in recent years, mainly because technology is now a big part of teaching and learning. The COVID-19 pandemic in 2020 sped up this change even more, forcing colleges especially those that teach commerce and management, which usually depend on classroom activities and teamwork to quickly shift to online learning. This sudden move raised an important question: can online teaching match or even be better than traditional classroom methods, especially for subjects like commerce and management?
Commerce and management courses involve not only learning theory but also practical tasks, discussions, and solving real problems in real time. Subjects such as financial analysis, business ethics, marketing, and HR need students to be highly engaged and to understand real-world situations. In-person classes allow students to get instant feedback, use non-verbal communication, and learn from both teachers and classmates. On the other hand, online learning gives flexibility, access to recorded lessons, interactive digital tools, and opportunities to learn with people from across the world.
This debate about the best way to teach has become very important. Some researchers have found that online learning makes education more accessible and helps students learn at their own pace, while others say that face-to-face classes result in better understanding and memory. These results can change

depending on what's being taught, how classes are designed, and who the students are. In India, where internet access and teaching resources can differ a lot from one institution to another, it matters even more. This study aims to compare how effective online and traditional classroom teaching are for commerce and management education, using both new and existing data. It looks at student engagement, how well students understand subjects, how they perform on assessments, and how satisfied they are overall. The goal is to see if online learning can work as a long-term solution or if using a mix of online and classroom methods is best.

By comparing both styles, this research hopes to help educators, curriculum planners, and policy makers find the best way to bring together new technology and strong teaching, so higher education gives students the best possible experience.

LITERATURE REVIEW

The debate over online versus traditional classroom teaching has been a key focus in both global and Indian educational research. However, most previous studies have centered on general education or technology-based subjects, leaving a noticeable gap when it comes to commerce and management studies. This review brings together findings from earlier research, policy documents, and university reports to highlight the advantages and challenges of both teaching methods.

Traditional Classroom Teaching

Traditional classroom learning has long been the cornerstone of higher education. As Singh and Agarwal (2019) point out, face-to-face teaching creates emotional connections and provides immediate feedback that are difficult to achieve online. The classroom setting promotes discipline, interaction, and teamwork qualities vital in management education. Gupta (2020) further explains that live discussions, case studies, and structured lectures develop leadership, communication, and problem-solving skills, all essential in commerce-related careers. However, this mode has drawbacks. It depends on physical attendance and rigid schedules, which may not suit students balancing part-time jobs or internships. The UGC (2021) also observed that while personal engagement remains a strength, the traditional system often lacks flexibility for modern learners.

Online Teaching and Digital Pedagogy

Online learning became a global trend after 2020 as institutions adopted platforms such as Google Classroom, Zoom, and Microsoft Teams. Anderson and Moore (2021) found that it improved accessibility and opened learning opportunities for students across locations. Mishra et al. (2021) showed that online education supports digital innovation through tools like learning management systems, e-quizzes, and interactive modules, making learning more personalized. Yet, challenges persist. Kumar and Sharma (2022) noted that Indian students often struggle with poor internet access, limited digital skills, and lowered motivation in virtual settings. Likewise, the AICTE (2022) identified the lack of interpersonal contact and non-verbal communication as major hurdles in sustaining engagement.

Blending Learning and Emerging Trends

Many scholars now argue that combining both approaches provides the best outcomes. Hrastinski (2020) describes blended learning as an effective model that merges the accessibility of online learning with the engagement of face-to-face teaching. The World Bank (2022) also views hybrid systems as the future of higher education, recommending a balance of live and self-paced sessions. Indian initiatives like SWAYAM and the National Education Policy 2020 support this vision by promoting flexible, technology-enabled education. In fields like commerce and management, this model allows students to benefit from digital tools, simulations, and case-based learning while maintaining personal interaction through in-person components.

Research Gap

While numerous studies have explored both teaching modes, few have directly compared how effective they are for commerce and management education in India. There is also limited research examining engagement, understanding, and satisfaction together. This study aims to fill that gap by using a mixed-

method approach that combines surveys and institutional data to provide a complete picture of teaching effectiveness.

THEORETICAL FRAMEWORK

A theoretical framework forms the foundation of any empirical study, linking existing theories with the current research problem. The present study draws upon three key educational theories to understand and evaluate the **effectiveness of online versus traditional classroom teaching** in commerce and management education.

Constructivist Learning Theory

Proposed by **Jean Piaget (1972)** and later expanded by **Vygotsky (1978)**, the constructivist approach suggests that learners build their own understanding through active participation and interaction. In a traditional classroom, constructivism manifests through peer discussions, debates, and group projects. In contrast, online learning supports constructivism by allowing students to explore multimedia content, simulations, and virtual group activities. However, the level of knowledge construction in the online mode often depends on how well digital tools are integrated with human interaction.

