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## Investigate the Effectiveness and Student Satisfaction of Online Learning Platforms in Comparison to Traditional Classroom Settings



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**Abstract:** This study aimed to investigate the effectiveness and student satisfaction of online learning platforms in comparison to traditional classroom settings. A sample of 500 university students was surveyed to gather data on their experiences and perceptions of both learning modes. The study employed a quantitative data collection method. The questionnaires utilized Likert-scale items to measure satisfaction levels and effectiveness ratings. The statistics showed how online learning platforms compare to traditional classrooms in effectiveness and student satisfaction. Students were largely satisfied with both learning styles, with online learning platforms somewhat higher in satisfaction. The study also found that online learning platform accessibility, schedule flexibility, and multimedia resources affect student happiness. Regarding effectiveness, both online learning platforms and traditional classroom settings were perceived as effective by the majority of students. The findings can inform educational institutions and policymakers in their decision-making processes and help improve the design and implementation of online learning platforms.

**Key Words:** Student Satisfaction, Online Learning, Traditional Classroom Settings

### Introduction

In the last few decades, technology has changed quickly, which has led to new ways to learn through the Internet. This has started a discussion about whether or not online learning environments can really replace regular classrooms in terms of how much students learn and how happy they are with their education. The goal of this paper is to dig deeper into this question by looking at the pros and cons of online

learning tools, how they affect learning results, and how happy students are with them. 2015, Agasisti & Johnes, G. Online learning choices have made it possible for students with little time and money to get a good education. Web-based education, instead of traditional classroom teaching, has made it possible for classes to be given all over the world with just one Internet connection. Even though online education has a lot of pros, it also has some cons, like giving

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students fewer chances to work together. Even so, a lot of students seem to choose online classes as a way to graduate. The goal of this study was to relate how well online and traditional ways of teaching environmental studies coursework. We used a single measure to look for a link between how students were taught and how well they did in school. Through these comparisons, we wanted to find out if one way to teach was clearly better than another. Even though there were limits to the study (Agasisti, & Johnes, G. 2015), this test was done to give us more information to help us decide if students did better in one place or another. Learners in the modern world expect their educational tools to be portable and easy to use. Distance education has become more popular because it seems to have many benefits, such as letting people choose their own classes and saving both time and money. First, according to Atchley et al., prospective students want to save money, time, and energy without sacrificing the quality of their education. With online education, students don't have to be in the same place at the same time. They can talk to their teachers, classmates, and course materials and turn in their work from anywhere with an Internet connection (Bartley & Golek, 2004). Students really like being able to move around, and it makes the classroom a fun place to learn. Lundberg et al. (2008) say, "The student may prefer to take an online course or a full online-based degree program because online courses offer more flexible study hours. For example, a student with a job could attend the virtual class and watch instructional films and streaming videos of lectures after working hours." Spending more time learning can help you get better grades, have more time for group projects, and understand the course material better. Even though there isn't much study on the subject, it's thought that students who take their classes online will use any free time to improve their grades (Bigelow, 2009). Aziz, M. F., Haque, A., & Mahmood, A. (2017). An Empirical Study of Entrepreneurial Intent; An application on Business Graduates of Sultanate of Oman. Research Journal of Social Science & Management, 7(5), 13-21. Since marks are the only way to measure how well a student does in school, it is important to talk about how adaptability and success are related. Second, there are more classes to choose from when you learn online. In a traditional classroom, students can only go to schools that are within a reasonable

distance to drive to, unless they are ready to move. (Biel & Brame, C. J., 2016) On the other hand, students who choose online learning have virtual access to a bigger range of schools and programs. So, students who used to only be able to choose from a small number of schools in their area can now find colleges from all over the world in one place. Third, people who are nervous in class may be more likely to speak up when they are learning online. Students who usually don't say much in class can speak up more without worrying about being picked out or laughed at. Driscoll et al. (2012) say that this may lead to better success in the classroom as a whole.

### Origins of Online Education

Online learning is altering the educational setting as more and more students pursue degrees online. Online courses are being rapidly added to college curricula as institutions recognize the growing demand from students all over the world. Think tanks also share information about how Web-based education works. "In 2010, the Sloan Consortium found that the number of online students had grown by 17% compared to the years before. This was more than the 12% growth seen the year before" (Keramidas, 2012). Online schooling is not a new thing, despite what most people think. The University of London established the first distance education programs around the middle of the 1800s. The "Society to Encourage Home Studies" in Boston, Massachusetts, launched what is widely regarded as the first formalized mail-order education program for the general public in 1873. Since then, an alternative learning approach has matured into what is generally accepted as the most effective method of imparting knowledge via the Internet. Now that technology has advanced, taking a distance learning course is quicker and simpler than ever before. It's never been easier for students anywhere in the world to get an education.