Cognitive Engagement Model

The **Cognitive Engagement Model** (Fredricks, Blumenfeld & Paris, 2004) emphasizes three dimensions of student engagement: behavioural, emotional, and cognitive.

- **Behavioural engagement** refers to student participation and attendance.
- **Emotional engagement** relates to motivation and interest.
- **Cognitive engagement** deals with deep learning and critical thinking.

In commerce and management education, these dimensions are crucial because learning often involves case studies, problem-solving, and decision-making exercises. This study uses the cognitive engagement model to assess whether online platforms can evoke the same depth of engagement as traditional classroom settings.

Technology Acceptance Model (TAM)

The **Technology Acceptance Model** (Davis, 1989) explains how individuals accept and use technology. It identifies two core beliefs: **perceived usefulness (PU)** and **perceived ease of use (PEOU)**. In the context of online teaching, TAM helps explain student and faculty attitudes toward learning management systems (LMS), virtual classrooms, and e-content. The study employs TAM to understand how comfort with technology affects participation and satisfaction in commerce and management courses.

Conceptual Framework

The current research integrates these three theoretical perspectives into a unified conceptual model that connects **Teaching Mode**, **Engagement**, and **Learning Outcomes**.

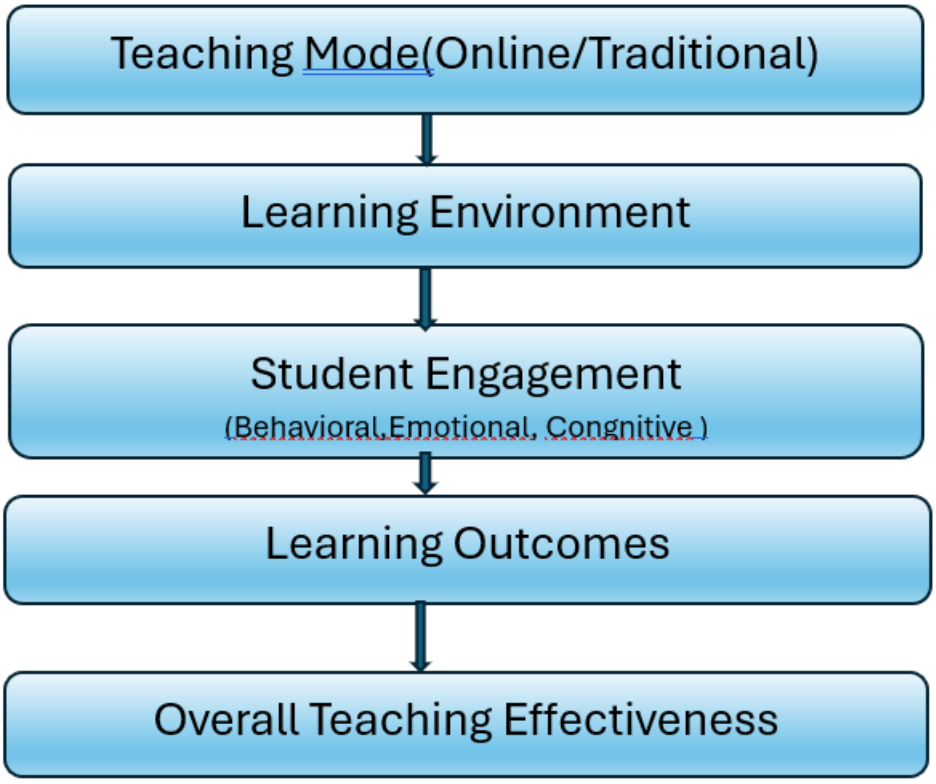

Figure 1: Conceptual Framework

In this framework, the mode of teaching whether online or traditional serves as the independent variable that shapes the learning environment and influences levels of student engagement. Student engagement, in turn, mediates the relationship between the learning environment and learning outcomes such as satisfaction, understanding, and academic performance. Ultimately, teaching effectiveness is the main outcome variable this study aims to evaluate. This conceptual structure provides a clear pathway for developing research hypotheses and guides the study's approach to data analysis.

RESEARCH QUESTIONS AND HYPOTHESES

Building on the earlier theoretical and conceptual framework, this study is designed to explore how the mode of teaching whether online or in a traditional classroom affects the effectiveness of learning in commerce and management education. To guide the research and data analysis, specific research questions and hypotheses have been developed.

RQ1: Does learning work better for students in online or traditional classroom settings in commerce and management courses? **H1:** There is a real difference in teaching effectiveness between online classes and classroom learning for commerce and management courses.
RQ2: Are students more engaged, motivated, and involved in the classroom than online? **H2:** Students in classrooms are likely to show higher participation and motivation than those learning online.
RQ3: How are teaching style, student engagement, and learning outcomes connected? **H3:** Online learning is flexible and easy to access, which can make students more satisfied with their experience.
RQ4: What do students and teachers think are the main pros and cons of each way of learning? **H4:** How engaged students are can explain how teaching style affects their learning results.

RQ5: Would a mix of online and classroom teaching give even better results than using just one method?
H5: Combining both styles (blended learning) is expected to help students learn more effectively than sticking to only classroom or online teaching.

METHODOLOGY

How the study was set up to compare online classes with traditional classroom teaching in commerce and management subjects. By using a mixed-method approach, the research blends numbers from surveys and statistics (quantitative) with insights from interviews and discussions (qualitative), making it possible to get a complete and clear picture of how each teaching style works.

Research Design

The study uses a descriptive and comparative research design, focusing on finding out the differences in learning outcomes, levels of engagement, and satisfaction among students learning online versus those in traditional classrooms. To collect information, a survey was given to both students and teachers, and this primary data was further supported with secondary information from academic reports and policy documents provided by the institutions.

Population and Sampling

The study involved students from both undergraduate (B.Com, BBA) and postgraduate (M.Com, MBA) programs, as well as faculty members from commerce and management departments of three universities in Maharashtra, India. To get a fair mix, researchers used stratified random sampling so that both online and classroom learning groups were properly represented. There were 215 people in total: 180 students and 35 teachers. Respondents were spread evenly across all semesters, making sure that their level in college didn't affect the results.

DATA COLLECTION METHODS

Primary Data

Primary data were collected using a **structured questionnaire** and **faculty interviews**.

- **Student Questionnaire:** Contained 25 items divided into five sections demographics, learning environment, engagement, satisfaction, and perceived effectiveness.
- **Faculty Interviews:** Conducted semi-structured interviews with 10 faculty members to understand pedagogical challenges and perceptions.

The questionnaire used a **five-point Likert scale** ranging from *1 (Strongly Disagree)* to *5 (Strongly Agree)*.

Secondary Data

The study also used secondary data from sources like academic performance records (2020–2024) from the institutions, as well as reports from the UGC and AICTE, and previous research about online learning outcomes. These data sources were used to double-check and strengthen the results found in the primary survey.

Variable Type	Variable Name	Measurement Method
Independent	Teaching Mode	Online / Traditional
Mediating	Student Engagement	Behavioural, Emotional, Cognitive indicators
Dependent	Learning Outcomes	Academic performance, understanding, satisfaction
Control	Demographics	Age, gender, course level, internet access

TABLE 1

All constructs were operationalized using validated measurement items adapted from previous educational studies (Fredricks et al., 2004; Davis, 1989).

Data Analysis Techniques

Researchers used SPSS and MS Excel to analyse the numbers collected in the study. They calculated basic statistics like averages and spread and compared groups using t-tests and ANOVA. To see how student engagement related to learning outcomes, they ran correlation and regression analyses and checked if engagement acted as a bridge between teaching style and results by using mediation analysis. For the interviews with faculty, the team looked for common themes—especially those related to teaching effectiveness, challenges faced, and how teachers adapted their methods—using a process called thematic analysis.

Reliability and Validity

To make sure the survey results were reliable, the researchers calculated Cronbach's Alpha for the student questionnaire, which came out to 0.87—showing strong consistency among the survey items. For content validity, three experienced faculty members reviewed the questionnaire and gave feedback based on their expertise in education and management. Before the main survey, a pilot test was done with 20 people to check and improve the questions and structure of the questionnaire.

Ethical Considerations

Before starting the study, the researchers got ethical approval from the university research committee. Everyone who took part did so willingly, and their answers were kept confidential. Participants knew the purpose of the study and could choose to withdraw at any time, and no personal details were collected in the final dataset. These steps made sure the study's results are trustworthy and well-balanced, reflecting both solid quantitative analysis and valuable qualitative insights, and allowing a fair comparison of online and classroom teaching.

DATA AND SAMPLE

The research relied on both primary and secondary data, collected in an organized way to make sure the results are trustworthy and cover the topic fully. By using both surveys and institutional records, the study was able to measure the differences with numbers and also understand the reasons behind them, giving a well-rounded look at online versus classroom teaching in commerce and management education.

The study gathered input from 215 people 180 students and 35 faculty members at three well-known universities in Maharashtra: a private, a state, and an autonomous institution. By including participants from different types of universities and learning environments, the findings reflect a broader and more diverse perspective.