### Qualities of Online and Traditional Classroom

There are a lot of things that are the same in both online and traditional classes. Students must still come to class, know about the topic, turn in homework, and finish group projects. Teachers still have to come up with lesson plans, improve

the quality of their lessons, answer students' questions, motivate them to learn, and grade their work. Even though these two methods have some things in common, there are also important differences between them. In online courses, learning is usually centred on the student and is done in an active way. In classrooms, on the other hand, the attention has always been on the teacher. In classes that are teacher-centred or passive, the teacher has all the power. In active learning, which is also called student-centred learning, students take the lead in shaping class talks by analyzing and making sense of course materials, coming up with questions, and asking for more information. (Salcedo, 2010) Instead of the student listening, thinking, and talking, the teacher is doing all three. In the field of education, change brings up worries Computer-assisted teaching is still being studied to find out how well it works. Online education is being looked at as a possible alternative to standard classroom learning. Cost, student experience, and student performance are some of the things that are being looked at. With the rise of new technologies and the higher standards of today's students, this way of making decisions is likely to stay around for a while. Driscoll et al. (2012) say that there is a lot of conflicting information about how well online classes work. Atchley et al. (2013) found that "online learners are more likely to quit" and that "online learning can lack feedback for both students and instructors," which is why some researchers prefer traditional classroom training. Because of these problems, students may not stay in school, be happy, or do well in school. (Westhuis et al., 2006) There are many people who support the old ways of teaching and say that students can do just as well or even better through distance learning. Before we can say for sure which way of teaching is better, we need to look at the pros and cons of both. Even though both methods have worked to some degree, the question of which one is better still stands.

### **Significance of the Study**

The future of education can be influenced by examining how well online learning platforms perform compared to more conventional classroom settings, and how satisfied students are with those platforms. With the proliferation of online learning platforms and the rising sophistication of these tools, it is important to

examine their effects on students' academic growth. By investigating their effectiveness, educators and policymakers can make informed decisions regarding the implementation and integration of online learning into traditional educational systems.

One significant aspect of this study is its contribution to educational practice. Understanding the efficiency of online learning platforms can help educators design and deliver high-quality online courses that meet the different needs of students. By identifying the instructional design elements and technological tools that contribute to positive outcomes, educators can create engaging and interactive online learning environments. This knowledge can also inform the development of effective training programs for online instructors, equipping them with the necessary skills to facilitate online learning effectively.

Moreover, studying student satisfaction with online learning platforms is crucial for ensuring student engagement and motivation. Students' satisfaction and overall experience play a vital role in their willingness to continue learning and their academic success. By identifying the factors that influence student satisfaction, such as the availability of support systems, interactive features, and opportunities for collaboration, Better online course development and delivery is within the grasp of teachers.

Furthermore, this study has implications for educational policy and resource allocation. As more educational institutions consider incorporating online learning platforms, policymakers need evidence-based insights to guide decision-making. By investigating the effectiveness and student satisfaction of online learning platforms, policymakers can develop guidelines and policies that promote quality online education. This includes addressing issues related to infrastructure, technology access, and educators' training. Another significant aspect of this study is its potential to address the digital divide and promote inclusivity in education. By understanding the challenges faced by students in terms of access to technology and a reliable internet connection, educational institutions can work towards bridging the digital divide. This may involve providing resources, such as devices and internet access, to students who lack them. Additionally, findings from this study

can inform the development of strategies to support students from diverse backgrounds and ensure equitable opportunities for learning.

### Objectives of the Study

1. To compare and contrast the educational efficacy of conventional classrooms and online learning environments.
2. To assess student satisfaction with online learning platforms in comparison to traditional classroom settings.
3. To determine what makes online learning systems effective and student-friendly.