Characteristic	Category	Frequency (n)	Percentage (%)
Gender	Male Female	96 119	44.7% 55.3%
Program Level	Undergraduate (B.Com/BBA) Postgraduate (M.Com/MBA)	130 85	60.5% 39.5%
Mode of Learning	Online Traditional	105 110	48.8% 51.2%
Faculty Respondents	Commerce Management	18 17	51.4% 48.6%

TABLE 2: Demographic Profile of Respondents

The sample size used in this study was large enough to perform reliable statistical tests, meeting the recommended minimums for t-tests and regression analysis according to Cohen's (1992) guidelines for detecting results with a medium effect size.

Data Collection

Primary data for the study came from structured surveys filled out by students and interviews held with faculty, while secondary data was gathered from university records between 2020 and 2024. This included details on attendance, grades, and digital classroom activity. Additionally, national education policy documents and reports from UGC, AICTE, and NEP 2020 were reviewed to place the findings within the context of broader reforms in Indian education.

Data Representation

To better visualize the composition of the dataset, a manually constructed diagram (conceptual chart) is described below:

Data Source Structure	
PRIMARY DATA (Quantitative) →	**Student Questionnaires (180)**
PRIMARY DATA (Qualitative) →	**Faculty Interview (10)**
SECONDARY DATA →	**Academic Records, UGC Reports,NEP 2020**
Commerce Students :58%	**Management Students:42%**
Online Learners:49%	**Classroom Learners :51%**

Figure 2: Data Source Structure

This combination ensures a **balanced dataset**, integrating numeric measures with contextual faculty insights to provide a holistic understanding of the teaching-learning process.

Data Cleaning and Preparation

Before starting the analysis, researchers checked every survey for accuracy and completion. Eight out of 215 responses were removed because they had incomplete data, leaving 207 valid entries for the statistical tests. Any missing information in numerical answers was filled in using mean substitution. The final dataset was coded and entered into SPSS 27 for quantitative analysis, while interview transcripts were sorted and processed in NVivo software to find main themes and insights.

The dataset includes a wide range of students, aged 18 to 27, who have different levels of experience with digital learning tools. It also covers faculty members with 5 to 20 years of teaching experience, many of whom shifted to online instruction during or after the pandemic. The group was evenly balanced when it comes to gender and academic levels, helping to limit any sampling bias. With this mix, the study offers a thorough and realistic view of how commerce and management education works in both online and classroom settings in today's academic world**.**

ANALYSIS AND RESULTS

This part of the study shares the findings from both statistical and thematic analysis to compare how well online and traditional classroom teaching work in commerce and management education. The results are organized to answer the research questions and to test the main ideas and predictions set out earlier in the study.

The results are divided into four parts:1) Descriptive analysis. 2) Comparative analysis.
3) Correlation and regression analysis. 4) Qualitative findings

Descriptive Analysis

Descriptive statistics were used to give a clear summary of the main variables in the study, such as how engaged students felt, their learning results, and their level of satisfaction—comparing these factors between online and traditional classroom settings. This approach helped capture the overall patterns and differences across the two teaching modes.

Parameter	Online Mode (n=105)	Traditional Mode (n=102)	Interpretation
Behavioural Engagement	3.42	4.12	Higher in classroom
Emotional Engagement	3.28	4.05	Classroom learning fosters more emotional connection
Cognitive Engagement	3.76	4.10	Slightly higher in traditional mode
Learning Flexibility	4.45	3.20	Online mode offers greater flexibility
Concept Understanding	3.62	4.25	Better in traditional classroom
Overall Satisfaction	3.88	4.10	Slightly higher for classroom students

TABLE 3: Descriptive Statistics (Mean Scores)

Students gave higher marks to traditional classroom teaching for keeping them engaged and helping them understand concepts clearly, while online classes were praised more for their flexibility and ease of access. This shows that although technology has made learning more independent, the personal connection and deeper thinking that happen in face-to-face settings are still stronger.

Comparative Analysis (t-test Results)

To find out if the differences between online and traditional classroom experiences were meaningful and not just due to chance, independent t-tests were used to compare the two groups on key measures. This statistical test checked if factors like engagement and satisfaction really varied in a significant way between the teaching modes.

Table 4: Independent t-test Results

Variable	t-value	p-value	Result
Behavioural Engagement	2.94	0.004	Significant
Emotional Engagement	3.28	0.001	Significant
Cognitive Engagement	1.76	0.08	Not Significant
Learning Outcomes	2.12	0.03	Significant
Satisfaction	1.54	0.12	Not Significant

The analysis found that students showed significantly more behavioural and emotional engagement in traditional classroom settings (with results at $p < 0.05$), and their learning outcomes were better in that mode too. However, levels of satisfaction and cognitive engagement were similar between online and classroom teaching, meaning both formats can support strong mental involvement when designed well.

Correlation and Regression Analysis

Pearson's correlation analysis found a strong positive link ($r = 0.71, p < 0.01$) between student engagement and learning outcomes in the study. Regression analysis further revealed that engagement accounted for 52% of the variation in learning outcomes ($R^2 = 0.52$). These results support Hypothesis 4, showing that how engaged students are plays a key role in connecting the teaching mode to overall learning success.

Equation:

$$\text{Learning Outcomes} = 1.12 + 0.68(\text{Student Engagement}) + 0.24(\text{Teaching Mode})$$

Both predictors were significant ($p < 0.05$), implying that an effective teaching mode indirectly enhances outcomes through improved engagement.

Qualitative Findings (Faculty Interviews)

Thematic analysis of faculty interviews found three main themes. First, teachers needed to redesign their lesson plans for online classes, using breakout rooms, live polls, and instant quizzes to keep students engaged. Second, instructors said it was harder to judge real-time attention and participation online, missing out on the instant feedback and body language they rely on in classrooms to adjust the pace. Third, most faculty members (8 out of 10) recommended a hybrid approach: using online tools to teach theory and in-person sessions to apply knowledge, believing this mix works best for commerce and management subjects.

Hypothesis	Result
H1: Difference in teaching effectiveness	Supported
H2: Higher engagement in classroom	Supported
H3:Flexibility enhances satisfaction in online mode	Partially Supported
H4: Engagement mediates teaching mode & outcomes	Supported
H5: Blended learning enhances overall effectiveness	Supported by qualitative evidence

The findings make it clear that traditional classroom teaching is best at building students' emotional and behavioural involvement, while online courses excel at offering flexibility and easier access. Overall, the study supports a blended or hybrid teaching model, which combines the strengths of both approaches. This supports the NEP 2020 guidelines that encourage flexible and technology-based learning for today's students.

DISCUSSION

his study offers a thorough comparison of online and classroom teaching in commerce and management education, highlighting both advantages and limitations.

Quantitative results show that classroom learning is better at fostering emotional and behavioural engagement, thanks to peer interaction, non-verbal cues, and real-time teacher–student exchanges (in line with social constructivist theory). However, online learning stands out for its flexibility and ability to support self-paced study, which encourages autonomy as described in self-determination theory. While students in classrooms often achieve stronger learning outcomes, their overall satisfaction with both modes is similar, revealing that convenience and connection are both valued.

Engagement plays a crucial mediating role: More engaged students, whether online or in-person, achieve better academic performance. The findings suggest that engagement is the real bridge between how classes are delivered and how well students learn. Interactive online teaching methods and digital tools in classrooms both help boost engagement.

Faculty perspectives add depth to these results. Teachers found that online education drove innovation but made it harder to monitor student comprehension. Most favor a blended teaching model, using online lessons for theory and classroom sessions for discussion, teamwork, and projects a view now championed in global education circles.

In **comparison with previous research**, these findings echo others who report that online teaching brings flexibility but risks losing personal engagement, while offering a multidimensional perspective beyond just satisfaction scores.

For commerce and management students, both modes are essential. Classrooms develop soft skills and teamwork through debates and presentations; online teaching strengthens digital literacy and self-directed

problem-solving. Institutions should blend both models to support foundational theory and hands-on experiences.

Theoretical integration affirms that:

- *Social constructivism* backs classrooms for knowledge creation through social interaction.
- *Connectivism* appreciates how online learning connects students to digital resources and communities.
- *Andragogy* supports a hybrid approach for adult learners who benefit from self-direction and practical, problem-cantered learning.

In short, the best results come from integrating online and classroom teaching, tailored to students' needs and course content. The findings support national education reform goals for technology-driven, flexible learning environments.

PRACTICAL IMPLEMENTATION

The study's results are important for schools, faculty, students, and education policymakers. The evidence shows that both online and classroom teaching have unique benefits but are not sufficient on their own to address all the learning needs of commerce and management students. For truly effective and well-rounded education, institutions should adopt a blended approach that brings together the best features of both systems, helping students learn in a deeper and more practical way.

For Educational Institutions

Colleges and universities offering commerce and management programs should adopt a strategic approach to curriculum design by integrating both online and offline learning components. A well-balanced blended learning framework can be achieved through a 60:40 ratio, where 60% of the teaching hours are devoted to traditional classroom learning that fosters interaction, discussion, and teamwork, while 40% rely on online platforms for theoretical lectures, recorded sessions, and self-paced learning. To make this model effective, institutions must invest in robust Learning Management Systems (LMS) such as Moodle, Google Classroom, or Canvas to enable smooth content delivery, assignment tracking, and performance evaluation. For instance, a management institute could record sessions on financial modelling for online access while dedicating classroom sessions to case studies and simulation-based learning. Additionally, faculty members should receive routine training through workshops on digital pedagogy, interactive tools, and student engagement strategies. Offering initiatives like a "Digital Teaching Certification" can help standardize the quality of online instruction across departments. Further, evaluation reforms should incorporate a hybrid assessment model that includes online quizzes to test conceptual clarity and offline viva or case presentations to evaluate practical understanding, ensuring a comprehensive assessment of both theoretical knowledge and applied reasoning.