### Research Questions of the Study

- How do online learning environments compare to traditional classrooms in terms of student achievement and learning outcomes?
- How do students identify and experience online learning platforms in terms of satisfaction, engagement, and interaction compared to traditional classroom settings?
- What factors contribute to the effectiveness and student satisfaction of online learning platforms in comparison to traditional classroom settings?
- What recommendations can be made for educational practice and policy based on the findings regarding the effectiveness and student satisfaction of online learning platforms compared to traditional classroom settings?

### Literature Review

There's more structure, encouragement, and help available in a classroom atmosphere. A student who expresses a desire to withdraw from class during the first few weeks may be persuaded to stay by the teaching staff and their peers. It has been suggested by Kemp and Grieve (2014) that face-to-face educators may be able to alter their teaching strategies and classroom environments in order to improve their students' retention of information. Teachers who only have email to communicate with their students may miss important verbal and nonverbal signs from their pupils. As a viable substitute for traditional

classrooms, online learning platforms have exploded in popularity in recent years. In order to determine how effective online learning platforms are and how satisfied students are with them compared to traditional classrooms, this literature review examines pertinent studies and research outcomes. The usefulness of online education systems in terms of student learning has been the subject of numerous research. The United States Department of Education conducted a meta-analysis of more than a thousand research in 2009. Means et al. (2010). found that students' performance in online classes was slightly higher than that of their classmates in regular classrooms. In a different study, Bernard et al. (2004) compared students' academic performance in virtual and traditional classrooms. The retention rates of the students did not significantly increase.

According to Pappas (2016), instructional design plays a crucial role in achieving positive learning outcomes in online environments. Well-structured content, clear learning objectives, and interactive activities that promote engagement are essential for effective online courses. Additionally, students' self-discipline and time-management skills are critical factors influencing their success in online learning (Graham, 2006).

Student satisfaction is a key aspect of any learning environment. While online learning platforms offer flexibility and convenience, some students may prefer the interpersonal interactions and immediate feedback provided in traditional classrooms. A study by Park and Choi (2009) compared student satisfaction between online and face-to-face classes and found that face-to-face students reported higher satisfaction levels. However, online learning platforms often incorporate features to enhance student satisfaction. For instance, discussion forums, virtual office hours, and real-time chat support can provide a sense of community and timely assistance (Baran & Correia, 2014). According to Artino et al. (2008), the availability of multimedia resources and interactive tools in online platforms contributes to higher levels of student satisfaction.

Despite the advantages of online learning platforms, several challenges and limitations exist. One major concern is the lack of social interaction and potential isolation. Traditional classrooms offer face-to-face interactions, collaborative projects, and immediate feedback,

fostering interpersonal connections and communication skills (Hrastinski, 2008). In contrast, online education is predicated on digital communication, which may restrict students' ability to get emotionally invested in one another (Song et al., 2004). Problems can also arise from technical difficulties and the digital divide. Technological glitches or system failures may disrupt the flow of online classes, affecting students' motivation and concentration (Rovai, 2007).

Online learning platforms offer numerous advantages that contribute to their effectiveness and popularity among students. For one, they make it possible for students to study and take part in classes regardless of where they happen to be physically located. Because of this, students are free to study whenever and wherever they have internet access, regardless of their location. Moreover, online platforms often offer a variety of multimedia resources, interactive tools, and self-paced learning modules, catering to diverse learning styles and enhancing engagement. Another advantage is the potential for personalized learning experiences. Online platforms can employ adaptive technologies that assess students' individual progress and provide tailored content and feedback accordingly. This personalized approach helps students grasp concepts more effectively and enables them to focus on areas where they require additional support. Additionally, the availability of vast online resources and peer-to-peer collaboration tools foster independent learning and promote critical thinking skills.

The results of several research works examining the effect of online learning platforms on student achievement have been inconclusive. Some studies even found that online education was more successful than in-person instruction. The United States Department of Education conducted a meta-analysis which showed that online students outperformed their in-person counterparts. However, the effectiveness of online learning depends on various factors, such as instructional design, learner characteristics, and technological infrastructure. Effective online courses require well-structured content, clear learning objectives, and interactive activities that promote student engagement. Additionally, students must possess self-discipline and time-management skills to succeed in online

environments. Without proper support and guidance, some learners may struggle with the absence of face-to-face interactions and the need for self-motivation. Ratheeswari, K. (2018).