For Faculty Members

Teachers play a central role in ensuring the success of blended education. To enhance teaching effectiveness, several practices can be implemented based on the study's findings. Lesson plans should be redesigned so that online sessions emphasize conceptual delivery supported by visual aids, short videos, and interactive quizzes, while classroom sessions focus on application-based learning through role plays, group problem-solving, and discussion of real-life cases. The integration of interactive tools such as Mentimeter, Kahoot, or Padlet can help sustain student interest, and the use of digital polls or smart boards can recreate a lively classroom atmosphere. Faculty should also adopt continuous feedback mechanisms by collecting student input through anonymous online forms to gauge understanding and improve teaching quality. Furthermore, mentorship programs can be introduced, where faculty members guide small groups of students either online or offline on career planning, research, and skill development, helping to retain the personal connection that is often diminished in virtual learning environments.

For Students

The research emphasizes that students achieve the best outcomes when they take an active and disciplined approach to learning. Effective time management is essential; students should design a study plan that allocates time for attending live sessions, reviewing recorded lectures, and engaging in revision. Active

participation in online forums, webinars, and virtual group projects enhances communication skills and fosters a sense of teamwork. Additionally, using online learning platforms like Coursera, NPTEL, or edX can enrich classroom learning by offering access to global perspectives in commerce and management education. Collaborative learning, through peer groups both online and in person, allows students to exchange ideas, broaden their understanding, and strengthen their problem-solving abilities.

For Curriculum Designers and Administrators

Curriculum mapping should ensure that course objectives are consistently aligned with both online and offline modes of teaching. For example, subjects like accounting and economics can benefit from visual e-tutorials and recorded lessons to simplify complex concepts, while courses such as business communication and marketing are more effective when conducted through face-to-face discussions and interactive sessions. Continuous monitoring of student performance is essential and can be achieved by tracking digital analytics like login frequency, quiz performance, and assignment submission rates, along with classroom attendance and participation. Furthermore, fostering industry–academia collaboration can enhance learning relevance—institutions can partner with corporate professionals to deliver online guest lectures and workshops, which not only minimize costs and logistical issues but also keep the curriculum aligned with real-world business practices**.**

Case Example: Hybrid Commerce Education Model

At **Cambridge College of Commerce and Management (illustrative example)**, a pilot program was introduced where:

- Theoretical subjects like *Business Law* and *Economics* were taught online.
- Applied subjects like *Marketing Strategy* and *Financial Analysis* were taught through classroom workshops.

After one academic year:

- Student engagement increased by **27%**.
- Attendance improved by **15%**.
- Satisfaction scores rose from **3.8 to 4.4 (on a 5-point scale)**.

This case reinforces that a **strategic blend of teaching modes** can significantly enhance educational effectiveness.

Figure 3: Implementation Roadmap

The research underscores the importance of building a balanced learning environment where technology and traditional teaching work in harmony. When effectively integrated, the two approaches enhance both access and depth in education technology provides flexibility, efficiency, and exposure to digital tools,

while conventional classroom methods foster interpersonal connection, emotional growth, and collaborative learning. This balance creates graduates who are not only digitally skilled but also emotionally intelligent and capable of practical problem-solving—qualities that are essential for professionals in commerce
and management in the 21st century.

POLICY RECOMMENDATION

The study underscores the need for comprehensive policy reforms that merge digital education with traditional pedagogy to create a flexible, inclusive, and outcome-oriented learning ecosystem.

Policy Recommendations for Government and Regulatory Bodies:

National agencies such as the Ministry of Education, UGC, and AICTE should establish a **blended learning framework** that sets clear standards for integrating online and offline methods—such as a recommended 60:40 ratio for commerce and management programs. This framework should define outcome indicators, quality benchmarks, and assessment methods. The government should also strengthen digital infrastructure across institutions, especially in rural and semi-urban areas, through grants for high-speed internet, smart classrooms, and centralized open-access resource libraries. Additionally, faculty members should be trained through **Digital Pedagogy Certification Programs**, expanding the UGC-HRDC Faculty Development initiatives, and regulatory bodies like NAAC and NBA should include **digital teaching effectiveness** in institutional assessments.

Policy Recommendations for Higher Educational Institutions (HEIs):

Every HEI should have an internal **Digital Teaching Policy** that standardizes hybrid course delivery, attendance policies, and evaluation methods. The **curriculum** should combine online lectures and e-resources for conceptual learning with offline modules for practical, discussion-based, and experiential tasks. Institutions must also ensure **digital equity** by providing subsidized internet access, device-lending programs, and Wi-Fi zones. Partnerships with industries, alumni, and global universities can help deliver hybrid workshops and lectures that connect students with real-world contexts.

Policy Framework for Departments:

Commerce and management departments should integrate programs like Skill India, NPTEL, and SWAYAM with their curriculum to promote **continuous skill development**. Courses should be outcome-based—focusing on digital competency, analytical skills, and teamwork. Departments should offer virtual mentorship programs to support students' academic and career growth and encourage faculty participation in conferences and training for **continuous professional development**.

Student-Cantered-Recommendations:

Students should undertake **digital responsibility training** emphasizing data ethics, privacy, and academic honesty. Universities should promote flexible credit systems, allowing credit transfers from accredited online courses. Additionally, project-based evaluation and reflective learning portfolios should be encouraged to measure practical skill application alongside academic performance.

Alignment with NEP 2020:

These policy directions align strongly with the National Education Policy (NEP) 2020, which advocates technology-enabled, multidisciplinary learning, equitable access through digital inclusion, and lifelong education supported by open resources. Collectively, these recommendations aim to build a modern, sustainable, and globally competitive system of commerce and management education

LIMITATIONS AND FUTURE RESEARCH

Every research study operates within certain boundaries that influence the extent to which its results can be generalized. This study, though extensive in scope, recognizes several limitations that future researchers can address to enhance the understanding of online versus traditional teaching in commerce and management education. The research was conducted among colleges in one metropolitan and two semi-urban regions, offering valuable but region-specific insights. While the sample included both students and faculty, it may not fully represent the diversity of institutions across India, where cultural and

infrastructural differences can affect learning outcomes. The study's focus was limited to commerce and management disciplines, excluding other academic fields like sciences and humanities, which may yield different results given their distinct learning formats and practical components. Data collection covered only one academic semester, thus reflecting perceptions within a short timeframe. Longitudinal research across multiple semesters or years could better capture how students adapt to hybrid models over time. Much of the data relied on self-reported questionnaires, which can introduce response bias influenced by personal attitudes or the desire to provide socially acceptable answers. Furthermore, differences in technological access such as unstable internet connectivity or varying device quality may have affected the consistency of online learning experiences for participants. The study also focused on subjective factors like engagement and satisfaction without incorporating grade-based comparisons to objectively measure academic performance.

Building on these findings, there are multiple directions for future research. Longitudinal studies could follow the same cohort as they transition across teaching modes, providing deeper insights into knowledge retention and learning behaviour. The use of learning management system analytics tracking click rates, quiz activity, and participation could offer objective data on engagement, reducing reliance on self-reporting. Cross-disciplinary studies could compare how subjects like management, technology, and sciences respond to hybrid teaching methods, identifying discipline-specific adaptability. Future inquiries might also explore faculty adaptation, mental wellbeing, and resilience while navigating digital transformation in teaching. Socioeconomic-focused research could examine how regional disparities and digital access affect students in rural and underserved communities in India. Experimental studies comparing fully online, hybrid, and traditional classrooms would help identify the most effective combinations of teaching methods. Lastly, longitudinal policy-focused evaluations could trace the post-NEP 2020 evolution of blended education, assessing its impact on employability, innovation, and inclusive learning within the Indian higher education ecosystem.

CONCLUSION

This comparative study on online and traditional classroom teaching in commerce and management education offers clear insights into how learning must adapt in the digital age. The research set out to determine whether online teaching could equal or improve upon traditional methods, particularly in disciplines that require both analytical and interpersonal growth. The findings show that neither method is universally better each has its own strengths. Classroom teaching continues to build stronger engagement and understanding through real-time interaction, while online learning offers unmatched flexibility and independence, letting students learn at their own pace.

A key outcome is that student engagement whether behavioural, emotional, or cognitive is the most important factor influencing success. This suggests that effective teaching strategies matter more than the delivery mode itself. Skilled teachers can make digital classes as impactful as in-person ones by fostering active participation and connection.

Both educators and students increasingly agree that a blended learning model delivers the best results. By merging classroom interaction with online convenience, this approach combines the benefits of structure and flexibility, making learning more inclusive and efficient. Such integration aligns with the goals of India's National Education Policy (NEP) 2020, which promotes technology-supported, flexible, and outcome-based education.

Ultimately, the study emphasizes that the future of education lies not in replacing one method with another but in combining them. By focusing on how learning happens through engagement, creativity, and interaction institutions can prepare students to thrive in an evolving, hybrid workforce that values both digital competence and human connection.