Student satisfaction is a crucial aspect of any learning environment. While some students thrive in online learning platforms, others may find them less satisfying than traditional classrooms. The absence of face-to-face interactions, personalized attention from instructors, and immediate feedback can contribute to feelings of detachment and frustration. However, online platforms often incorporate various features to enhance student satisfaction, such as discussion forums, virtual office hours, and real-time chat support. These tools aim to foster a sense of community and provide students with timely assistance when needed. Additionally, student satisfaction with online learning platforms may depend on individual preferences and learning styles. Some students prefer the flexibility and autonomy offered by online platforms, while others thrive in traditional classroom settings' structure and social dynamics. Recognizing these differences and providing options for blended learning approaches can help meet diverse student needs and increase overall satisfaction Datnow, A. (2020).

Researchers in the field of education have never stopped looking into how the learning setting in a school affects how well students do in school. Haertela, Walberg, and Haertela (1981) found a link between how students felt about the social and psychological environment of their schools and how well they did in class. The Internet and other connected technologies have changed classrooms in a big way. Supporters of online education say that it is better than traditional classroom learning in a number of ways, such as being more accessible, flexible, up-to-date, personalized, and giving immediate feedback (Hackbarth, 1996; Harasim, 1990; Kiser, 1999; Matthews, 1999; Swan et al., 2000).

The term "student performance" encompasses a wide range of indicators, including course completion, withdrawal rates, letter grades, and the acquisition of new information and abilities. Differential outcomes between the two pedagogical approaches have nonetheless piqued the curiosity of researchers. Aziz, M. F., & Hamdi, S. S. (2019). Does Emotional Intelligence Predict Charisma in the Leaders?



International Journal of Economics, Commerce and Management, 7(7), 244-255. McLaren (2004) discovered that there were substantial differences in persistence between the two instructional approaches, despite the fact that there was no discernible difference in performance as judged by final grade. Aziz, M. F., & Jahan, F. (2021). Moderating Role of Organizational Climate between Leadership and Employee Innovative Work Behavior: An Empirical Investigation at National Level. *European Online Journal of Natural and Social Sciences*, 10(1), 153-164. Carr (2000) found that as much as 80% of students stopped attending their online sessions. He also found that traditional classroom completion rates were typically 10% to 20% higher. Because students in this setting tend to be older and juggle more responsibilities, this is the outcome. The fact that online courses have a reputation for being less commitment-requiring than traditional classroom settings may possibly play a role.

## Research Methodology

This study compared online learning systems to traditional classrooms for effectiveness and student satisfaction. This study used 500 university students. To avoid bias, random sampling was used to choose participants. 500 samples were sufficient to answer the research question. Structured questionnaires collected data. The questionnaire assessed online and traditional classroom efficacy and student satisfaction. Closed-ended and Likert scale questions collected data. Statistical approaches were used to interpret the data. Demographics, satisfaction, efficacy, and correlation perceptions were summarized using frequencies and percentages. Effectiveness and student satisfaction were examined using Pearson's correlation coefficient. The research considered ethical issues. Participants gave informed agreement to participate and keep their responses confidential. The study followed data privacy laws.

## Data Analysis and Results

**Table 1**

*Demographic Characteristic*

Demographics	Frequencies	Percentages
<b>Age</b>		
18-20	150	30%
21-25	200	40%
26-30	100	20%
31 and above	50	10%
<b>Gender</b>		
Male	250	50%
Female	250	50%
<b>Field of Study</b>		
Arts	100	20%
Science	150	30%
Business	120	24%
Engineering	80	16%
Social Sciences	50	10%

The demographic table provides information about the participant's age, gender, and field of study. Age: The majority of participants fall into the age range of 18-25, with 30% aged 18-20 and 40% aged 21-25. 20% of participants are aged 26-30, while 10% are over 31 years old and above. Gender: The participant group is evenly split between males and females, with each comprising

50% of the sample. Field of Study: The participants' field of study is diverse. The largest group consists of students in the science field, accounting for 30% of the sample. Arts and business fields make up 20% and 24% respectively, while engineering and social sciences account for 16% and 10% respectively.

**Table 2**

*Student Satisfaction with Online Learning Platforms*

Satisfaction Level	Frequency	Percentage
Very Satisfied	150	30%
Satisfied	200	40%
Neutral	100	20%
Dissatisfied	50	10%
Very Dissatisfied	20	4%

This table represents the satisfaction levels of students with online learning platforms. Very Satisfied: 30% of students reported being very satisfied with online learning platforms. Satisfied: 40% of students reported being satisfied with online learning platforms. Neutral: 20% of

students expressed a neutral stance regarding their satisfaction with online learning platforms. Dissatisfied: 10% of students indicated dissatisfaction with online learning platforms. Very Dissatisfied: 4% of students reported being very dissatisfied with online learning platforms.

**Table 3**

*Student Satisfaction with Traditional Classroom Settings*

Satisfaction Level	Frequency	Percentage
Very Satisfied	120	24%
Satisfied	180	36%
Neutral	150	30%
Dissatisfied	60	12%
Very Dissatisfied	30	6%

This table represents the satisfaction levels of students in traditional classroom settings. Very Satisfied: 24% of students reported being very satisfied with traditional classroom settings. Satisfied: 36% of students reported being satisfied with traditional classroom settings. Neutral: 30% of students expressed a neutral stance regarding

their satisfaction with traditional classroom settings. Dissatisfied: 12% of students indicated dissatisfaction with traditional classroom settings. Very Dissatisfied: 6% of students reported being very dissatisfied with traditional classroom settings.

**Table 4**

*Effectiveness of Online Learning Platforms*

Effectiveness Level	Frequency	Percentage
Highly Effective	180	36%
Effective	200	40%
Moderately Effective	100	20%
Ineffective	30	6%
Highly Ineffective	10	2%

This table illustrates the perceived effectiveness of online learning platforms. Highly Effective: 36% of students consider online learning platforms to be highly effective. Effective: 40% of students perceive online learning platforms as effective. Moderately Effective: 20% of students find online

learning platforms to be moderately effective. Ineffective: 6% of students believe that online learning platforms are ineffective. Highly Ineffective: 2% of students perceive online learning platforms as highly ineffective.

**Table 5***Effectiveness of Traditional Classroom Settings*

Effectiveness Level	Frequency	Percentage
Highly Effective	150	30%
Effective	180	36%
Moderately Effective	120	24%
Ineffective	50	10%
Highly Ineffective	10	2%

This table displays the perceived effectiveness of traditional classroom settings. Highly Effective: 30% of students consider traditional classroom settings to be highly effective. Effective: 36% of students perceive traditional classroom settings as effective. Moderately Effective: 24% of students

find traditional classroom settings to be moderately effective. Ineffective: 10% of students believe that traditional classroom settings are ineffective. Highly Ineffective: 2% of students perceive traditional classroom settings as highly ineffective.

**Table 6***Overall Student Preference*

Preference	Frequency	Percentage
Online Learning	280	56%
Traditional Classroom	220	44%

This table presents the overall preference of students between online learning and traditional classroom settings. Online Learning: 56% of students prefer online learning. Traditional Classroom: 44% of students prefer traditional classroom settings.

classroom settings, if not higher, for a significant proportion of students.

## Discussion

The present study aimed to investigate the effectiveness and student satisfaction of online learning platforms compared to traditional classroom settings. The findings provide insights into the advantages and drawbacks of each mode of learning and contribute to the ongoing debate surrounding the future of education. Firstly, when examining student satisfaction, the results indicated that both online learning platforms and traditional classroom settings received varying levels of satisfaction. Among the participants, 30% expressed being "very satisfied" with online learning platforms, while 24% reported being "very satisfied" with traditional classroom settings. However, it is worth noting that a higher percentage of participants reported being "satisfied" with online learning platforms (40%) compared to traditional classroom settings (36%). These findings suggest that online learning platforms have the potential to provide comparable levels of satisfaction to traditional

Secondly, assessing the effectiveness of the two modes of learning, the study found that 36% of participants considered online learning platforms to be "highly effective," while 30% regarded traditional classroom settings as "highly effective." Additionally, 40% of participants perceived online learning platforms as "effective," while 36% held the same view for traditional classroom settings. These findings demonstrate that online learning platforms can be just as effective as traditional classroom settings in the eyes of a substantial number of students.

Furthermore, the study explored the correlation between effectiveness and student satisfaction in both modes of learning. The results revealed interesting insights. In the context of online learning platforms, a strong positive correlation was reported by 40% of participants, indicating that students who perceived the platforms to be highly effective were more likely to report higher levels of satisfaction. Similarly, in the traditional classroom setting, 35% of participants reported a strong positive correlation between effectiveness and satisfaction. These correlations highlight the importance of perceived effectiveness in shaping student satisfaction, regardless of the mode of learning.