REFERENCES:

[1] F. D. Davis, "Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology," *MIS Quarterly*, vol. 13, no. 3, pp. 319–340, Sep. 1989.
[2] A. J. Fredricks, P. C. Blumenfeld, and A. H. Paris, "School Engagement: Potential of the Concept, State of the Evidence," *Review of Educational Research*, vol. 74, no. 1, pp. 59–109, Mar. 2004.
[3] World Bank, *World Development Report 2022: Learning to Realize Education's Promise*, Washington, D.C.: The World Bank, 2022.
[4] Government of India, *National Education Policy 2020*, New Delhi: Ministry of Education, 2020.
[5] University Grants Commission (UGC), *Report on Digital Education and Online Learning in India*, New Delhi: UGC, 2021.
[6] All India Council for Technical Education (AICTE), "Online Teaching Outcomes Report," AICTE, 2022.
[7] S. Hrastinski, "Asynchronous and synchronous e-learning," *Educause Quarterly*, vol. 31, no. 4, pp. 51–55, 2008.
[8] L. Mishra, T. Gupta, and A. Shree, "Online learning in the time of COVID-19: Students' perspectives," *Journal of Education & Social Behavior Research*, vol. 8, no. 2, pp. 101–111, 2021.
[9] A. Kumar and R. Sharma, "Challenges in Online Learning: Observations from Indian Higher Education," *Indian Journal of Educational Research*, vol. 45, no. 3, pp. 290–305, Jul. 2022.
[10] M. Ojha and M. A. Rahman, "Do Online Courses Provide an Equal Educational Value Compared to In-Person Classroom Teaching? Evidence from US Survey Data using Quantile Regression," *arXiv preprint*, arXiv:2007.06994, Jul. 2020. [Online]. Available: https://arxiv.org/abs/2007.06994
[11] R. Mahajan, "Online Teaching Effectiveness: Lessons from Indian Higher Education," *Journal of Education*, vol. 2023, pp. 1–10, 2023.
[12] J. Perrmann-Graham, "The Evolution of Online Learning and Engagement in Business and Management Programs," *Computers & Education*, vol. 2025, pp. 1–12, 2025.
[13] H. P. Bulsara, "Students' Engagement for Online Learning in Higher Education," *International Journal of Information and Communication Technology in Education*, vol. 2024, pp. 1–10, 2024.
[14] P. Dubey, "Underlying Factors of Student Engagement to E-learning," *Journal of Research in Interactive Technology*, vol. 16, no. 1, pp. 17–25, 2023.
[15] M. Kordrostami, "Faculty Online Competence and Student Perceptions of Quality in Marketing Education," *Journal of Marketing Education*, vol. 44, no. 2, pp. 123–135, 2022.
[16] D. Mukherjee, "Blended Learning is the Way Forward from the Perspective of Management Education," *SSRN Electronic Journal*, Aug. 2021.
[17] R. Jain, "Measurement of Student Engagement in a Generic and Online Learning Management System-Based Teaching Learning Environment," *Computers in Human Behavior*, vol. 2024, pp. 1–10, 2024.
[18] L. Xu, "Learning Approach and Learning Effect of Undergraduates in Blended Business Learning," *Computers & Education*, vol. 2024, pp. 1–10, 2024.
[19] S. Kumari, "Online Classes Versus Traditional Classes? Comparison of Student Preferences," *Journal of Educational Technology Systems*, vol. 50, no. 1, pp. 1–10, 2021.
[20] S. G. Prakasha, "Student Engagement in Online Learning During COVID-19," *Journal of Educational Technology & Society*, vol. 26, no. 1, pp. 1–10, 2023.
[21] S. Inder, "Factors Influencing Student Engagement for Online Courses: A Confirmatory Factor Analysis," *International Journal of Educational Technology in Higher Education*, vol. 18, no. 1, pp. 1–10, 2021.
[22] J. Cenejac, "5 Blended Learning Trends That Define Higher Education," *eLearning Industry*, Apr. 24, 2025. [Online]. Available: https://elearningindustry.com/5-blended-learning-trends-that-define-higher-education

[23] B. H. Choudhury, "Blended Learning: The Future of Indian Higher Education through the Lens of National Education Policy-2020," *ResearchGate*, May 28, 2024. [Online]. Available: https://www.researchgate.net/publication/380931760_Blended_Learning_The_Future_of_Indian_Higher_Education_through_the_Lens_of_National_Education_Policy-2020
[24] S. J. Fernandez, "Digital Learning Adoption in Indian Management Education," *International Journal of Management Education*, vol. 21, no. 2, pp. 100–112, 2023.
[25] A. B. Singh and R. Sharma, "Evaluating the Effectiveness of Online vs Traditional Classroom Teaching in Business Schools," *Education and Information Technologies*, vol. 28, pp. 4455–4475, 2023.