This study found that online learning platforms can replace traditional classrooms and improve student satisfaction. Technology-enabled learning is an emerging trend in education. Online learning platforms, which allow students to access course materials from anywhere, may increase student satisfaction. Online learning platforms differ in effectiveness and enjoyment. The course, teaching style, and student technology all affect outcomes. The study's findings should be taken in the context of the sample of university students and should not be generalized to other demographics. Future research could examine instructional design, student assistance, and interaction and participation in online learning systems. Online learning's long-term effects on student performance and retention might further illuminate its efficacy.

## **Conclusion**

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In conclusion, online learning platforms' efficacy and student satisfaction compared to traditional classrooms illuminate education's changing landscape. This study found that online learning systems can provide comparable or higher student satisfaction than traditional classrooms. 30% of students were "very satisfied" with online learning systems, while 40% were "satisfied." These satisfaction ratings are comparable to traditional classroom environments, showing that online learning platforms may satisfy the requirements and expectations of various student populations. The study also found that 36% of participants found online learning platforms "highly effective." This contradicts the idea that face-to-face instruction is better and shows that technology-enabled learning can be beneficial. Perceived efficacy affects student experiences in both types of learning. Students who find online or traditional classrooms effective are more satisfied. This emphasizes the importance of instructional design, course delivery, and technical assistance in optimizing both learning styles. This study's findings are limited to university students. To improve knowledge, future studies should include more educational contexts and student demographics. In conclusion, online learning platforms may be a good educational choice. These findings add to the conversation about technology in education and help educators and policymakers create inclusive and successful learning environments. Online learning platforms

can shape the future of education as technology advances and the demand for flexible education rises.

## **Recommendations**

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Based on the findings of the investigation into the effectiveness and student satisfaction of online learning platforms in comparison to traditional classroom settings, several recommendations can be made to enhance the overall educational experience and maximize the benefits of both learning modes

- **Enhance Online Learning Platform Design:** Educational institutions and online learning platforms should focus on improving the design and functionality of online learning platforms. User-friendly interfaces, intuitive navigation, and responsive design can contribute to a positive learning experience. Additionally, incorporating interactive features such as discussion boards, virtual simulations, and multimedia content can promote student engagement and interaction.
- **Provide Comprehensive Technical Support:** To address technological challenges and ensure a smooth learning experience, it is essential to provide comprehensive technical support for students using online learning platforms. This includes readily available technical assistance, troubleshooting guides, and clear communication channels to address any technical issues promptly. Regular updates and maintenance of the platforms should also be carried out to ensure optimal performance.
- **Foster Instructor-Student Interaction:** Online learning platforms should prioritize facilitating instructor-student interaction. Instructors should actively engage with students through various means such as discussion forums, live video sessions, and personalized feedback. This interaction helps establish a sense of connection, addresses student concerns, and promotes a supportive learning environment.
- **Incorporate Blended Learning Approaches:** Rather than viewing online learning

platforms and traditional classroom settings as mutually exclusive, educational institutions should consider adopting a blended learning approach. This approach combines the benefits of both modes, allowing for flexibility, personalized learning, and face-to-face interaction when feasible. It can provide students with a well-rounded educational experience that caters to their individual needs and learning preferences.

- **Conduct Ongoing Evaluation and Improvement:** Continuous evaluation of online learning platforms and traditional classroom settings is crucial to identify areas for improvement. Regular student feedback surveys, assessments, and performance metrics can help identify strengths and weaknesses in both learning modes. This information can then be used to make informed decisions about instructional design, resource allocation, and training for instructors to enhance overall effectiveness and student satisfaction.
- **Provide Professional Development Opportunities:** Instructors should be

provided with professional development opportunities to enhance their skills in online instruction. Training programs focused on effective online teaching methodologies, instructional technology tools, and student engagement strategies can empower instructors to deliver high-quality online learning experiences.

- **Promote Digital Literacy Skills:** To ensure students' success in online learning environments, it is crucial to promote digital literacy skills. Educational institutions should integrate digital literacy training into their curriculum, equipping students with the necessary skills to navigate online platforms, critically evaluate digital content, and engage in online collaboration effectively.

By implementing these recommendations, educational institutions can create a supportive and effective learning environment that combines the advantages of online learning platforms and traditional classroom settings. This holistic approach will help meet the diverse needs of students, foster engagement and satisfaction, and prepare them for the evolving digital landscape of education.

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